FEMALE LABOUR-FORCE PARTICIPATION

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A. TRENDS IN FEMALE LABOUR FORCE PARTICIPATION AND FERTILITY

One of the most striking phenomena of recent times has been the extent to which women have increased their share of the labour force; the increasing participation of women in paid work has been driving employment trends and the gender gaps in labour force participation rates have been shrinking. Especially in the 1980s and early 1990s, labour force growth was substantially higher for women than for men for every region of the world except Africa. In the developed industrialized countries, increasing female labour force participation has been linked to the completion of the fertility transition. In many developing countries, however, fertility decline has been slow or stalled.

Figure 1a shows that by 1980, fertility levels in most of the developed industrialized countries were already close to or below the replacement rate of 2.1 children per woman. Labour force participation rates of women in the prime ages of 25-54 years continued to rise in the 1990s to between 60 to 85 per cent and by the turn of the century fertility was well below replacement. Figure 1b shows that the developed countries that experienced the largest increases in female labour force participation rates (FLFPRs) in the 1980s also tended to have the largest declines in total fertility rates (TFRs). By the 1990s, changes in both FLRPRs and TFRs had slowed down. In several of the transition economies in Figures 2a and 2b, the economic participation of women has actually been falling, especially in the 1980s but there has been a clear decline in fertility rates especially in the 1990s, most to below replacement. In Figure 3a for the Asia-Pacific countries, there is no clear pattern between women's employment and total fertility rates. There are almost as many countries with high FLFPRs and high levels of fertility (for example, Nepal, Papua New Guinea) and as there are countries with similar high FLFPRs and total fertility rates around replacement level (for example, Democratic People's Republic of Korea and Thailand) and yet another group of countries where fertility had dropped below replacement but FLFPRs are only around 60 per cent (Hong Kong and Singapore). Figure 3b also does not show a clear relationship between changing FLFPRs and fertility decline; Asia-Pacific countries with little increase in female participation showed sharper falls in TFRs than many of the countries with large increases in female participation. In Latin America and the Caribbean, figure 4a shows increasing FLFPR and declining fertility since 1980. Changes in both rates in figure 4b have generally been larger in the 1980s than in the 1990s. Women in the North African and Middle Eastern countries continue to have the lowest levels of labour force participation in the world but there has been a distinct fall in total fertility rates, albeit none to below replacement levels (figure 5a). What is striking in figure 5b is that FLFPRs fell or changed very little in most North African and Middle Eastern countries in the 1990s but fertility continued to drop sharply. In contrast, women in Sub-Saharan Africa in figure 6a have very high rates of female labour force participation and their fertility rates have remained high and even in the late 1990s total fertility rates were between 4 to 7 children per woman. Figure 6b shows that there has been very little percentage change in FLFPRs especially in the 1990s and the declines in TFRs have been small.

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The paper examines the elusive or ambiguous relationship between fertility and women's labour force participation in those developing countries with intermediate levels of fertility (with TFRs above replacement and below five children per woman). Focussing on recent trends and patterns, it essentially argues that increases in labour force participation have not been matched by improvements in job quality and that the kinds of jobs women are engaged in and their working conditions have not led to their true socio-economic empowerment, have not provided adequately satisfying alternatives to childbearing or have not involved serious incompatibility between paid and unpaid work. Other factors affecting the relationship between women's employment and fertility, such as the socio-cultural and macro economic contexts in specific countries, are also identified. The last section attempts to address the following questions: What are the indicators of women's labour force participation and working conditions that could be useful predictors of future fertility in these countries and is their correlation likely to be strong or weak? What other contextual factors should be considered in formulating plausible assumptions on future fertility for these countries? On the basis of these suggested predictors, the paper does not foresee fertility falling to below replacement in most of these countries.

1. When is the relationship inverse

It may be useful to start by recalling some main hypotheses linking increasing female labour force participation with declining fertility and considering the nature of women's employment underlying these hypotheses. Drawing from the experience of developed industrialized countries, women's employment is likely to lead to sustained declines in fertility when:

(a) Women's employment is empowering or "status enhancing", so that they have control over income and resources and a greater say in family decision-making, including in fertility decisions;
(b) The conflict between women's productive and reproductive roles significantly raises the opportunity cost of having children;
(c) Childcare arrangements are not easily available and the time intensity and quality of childcare desired seriously constrain women's economic activities;
(d) The interruption effects (of a period of labour force withdrawal to bear and raise young children) involve heavy costs;
(e) The returns and satisfactions women derive from participation in economic activities are substantially higher than the returns and satisfactions of having additional children;
(f) Women's employment and income-earning capacity enhances their economic or financial independence and reduces the need to have children as a form of security for old age or against adverse economic conditions;
(g) Women's economic role and contribution to family welfare lead to reduced sex preference for children and changing attitudes toward the value of daughters;
(h) Women's increasing participation in the labour force is linked to increasing investments in girls' education, and age at first marriage and age at first pregnancy go up; and
(i) Women work and build up careers before marriage, and age at first marriage and age at first pregnancy go up.

The nature of women's employment or the kinds of jobs and working conditions for women that are likely to empower women, exacerbate role incompatibility, enhance their status and decision-making within their families, increase their economic or financial independence, constrain domesticity or motherhood or provide alternative returns and satisfactions to having children can be identified as:

(a) Wage employment away from the home – particularly in non-familial enterprises;
(b) Productive and remunerative jobs in the formal rather than in the informal economy;

(c) Regular, full-time jobs that are permanent and secure;
(d) Regular or fixed working hours;
(e) Quality jobs with clear career prospects that require and generate commitment and offer alternative interests and achievements to domesticity or motherhood;
(f) Jobs that are progressive rather than static and offer opportunities for occupational or geographical mobility;
(g) Non-discrimination in the labour market and labour markets that are not strongly sex segregated;
(h) Jobs that allow women to organize and increase their representation and voice at the workplace, community and society;
(i) Jobs that provide workers with social security, such as pension schemes; and
(j) Jobs that do not open up opportunities for the use of child labour.

There is growing evidence confirming that it is not entry into the labour force per se but true economic empowerment that is linked to reproductive decision-making:

> "There is mounting evidence that women's ability to fully enjoy human rights – indeed, even to demand such rights – is integrally linked to their economic empowerment. A study of the circumstances in which women in poor communities feel entitled to make decisions about marriage and childbearing, contraception and sexuality was carried out by the International Reproductive Rights Research Action Group in seven countries: Brazil, Egypt, Malaysia, Mexico, Nigeria, the Philippines and the United States. Among its conclusions is that the ability to take such decisions requires a sense of personal autonomy, which develops in tandem with the knowledge that women can provide for themselves and their children. Their sense of personhood is sparked by motherhood and nurtured by participation in organized groups, but fundamentally depends on having incomes of their own.
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> For most of these women, livelihoods remain uncertain, and autonomy provisional, subject to factors outside their control, including the rising costs and care burdens they experience as a result of cuts in government spending and the privatisation of social services. But for a few, those with a paid job or a small business and money they can call their own, economic empowerment conveys the right to imagine a different future. With it comes the courage to stand up against husbands and partners, parents and in-laws, to assert their rights to decide whether and when to have sex, or bear children, to resist violence, to make household decisions". (UNIFEM, 2000, p.18).

Of the countries listed in the quotation above, six are intermediate fertility countries, Nigeria's total fertility rate is above 5 and only the United States has below replacement fertility.

B. WOMEN'S EMPLOYMENT IN THE INTERMEDIATE FERTILITY COUNTRIES

In the intermediate fertility countries, the trend in labour force participation since 1980 has generally been one of rising rates for women and reduced rates for men, so that the sex differential has narrowed. The largest increase over the last two decades took place in Latin America and the Caribbean. Women's participation also increased in those countries where it has historically been low; in the Middle East and North Africa, FLFPRs increased in the 1980s but fell in several countries in the 1990s. What is striking in table 1 and figures 1b to 6b is that increases in labour force participation rates of women distinctly slowed down in the 1990s as compared to the 1980s.

