

#### IV.D. GENDER AND DEVELOPMENT

##### Selection IV.D.1. Gender Inequality at the Start of the 21st Century\*

###### Education

Education is central to one's ability to respond to the opportunities that development presents, but significant disparities remain in several regions (Figure 1). Disparities persist both in enrollment rates, which capture education flows, and in average years of schooling, which represent the stock of education in the population.

Female primary and secondary enrollment rates and average years of female schooling have generally risen over time. In several regions primary enrollment rates have flattened out at high levels—as in East Asia and Pacific, Latin America and the Caribbean, and Europe and Central Asia, where gross enrollment rates for females have reached or surpassed 100 percent.<sup>1</sup> Girls' primary enrollment rates have also leveled off in Sub-Saharan Africa—but at much lower levels. In Sub-Saharan Africa girls experienced strong gains in primary enrollment rates between 1970 and 1980, but those rates have since flattened out at 54 percent. Absolute levels of female enrollment and schooling remain lower in Sub-Saharan Africa than in other developing regions. Female secondary enrollment rates were just 14 percent in 1995, and average schooling attainment was just 2.2 years in 1990.

How do these trends compare with those for boys? Gender equality in school enrollments and average years of schooling has improved since 1970, as girls' schooling has generally increased faster than boys'. But the gender disparity and the speed in closing gender gaps have varied. As with rights, East Asia, Latin America, and Europe and Central Asia have the highest gender equality in education. In Europe and Central Asia and Latin America average female secondary enrollment rates now exceed male rates, and women have on average about 90 percent as many years of schooling as men.

\*From World Bank, *Engendering Development* (New York: Oxford University Press, 2001), pp. 41–44, 53–59, 63–66, 151–154, and 158–162. Reprinted by permission.

<sup>1</sup>Gross enrollment rate, the total enrollment in a specific level of education, regardless of students' age, expressed as a percentage of the official school-age population corresponding to the same level of education in a given school year, can exceed 100 because the numerator, unlike the denominator, is not limited to youths of a given age. Early entry into school and grade repetition are among the reasons that the numerator may include youths outside the appropriate age range.

Starting from lower initial levels of gender equality, South Asia, Sub-Saharan Africa, and the Middle East and North Africa have all registered noteworthy declines in gender disparities in primary and secondary enrollments between 1970 and 1995. Nonetheless, South Asia continues to have the lowest gender equality in education. Women in South Asia have on average only about half as many years of education as men, and female enrollment rates at the secondary level are still only two-thirds of male rates. Moreover, South Asia has larger gender inequalities in education than other developing regions where absolute levels of female education are lower (Filmer, King, and Pritchett 1998).