Women have been entering the labour force increasingly to contribute to family survival. Structural adjustment processes, financial crises, prolonged economic downturns, the "feminization of

poverty" have all forced more and more women to take up economic activities outside the home. The generally quoted figure is that women account for 70 per cent of the absolute poor and that the percentage may be rising. What is also important to consider is that work done out of economic necessity is less likely to have a negative impact on fertility than work done out of choice or intrinsic interest.

Women are not only entering the labour force in much greater numbers, they are also remaining in the labour force throughout their child bearing and child rearing years. They are no longer a reserve or secondary labour force. In the past and particularly in developed countries, a "double peak" pattern was prevalent – most women entered the labour force in their twenties, left after a few years to bear and raise children and re-entered the labour force towards the end of their childbearing years. Nowadays, labour force participation rates are high for women in their twenties, rise through their thirties and forties and decline only after age 50. "Recent age patterns indicate that women are finding ways to combine family responsibilities with market work" (United Nations, 2000a, p.111). Of course, it could also be that with unemployment and under-employment growing, the competition for jobs is becoming so intense and the costs of interrupted participation are so high that women do not dare withdraw from the labour force even when they have children -- and especially if they have large families to support.

Role incompatibility is likely to be greater for women in wage employment, less so for those in self-employment and least so for contributing family workers who are unpaid. Except in Sub-Saharan Africa (excluding Southern Africa) and Southern Asia, the majority of women workers are employees working for others for wages or salaries. Many of the intermediate fertility countries do not have a consistent statistical series on employment status broken down by sex, but where available, the information suggests a declining trend in the proportion of employees and a consequent increase in other employment statuses where the conflict with child bearing and rearing is likely to be less. In Latin America and the Caribbean, for example, the share of wage and salary workers among the female workforce dropped from 76 per cent to 71 per cent in Belize between 1993-99, from 69 to 65 per cent in the Dominican Republic between 1991-97, from 48 to 43 per cent in Bolivia between 1990-96, from 84 per cent to 77 per cent in Panama between 1992-99 (ILO, 2001a, pp.92-96). This trend is expected to continue in most parts of the world as more and more women are unable to find paid employment in the formal economy and have to go into the informal economy as own-account or unpaid family workers.

Even among the wage and salary workers, more and more are likely to be in non-regular or atypical jobs. Whereas men are more likely to be hired in core or regular and better remunerated positions, women are increasingly being hired in peripheral, insecure, less valued jobs as home-based workers, causal workers and temporary workers. In the context of globalization and flexible specialization in production and employment relationships, more and more women are being employed under sub-contracting arrangements in putting out systems as industrial out-workers who are often home-based. Another important and growing source of employment for women is related to the rapid advances in telecommuting that have made it possible to relocate data entry, keyboarding, clerical, answering service jobs from developed to developed countries. In countries such as India, South Africa, the Caribbean, more and more women are working in these offshore "back offices" and call centres, which are often their own homes.

These various forms of non-regular or atypical work are normally characterized by very low pay, irregular incomes, little or no job or income security and lack of social protection, and cannot be expected to provide a satisfying alternative to childbearing. Very importantly, the available evidence suggests that home-based work (which could be as employees or own-account) is an important and expanding source of employment worldwide, especially for women, and that women who are engaged in home-based work are not only better able to combine work and family responsibilities but also are more likely to use child labour. Especially where they are involved in subcontracting with piece rate payment or tight delivery deadlines, women are likely to use child labour. In India, for example, of the estimated 5 million workers

in the beedi (tobacco rolling) industry, 90 per cent are home-based women workers who are paid very poorly on a piece rate – they have to roll 1,000 beedis a day to earn roughly US$1 -- and who use children, especially girls, to help out in beedi rolling.

If the intermediate fertility countries follow the trend in developed industrialized countries, then the trend will also be one of increasing part-time employment. In the United States and United Kingdom where standard working hours have been reduced and there has been a sharp increase in part-time jobs, the inverse relationship between FLFPRs and fertility has weakened (Standing, 1983, p.534). Part-time work is very much a female domain; in the countries for which data are available, well over half, if not over two-thirds, of all part-time workers are women. Furthermore, part-time work for women is increasingly involuntary, growing numbers are working shorter hours than they want. Both the role incompatibility hypothesis and the economic empowerment hypothesis would then be less relevant.

A significant trend has been growing self-employment among women (and men), especially among those who have failed to secure paid jobs. For example, the proportion of self-employed among non-agricultural women workers doubled in sub-Saharan Africa (excluding Southern Africa) from 44 per cent in 1970 to 90 per cent in 1990. The proportion also increased in Northern Africa, South America, Southern Asia and Eastern and Southern Europe (United Nations, 2000a, p.117). Many of the self-employed women are in micro and small enterprises, rather than large companies. Among the self-employed, women are much more likely than men to be own-account workers rather than employers and to be in the informal rather than formal economy. The available evidence suggests that own-account work is more out of need than choice, and that those who work from economic necessity have higher fertility than those who work because they want to do so.

In some of the countries, women are still concentrated in the category of unpaid family work. According to latest year figures available, contributing family workers among economically active women is over 77 per cent in Bangladesh, 44 per cent in Indonesia, 56 per cent in Kenya and 23 per cent in Egypt. For these women, unpaid family work would involve both economic activities and care work looking after children (ILO, 2001a, pp.92-97).

Related to increasing self-employment of women is the growth of the informal economy, and it is this feature that is likely to have important implications for the trend in fertility decline. Where data are available, they indicate that the informal economy has been growing not only in developing but also in transition and developed countries. In India and Indonesia, the informal economy accounts for nine out of every ten women working outside of agriculture, in Kenya for 83 per cent, 40 per cent in Tunisia, 30 per cent in South Africa, 74 per cent in Bolivia, 67 per cent in Brazil, 44 per cent in Chile and also in Colombia, 48 per cent in Costa Rica, 69 per cent in El Salvador, 65 per cent in Honduras, 55 per cent in Mexico, 41 per cent in Panama and 47 per cent in Venezuela (United Nations, 2000a, p.122). Most women (and men) have been going into the informal economy because they cannot find jobs or are unable to start businesses in the formal economy and cannot afford to be openly unemployed. But work in the informal economy, being outside legal and regulatory frameworks, is normally characterized by a high degree of vulnerability. Workers have little or no legal or social protection and they are excluded from or have limited access to public infrastructure and benefits. Informal economy workers are rarely organized for effective representation and have little or no voice either at the workplace or in the socio-political arena. Informal employment is normally unstable and insecure – consisting of very long hours and peak pressure to finish contract orders by a short deadline, followed by "inactive" periods waiting for orders and therefore providing only unstable and insecure incomes. A much higher percentage of people working in the informal, relative to the formal economy, are poor and women working in the informal economy are more likely than men to be poor. Where there is child labour, it is in the informal economy.

Other aspects that may explain why women's recent labour force participation in these countries is not likely to be status enhancing or empowering for them and therefore not likely to have a significant impact on reducing fertility include labour market segmentation, occupational segregation by sex and labour market discrimination. Information at the 1-digit sector level shows that women are still concentrated in those sectors that are traditionally associated with their gender roles, especially in community, social and personal services whereas men dominate the better-paying sector jobs in financial services, real estate and business services. In the industrial sector, women are almost exclusively in manufacturing whereas men are in construction and the utilities industries (ILO, 2001a, p.721). Occupational segregation by sex has generally declined over the past two decades but is still very extensive all over the world and has remained virtually unchanged in most Middle Eastern and North African countries (Anker, 1998, p.412). "Occupational segregation is more detrimental to women than to men, especially given the characteristics of the typically female occupations. Female occupations are 'relatively low paid, have relatively little employment security and have relatively little authority or career opportunities' and are also undervalued in terms of social status" (United Nations, 2000a, p.128). Where labour market segmentation remains strong and women are excluded from career jobs or have little job occupational mobility and are not able to satisfy their status aspirations, they may seek to enhance their self-esteem and status in motherhood. On the other hand, in highly segmented labour markets, women may have fewer opportunities to meet potential marriage partners and age at marriage may therefore go up.

That gender discrimination remains strong in the labour market can also be seen in other ways: "many women with comparable skills and experience are confronted with a gender wage gap and lag behind men in income and career mobility in the formal sector. Equal pay for women and men for equal work or work of equal value, has not yet been fully realized. Gender discrimination in hiring and promotion and related to pregnancy, including through pregnancy testing, and sexual harassment in the workplace persist. In some countries, women's full and equal rights to own land and other property, including through the right to inheritance, is not recognized yet in national legislation. Progression in the professions, in most cases is still more difficult for women" (United Nations, 2000b, paragraph 20).

C. OTHER FACTORS INFLUENCING THE RELATIONSHIP BETWEEN WOMEN'S EMPLOYMENT AND FERTILITY

This section briefly considers the impact that other major factors, including ethnicity and religion, government policies, socio-cultural norms and migration, are likely to have either directly or indirectly on women's employment and fertility in the future. Examples are drawn mainly from three countries in different regions of the world – Malaysia, Nicaragua and Tanzania. In Malaysia, the confounding of race, religion, politics and economics by affirmative action government policies along ethnic lines has been a major explanation of the fertility transition. The Malaysian case also suggests that rising religious fundamentalism may be an important "predictor" of future fertility levels. Nicaragua illustrates the impact of autonomous international migration of women on fertility levels. Other countries sending large numbers of women overseas for employment mainly in domestic service include Indonesia, the Philippines and Bangladesh. Although Tanzania is actually not in the list of intermediate fertility countries (its current TFR is 5.5), it is included to illustrate the point that where strong socio-cultural norms persist, as in much of Sub-Saharan Africa, women's labour force participation tends to have little impact on high fertility levels.

The Malaysian case is interesting because despite extraordinarily rapid socio-economic development and increase in female labour force participation rates, the fertility transition has slowed and hovered at above 3.3 children per woman. Various studies have shown that even after controlling for socio-economic, demographic and residential characteristics, fertility differentials persist among the three main ethnic groups in the country and that ethnicity appears to be an important determinant of fertility

differentials. Fertility decline has been most rapid for the Chinese, followed by the Indians but Malay fertility decline "bottomed out" in the early 1980s (about the same time as the Islamic fundamentalist revival movement took off) and even showed signs of increasing since. Linear extrapolation of fertility trends of the 1980s led to the prediction that the Chinese would attain replacement level fertility about 1995 and the Indians about 2000, that fertility for these two groups would continue to fall below replacement, and that Malay fertility decline would be at a much slower pace so that the ethnic fertility differentials would widen (Lim, Jones and Hirschman, 1987, p.423). However, recent data from the Population Census of 2000 indicate that both Chinese and Indian fertility levels have not yet reached replacement (being respectively at 2.57 and 2.55) and that Malay fertility is still at 3.62 (Malaysia, 2001, p.88). Since the Malays now account for 66 per cent of total Malaysian population (up from just over half in the 1970s), what happens to Malay fertility will increasingly determine the overall rate for the country as a whole.

Even after controlling for socio-economic, demographic and residential characteristics, fertility differentials persist among the Malays, Chinese and Indians and "ethnicity" appears to be an important determinant. The ethnic factor in Malaysia has been clearly influenced by the Malaysian Government's New Economic Policy (NEP) which came into force in 1970 and which favoured the educational advancement, geographical and occupational mobility and income earning opportunities of the Malays vis-à-vis the other ethnic groups and directly influenced the relative costs and values of children. By ensuring educational and job opportunities for Malay children through a quota system, scholarships and other financial subsidies, the NEP reduced the costs and raised the value of children to Malay parents. These policies had the opposite effect on Chinese and Indian parents. The NEP has been replaced by an active policy to develop a Bumiputra Commercial and Industrial Community, which still favours the restructuring of employment in Malaysia to increase the number of Malay professionals, managers and skilled workers in various occupations and sectors. This affirmative action policy of the government will continue to influence the way in which the different ethnic communities view the costs and benefits of children.

Religion and religious orthodoxy also represent an important aspect of ethnicity and since the Malays are all Muslims, the influence of the Islamic religion in particular can be examined. While the implementation of the NEP served to improve the position of Malay women relative to the other ethnic groups, the religious fundamentalist movement appears to have worked in the opposite direction to lower their status relative to their own menfolk. One study (Lim, 1990) based on data from a number of surveys conducted in the mid-1980s showed that the percentage of Malay women working outside the home was not greatly different from that of the non-Muslim groups of Chinese and Indians and did not indicate restriction of Malay women from the employment sectors that entail contact with men. But relative to the other ethnic groups, Malay women faced the greatest objections from their husbands and were most restricted in their efforts to assume economic roles outside the home. They were also least likely to feel confident that they would be able to financially support themselves, much less their children, in spite of having higher mean income from employment than the Chinese or Indian women. The censure of spinsterhood and the emphasis Islam places on safeguarding against a woman's sexual misconduct or suspicion thereof by marrying her off early was evident in the comparatively younger age at marriage, even though educational levels have been going up. Other than increasing pressure among Muslims to be more observant of their religion, incursions of religion into politics, the setting up of communes that attempt to emulate the order of Islam and moves in some States to introduce "syariah" as the basis of all laws in the country, the "dakwah" movement has also resulted in increasing numbers of Malay women who have adopted traditional costumes and covered their heads. There was also evidence of high fertility norms persisting among Malay women and a distinct drop in contraceptive use by the end of the 1980s. Whether religious fundamentalism will continue in the changed global context since September 11 and its implications for Malay women and their fertility behaviour remains to be seen, but for Malaysia completion of the fertility transition does not seem to be on the horizon.

Nicaragua is an example of a country where autonomous international migration of women for employment has been an important contributory factor in the decline in fertility. The estimates are that close to one million Nicaraguans or roughly 20 per cent of the nation's total population are migrating to other countries. Women account for about 49 per cent of the total emigrants and the majority go to Costa Rica to work as domestic helpers or in commercial activities. A recent survey (ILO, 2001d) found that female emigration is much more likely than male emigration to be linked to the disintegration of marriages and that female migrants who are still married have lower desired family size than non-migrant women. It is also worth noting that migrant women claimed that the most important reason for having children is to fulfil their emotional needs and to realize themselves as women – reasons related to having help in the home and support in old age came second. In countries such as Nicaragua, including the Philippines, Indonesia and Bangladesh, where women are increasingly engaged in contract labour migration, it can be expected that fertility would continue to fall at least to replacement.

Tanzania is an example of a country where socio-cultural norms support high fertility and where these norms are not likely to change rapidly especially in a context where productive and reproductive roles go together and where women's labour force participation generally has not been empowering. "Women in Tanzania, like women elsewhere in Sub-Saharan Africa, are oriented towards motherhood. Traditionally a woman is expected to marry early and give birth to many children. Girls are socialized early in their lives into key roles as mothers, housekeepers and producers. A women's status is measured largely by her capacity to reproduce and maintain children. Young girls learn early in life to look after their siblings and to trade and farm like their mothers, sisters, aunts and grandmothers" (ILO, 2001e, p.20). The trend in female labour force participation in Tanzania has been one of rising unemployment since 1985, concentration in the agricultural sector where women outnumber men, and in the informal economy where they are engaged mainly in survival type activities and where their low income earnings force many women to enlist their children to supplement family income. Women work because it is a matter of survival and continue to want large families. The ideal number of children is still cited as six. Girls are precious in fetching dowry and assisting in domestic chores while boys are counted on for support in old age and to carry on the family name. A recent survey conducted among working women in Tanzania confirmed that support in old age is the most important reason for high fertility – " I need many children so that some can take care of me when I am old" (ILO, 2001e, p.96). The value of children is also confirmed in the belief that a child who has died should be replaced.

D. COMPLETING THE FERTILITY TRANSITION: WHAT INDICATORS OF WOMEN'S EMPLOYMENT MAY BE IMPORTANT PREDICTORS

Female labour force participation rates per se are increasingly less likely to be meaningfully linked to total fertility rates in the intermediate fertility countries in the future. The assumption that in the process of socio-economic development, women go increasingly into modern sector, permanent, full-time wage employment does not hold. To predict what is likely to happen to fertility in these countries, it would be more useful to have specific indicators of the quality of women's employment and their working conditions. Listed below are some indicators and some speculation about how they are likely to affect future fertility:

(a) *Status in employment:* The proportion in wage and salary employment is not likely to go up significantly. In many of the countries, the significant jump in employee status for women was linked to the establishment of export processing zones and labour-intensive manufacturing industries in the 1970s and 1980s. But over time, with changing skill requirements in many of the zones, men rather than women are being hired and the proportion of female employees tends to drop (in the maquiladoras in Mexico, for example). More importantly, with intensifying global competition and flexible specialization, women in poor countries are more likely to be hired in subcontracting for global commodity and value chains and to be in the category of self-employed

or own-account work. Compared to employee status, self-employment and own-account work is less likely to have a strong inverse relationship with fertility.

(b) *Open unemployment rates:* An important feature is that women's jobs and income earning capacity tend to be increasingly insecure. Women generally have higher rates of unemployment and especially of under-employment and disguised unemployment than men and find it harder to re-enter employment once they lose their jobs. For example, at the end of the 1990s, the open unemployment rates for women and men respectively were 5.1 per cent and 3.3 per cent in Indonesia, 9.7 per cent and 6.0 per cent in the Bahamas, 14.3 per cent and 11.9 per cent in Argentina, 11.6 per cent and 7.2 per cent in Brazil, 23.3 per cent and 17.2 per cent in Colombia, and 14.5 per cent and 8.8 per cent in Nicaragua. Between 1990 and 1997, the unemployment rate for women increased by 2 and 5 percentage points in Northern Africa, Central and South America and Eastern and Western Europe. Young women in particular have very high rates of open unemployment. For example, in the Philippines in 1998, the rate was 19.3 per cent for women aged 15-24 years as compared to 13.6 per cent for men in the same age group and 5.3 per cent for women aged 25-54 years. If one reason for women to have children is to ensure their security either in old age or under difficult economic circumstances, then it could be speculated that this motive would be increasingly important under conditions of growing unemployment and income insecurity.

(c) *Work in the formal or informal economy:* The informal economy has been responsible for the bulk of new jobs in most if not all these countries and the situation is not likely to change in the near future. The relationship between informal employment and fertility is mutually dependent (women in the informal economy are likely to have higher fertility than women in the formal economy and women with high fertility may be forced to work in the informal rather than formal economy). At both national and international levels there have been growing efforts to improve legal and social protection and organization and representation of workers in the informal economy (for example, the General Discussion at this year's International Labour Conference will be on Decent Work and the Informal Economy). The success of these effects may have some impact on fertility decisions, but given the problems and the size of the informal economy in most of these countries, the impact would most likely not show up for a very long time.

(d) *Sector of employment:* The inverse relationship between labour force participation and fertility tends to be most obvious among those employed in the industrial sector and to be less so or even to be absent among those employed in agriculture or services. In fact, several studies have suggested a positive relationship between women's work in agriculture and fertility. In those countries with large agricultural sectors, women's employment share remains very high; women have even taken over from men in agriculture in several areas. The trends indicate only slow decline in the share of agriculture in total employment and increases in the services sector rather than in the industrial sector.

(e) *Location of employment:* Home-based work is becoming increasingly common – because of sub-contracting and industrial outputting systems and the spread of information and communications technology. The trend has been one of increasing relocation of jobs from industrialized to developing countries, especially "back office" staff located in call centres or engaged in data entry and processing. The jobs are dominated by women, but while they can benefit from the new independence of work location, "isolation and exclusion from career choices can also occur" and "in the best, a new, more informal and more appealing work culture may be apparent; but, in the worst circumstances, call centres have been called the 'sweatshops of the digital era' (ILO, 2000b, p.7). Female homeworkers may be better able to balance work and family responsibilities but may also desire children to compensate for the low status and isolation of their work. The isolation of home-based work or work in micro or small enterprises (discussed below) may also mean that women are less likely to have the support of group norms to change their fertility behaviour.

(f) *Occupational segregation:* The sex segregation of occupations is changing but only slowly and therefore not likely to have any significant impact on reducing fertility. In fact, occupational segregation not only reinforces typical female stereotypes, such as the caring, docile and homebased woman worker, but may also perpetuate into the next generation because restricted and inferior labour market opportunities for women "cause many families – and many women – to underinvest in women's education, training and experience" (Anker, 2001, p.151).

(g) *Size of enterprise:* Most new jobs have been created in micro and small enterprises than in large enterprises. For example, in Latin America in the 1990s, only one-third of net job gains in private sector urban employment was in enterprises with more than 20 workers and most of these jobs were in the least productive, lowest earning activities (ILO, 2001c, pp.28-29). In India, there has been increasing feminized employment in small-scale production units, which are actually ancillaries of large companies. An inverse relationship between female employment and fertility is more likely in large companies, especially multinational companies. In micro and small enterprises, the relationship is not clear or may be absent.

(h) *Child labour:* The contribution of children to the family workforce and especially to family income has always been an important reason for high fertility. One estimate is that the number of child workers in the world has fallen from about 250 million to about 211 million and can be expected to continue to fall significantly. The global campaign against child labour is having an impact, at least on the number of children going to school instead of being in hazardous forms of work. A Timebound Programme for the Elimination of Child Labour has been launched in El Salvador, Nepal and Tanzania and is being extended to a number of other countries, including the Philippines. The Timebound Programme, which has the commitment of national governments, includes a component for providing viable alternative livelihood for parents in return for sending children to school. In these countries, the value of children as child workers would fall.

(i) *Migration for employment:* Women are increasingly engaged in autonomous migration, both internal and international, for employment. The opportunities for male contract labour migration have shrunk, but there are still many opportunities for international female labour migrants, especially as domestic helpers, "entertainers", sales persons, hotel and restaurant workers and assembly line workers. However, statistics are hard to come by and where available are probably underestimated because much of it is undocumented. Whether within countries or internationally, women involved in autonomous migration for economic reasons are likely to get married at a later age than those remaining in their place of origin. The autonomous migration experience and exposure to work and living conditions in urban areas or other countries tends to influence the attitude of young women toward delayed marriage and family formation. For those already married, the kinds of work that women migrants are mainly going into do not provide for having children with them. Importantly, marriage breakups are much more likely to occur when it is the man rather than the woman remaining behind in a migration move.

(j) *Other "predictors":* It is also important to take into account the fact that more and more governments, employers' and workers' organizations are instituting various measures to enable women (and men) to better harmonize work and family responsibilities. Legislation and regulations in the labour code increasingly provide for maternity protection, leave and benefits for women workers, parental leave (with appropriate job guarantees) to allow both women and men to take time off work to care for children, to have flexible working time arrangements, child care services and facilities, etc. It is a legal obligation in countries as diverse as Bangladesh, Bolivia, Colombia, Ecuador, Egypt, Iran, the Philippines and the Syrian Arab Republic for employers to provide childcare support services or facilities in enterprises employing above a specified number of workers (ILO, 1994, pp.31-35). Even in rural areas, labour laws provide for crèches for children of workers in the formal agricultural sector. In the informal economy in both rural and urban areas, there are growing initiatives by grassroots women's groups, NGOs, community/civil society groups to set up social support services to promote the harmonization of work and family

responsibilities. Under such circumstances, it can also be expected that the role incompatibility hypothesis will increasingly have less relevance.

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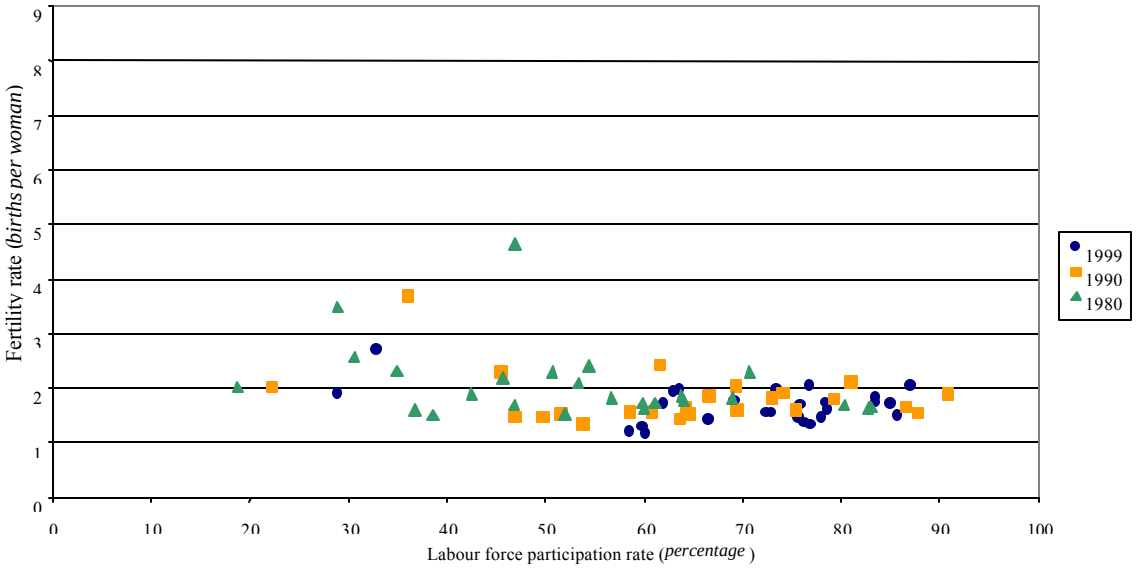
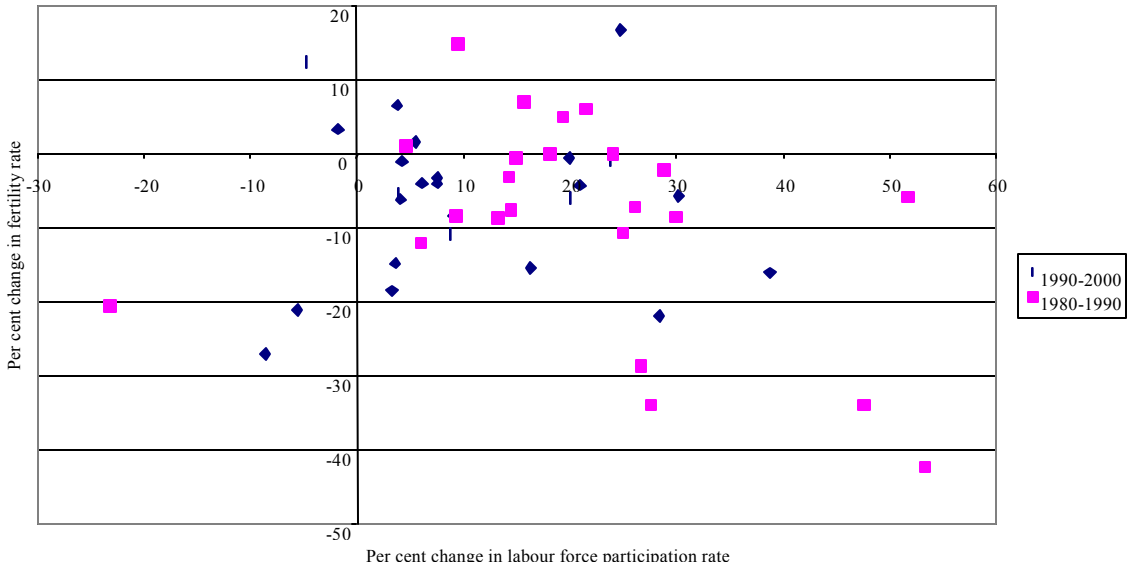
Figure 1a. Developed (industrialized) economies, females aged 25-54 years



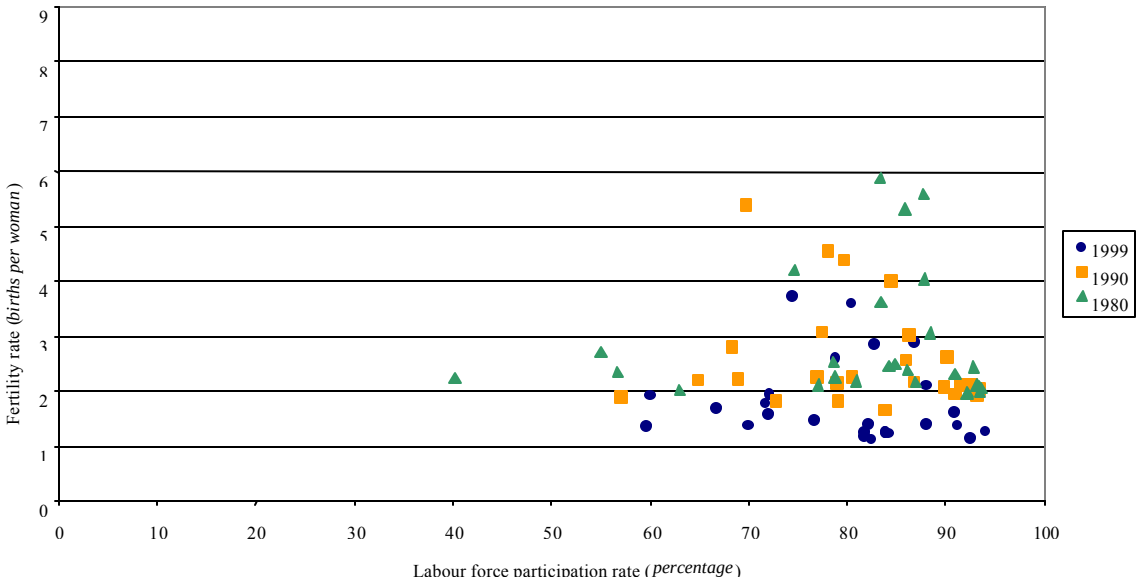
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 1999 figures are for latest year after 1995.

Figure 1b. Developed (industrialized) economies, females aged 25-54 years



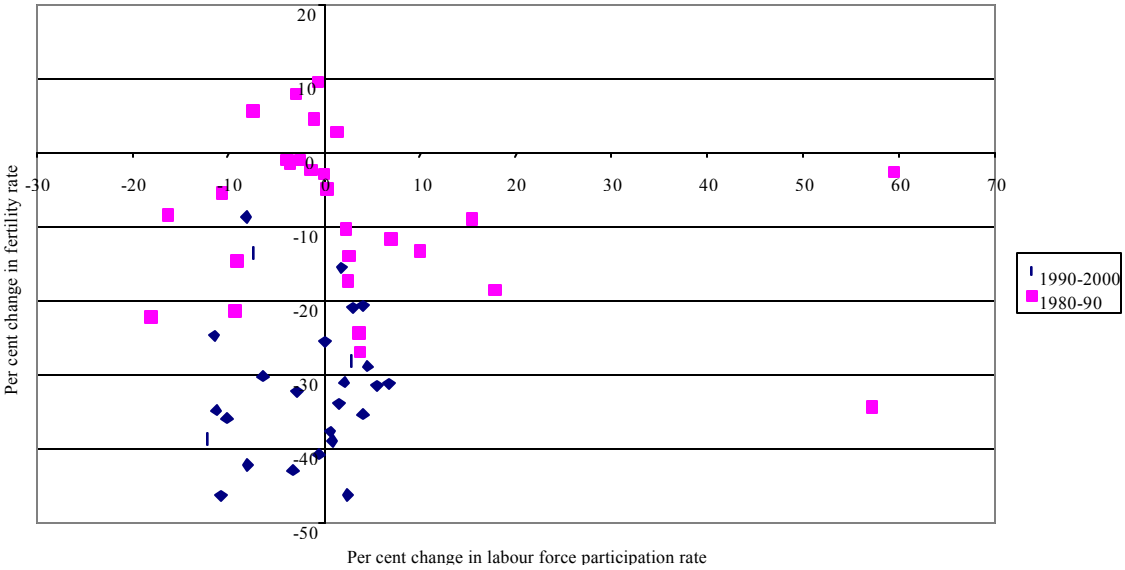
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 2000 figures are for latest year after 1995.

Figure 2a. Transition economies, females aged 25-54 years



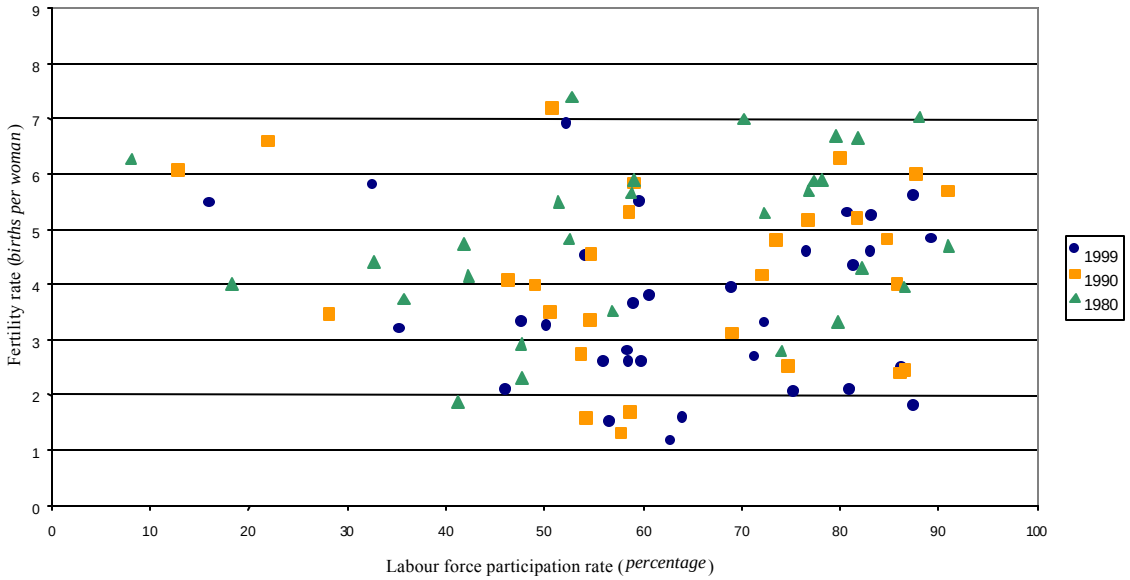
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 1999 figures are for latest year after 1995.

Figure 2b. Transition economies, females aged 25-54 years



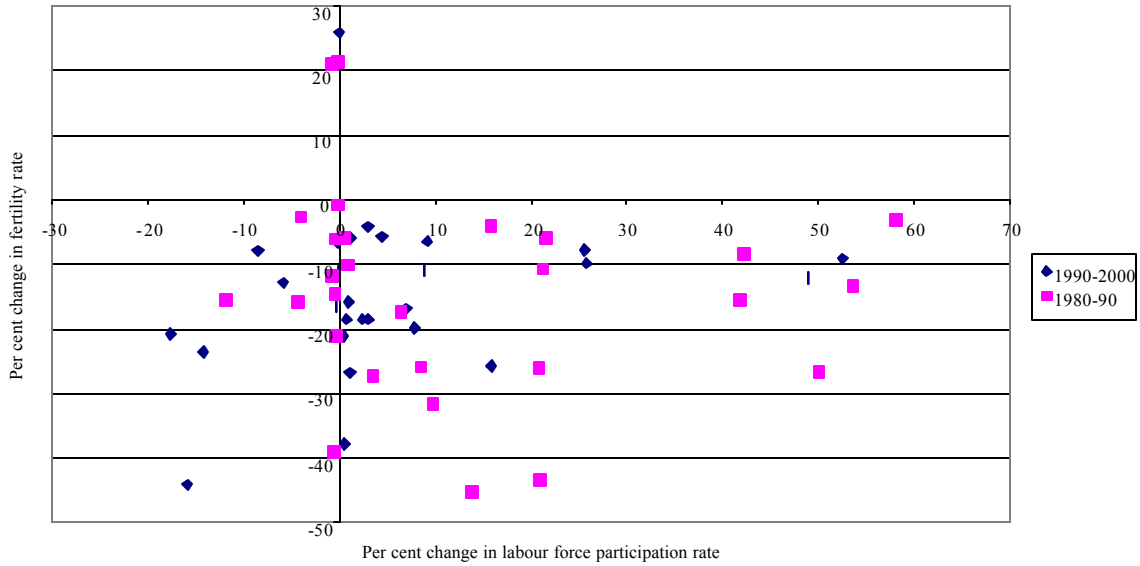
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 2000 figures are for latest year after 1995.

Figure 3a. Asia and the Pacific, females aged 25-54 years



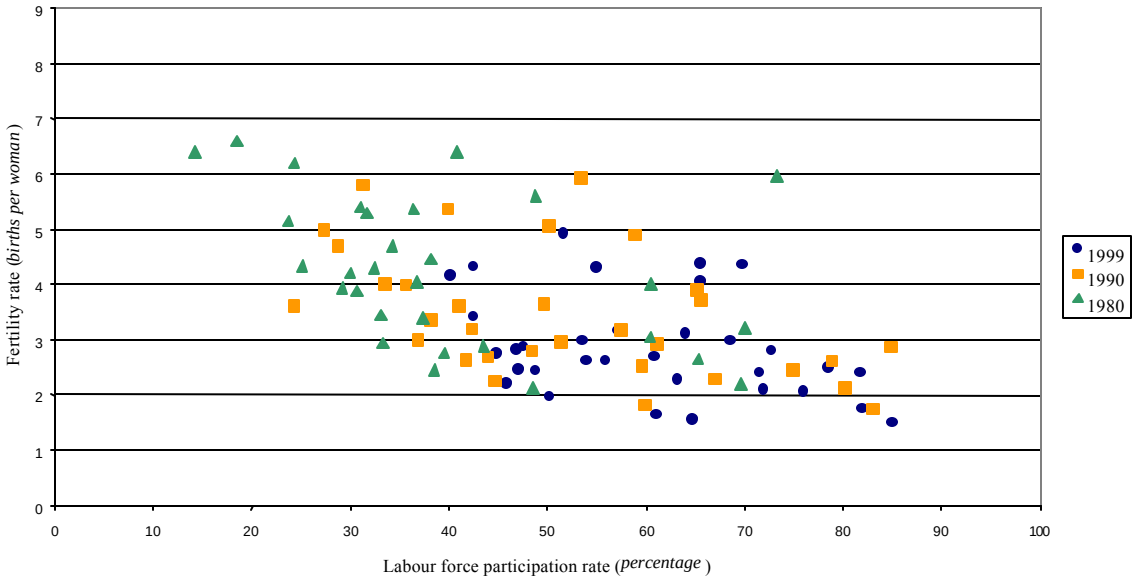
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 1999 figures are for latest year after 1995.

Figure 3b. Asia and the Pacific, females aged 25-54 years



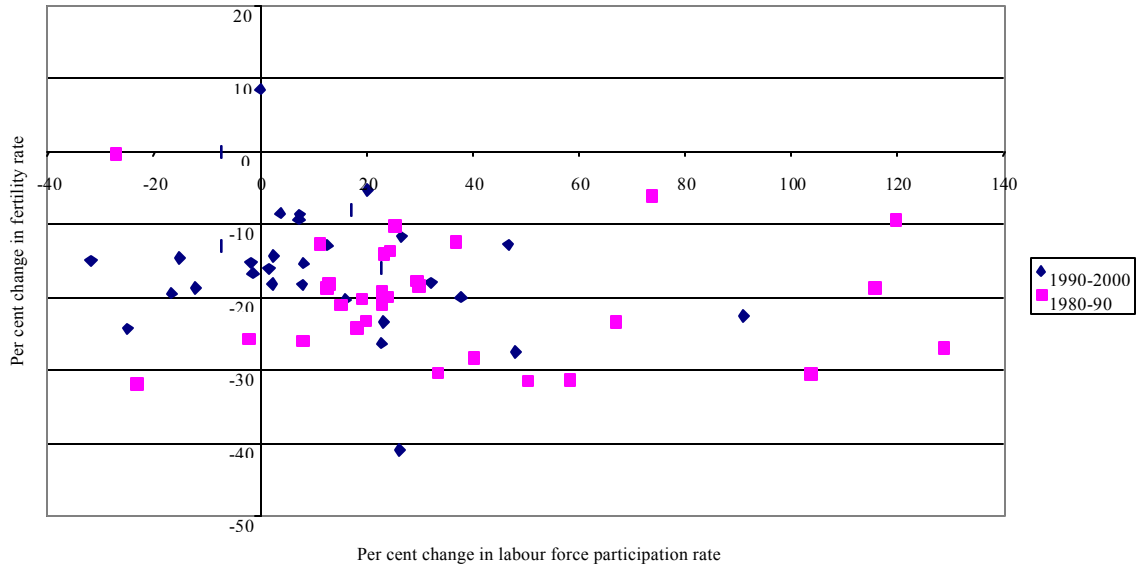
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 2000 figures are for latest year after 1995.

Figure 4a. Latin America and the Caribbean, females aged 25-54 years



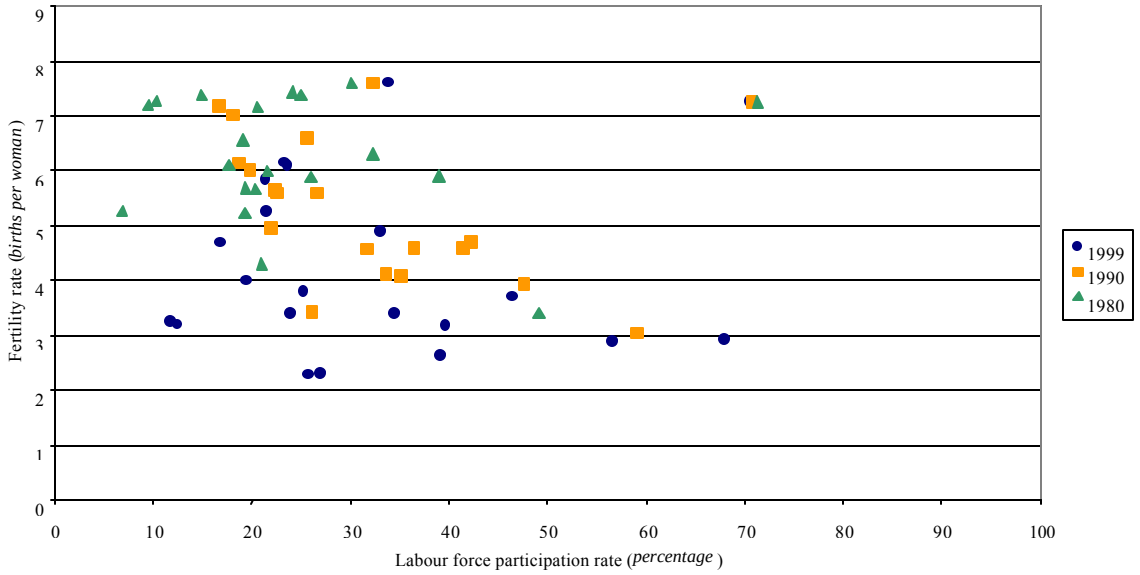
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 1999 figures are for latest year after 1995.

Figure 4b. Latin America and the Caribbean, females aged 25-54 years



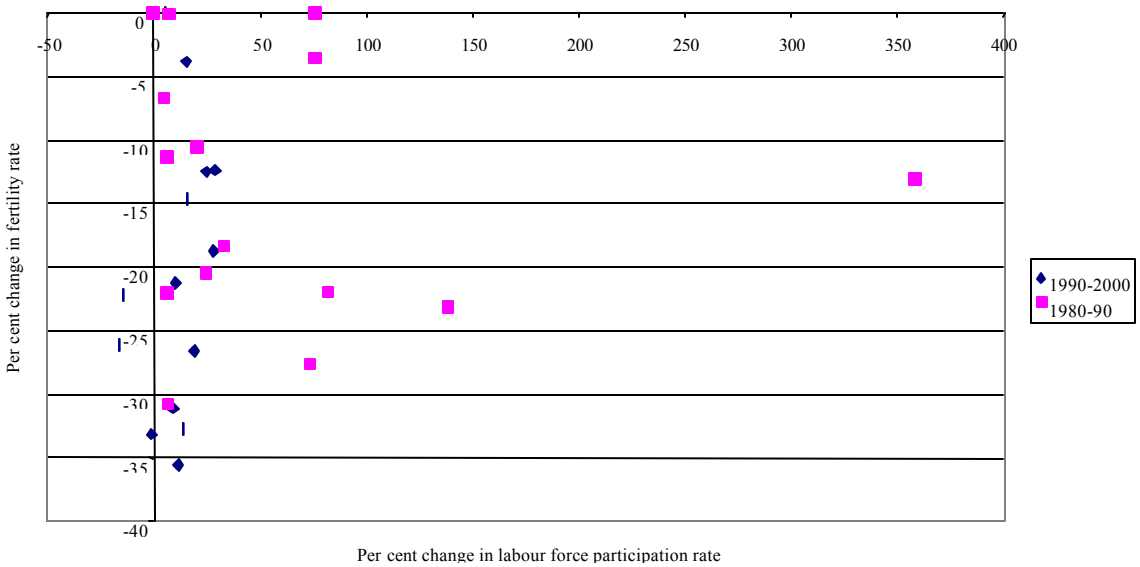
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 2000 figures are for latest year after 1995.

Figure 5a. North Africa and the Middle East, females aged 25-54 years



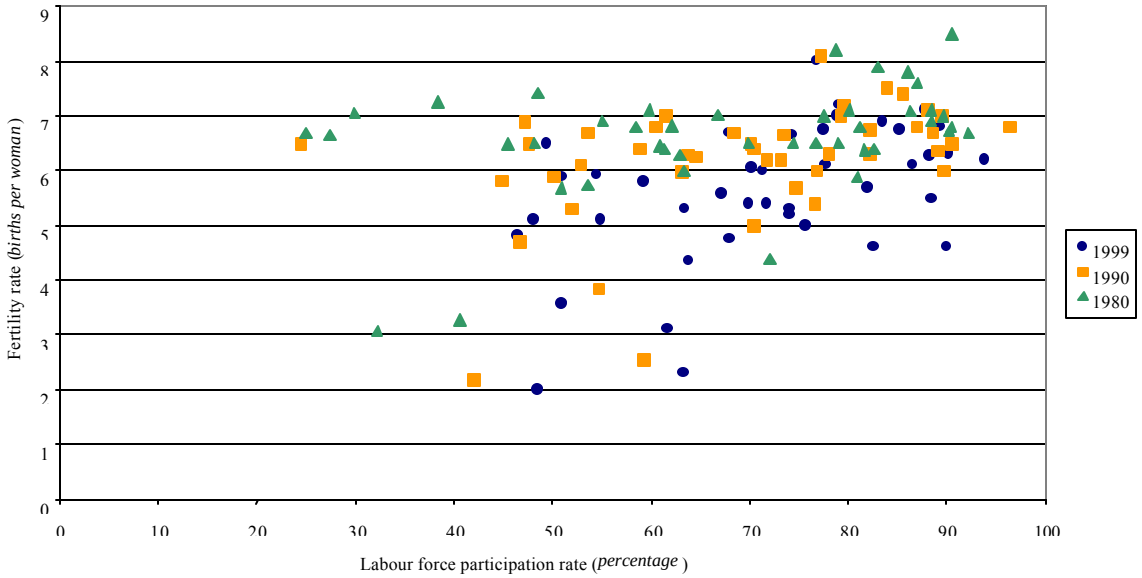
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 1999 figures are for latest year after 1995.

Figure 5b. North Africa and the Middle East, females aged 25-54 years



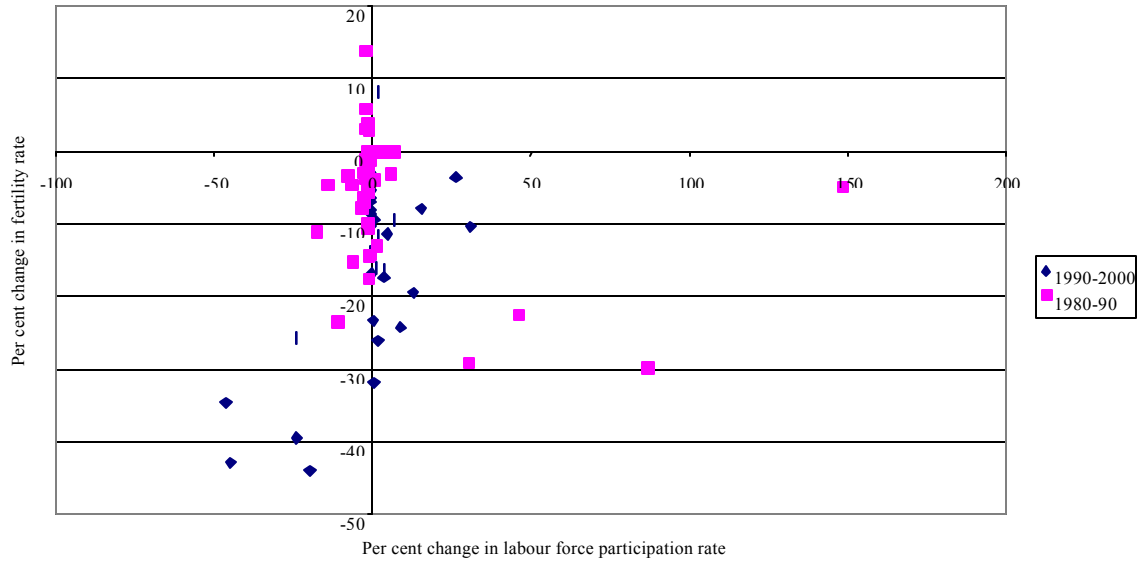
Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 2000 figures are for latest year after 1995.

Figure 6a. Sub-Saharan Africa, females aged 25-54 years



Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 1999 figures are for latest year after 1995.

Figure 6b. Sub-Saharan Africa, females aged 25-54 years



Sources: Fertility rates – United Nations Population Division estimates 1975-80, 1985-90 and 1995-2000; Labour force participation rates – ILO, 2001-2002 Key Indicators of the Labour Market (Geneva, 2001), 2000 figures are for latest year after 1995.

TABLE 1. INTERMEDIATE FERTILITY COUNTRIES: TOTAL FERTILITY RATES AND FEMALE LABOUR FORCE PARTICIPATION RATES

Region and country	*Total fertility rate 1980-1985*	*Total fertility rate 1995-2000*	*FLFPR 25-54 1980*	*FLFPR 25-54 1990*	*FLFPR 25-54 latest year 1990s*
North Africa and Middle East					
Algeria	6.4	3.3	20.6	22.0	11.8
Bahrain	4.6	2.6	19.4	35.1	39.1
Egypt	5.1	3.4	6.9	31.6	24.0
Iran	6.5	3.2	21.7	22.6	12.5
Israel	3.1	2.9	49.1	59.0	68.0
Jordan	6.8	4.7	15.0	19.9	16.9
Kuwait	4.9	2.9	26.5	47.7	56.6
Lebanon	3.8	2.3	21.1	26.1	25.8
Libyan Arab Jamahiriya	7.2	3.8	25.0	22.3	25.3
Morocco	5.4	3.4	39.1	41.4	34.5
Qatar	5.5	3.7	17.8	42.3	46.5
Sudan	6.0	4.9	32.3	26.6	33.1
Syrian Arab Republic	7.4	4.0	24.1	25.6	19.5
Tunisia	4.9	2.3	19.4	33.6	27.0
United Arab Emirates	5.2	3.2	20.4	36.4	39.7
Sub-Saharan Africa					
Botswana	6.0	4.4	81.6	76.6	63.8
Cape Verde	6.3	3.6	33.0	46.7	50.9
Ghana	6.7	4.6	88.5	89.8	90.0
Kenya	7.5	4.6	83.0	82.1	82.6
Lesotho	5.6	4.8	53.7	51.9	68.0
Reunion	2.9	2.3	40.6	59.3	63.3
South Africa	4.6	3.1	48.4	54.7	61.7
Swaziland	6.0	4.8	45.5	44.8	46.4
Asia and the Pacific					
Bangladesh	5.3	3.8	76.8	73.5	60.6
Brunei Darussalam	3.8	2.8	32.7	54.6	58.4
East Timor	5.4	4.4	82.3	81.6	81.3
India	4.5	3.3	52.5	46.3	47.7
Indonesia	4.1	2.6	50.7	50.5	58.5
Malaysia	4.2	3.3	45.5	49.0	50.2
Mongolia	5.7	2.7	81.8	84.7	71.3
Myanmar	4.7	3.3	72.4	72.1	72.3
Nepal	5.5	4.8	58.8	58.5	89.2
Philippines	5.0	3.6	51.5	54.7	59.0
Turkey	4.2	2.7	47.0	36.0	32.9
Vietnam	4.5	2.5	78.1	85.7	86.2
Oceania					
Fiji	3.8	3.2	18.4	28.1	35.3
Guam	3.1	4.0		69.0	
Papua New Guinea	5.4	4.6		76.7	76.6
Latin America and the Caribbean					
Argentina	3.2	2.6	34.6	36.8	54.0

TABLE 1 (*continued*)

Region and country	*Total fertility rate 1980-1985*	*Total fertility rate 1995-2000*	*FLFPR 25-54 1980*	*FLFPR 25-54 1990*	*FLFPR 25-54 latest year 1990s*
Bahamas	3.2	2.4	70.2	78.8	81.8
Belize	5.4	3.4	23.6	28.8	42.5
Bolivia	5.3	4.4	42.0	27.3	69.8
Brazil	3.6	2.3	36.5	51.1	63.2
Chile	2.7	2.4	33.3	41.7	48.8
Colombia	3.7	2.8	24.7	57.4	72.7
Costa Rica	3.5	2.8	31.0	38.2	46.9
Dominican Republic	4.2	2.9	34.2	41.0	47.6
Ecuador	4.7	3.1	23.9	33.5	64.0
El Salvador	4.5	3.2	48.8	65.1	57.2
French Guiana	3.6	4.1		65.5	
Guatemala	6.3	4.9	29.5	31.2	51.6
Guyana	3.3	2.5	29.3	43.9	47.1
Haiti	6.2	4.4	70.0	53.3	65.5
Honduras	6.0	4.3	35.1	40.0	55.0
Jamaica	3.6	2.5	60.5	84.8	78.5
Mexico	4.2	2.8	31.6	34.5	44.8
Nicaragua	6.2	4.3	40.9	50.1	42.5
Panama	3.5	2.6	44.4	42.3	55.9
Paraguay	5.3	4.2	35.8	58.9	40.1
Peru	4.6	3.0	28.2	35.6	68.5
Suriname	3.7	2.2	35.8	41.2	45.9
Uruguay	2.6	2.4	43.5	59.5	71.5
Venezuela	4.0	3.0	38.3	49.7	53.5
Transition Economies					
Albania	3.4	2.6	74.7	77.4	78.8
Kyrgyzstan	4.1	2.9	87.9	84.5	86.8
Tajikistan	5.5	3.7	83.3	69.8	74.4
Turkmenistan	4.8	3.6	85.8	78.1	80.4
Uzbekistan	4.7	2.9	87.8	79.6	82.8

Source: Total Fertility Rates: United Nations Population Division estimates Female Labour Force Participation Rates: ILO, 2001a.