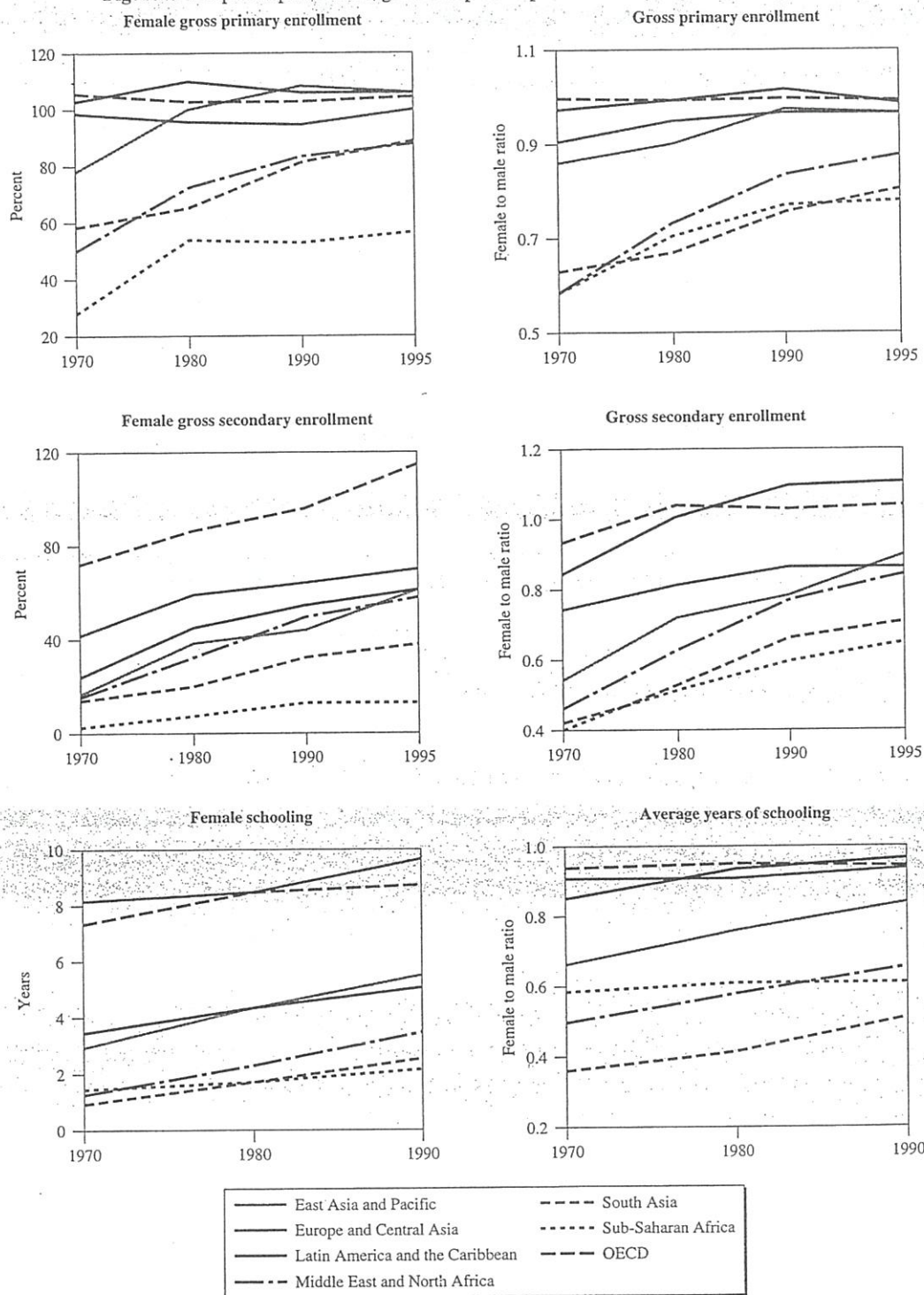
In Sub-Saharan Africa gender equality in enrollment rates has increased—although at the primary level improvements between 1980 and 1990 tended to reflect absolute declines in boys' enrollment rates rather than improvements in girls'. Moreover, in contrast to South Asia and the Middle East and North Africa, Sub-Saharan Africa made no real progress in closing the gender gap in average years of schooling between 1970 and 1990.

So, while there has been a clear trend toward gender equality in education since 1970, the gains have been slow and uneven for the poorest regions. Closing gender gaps in education—and closing them more quickly—are thus still important development challenges to policymakers, especially in South Asia, Sub-Saharan Africa, and some countries in the Middle East and North Africa. The challenges are particularly important as the world moves into the information age and knowledge-intensive output displaces traditional modes of production. Basic education is the foundation for developing the flexible skills needed to participate in knowledge-intensive economic activity. Those who lack access to basic education are likely to be excluded from the new opportunities, and where longstanding gender gaps in education persist, women will be at increasing risk of falling behind men in their ability to participate in development. . . .

###### Employment and Earnings

Historically, men have had higher rates of participation in the labor force than women—a pattern that continues. But female labor force participation varies considerably across developing regions, with women's share of the labor force ranging

Figure 1. Despite improvements, gender disparities persist in schooling in some regions.



Sources: Years of schooling data from Barro and Lee (1994); population weights from World Bank (1999b).

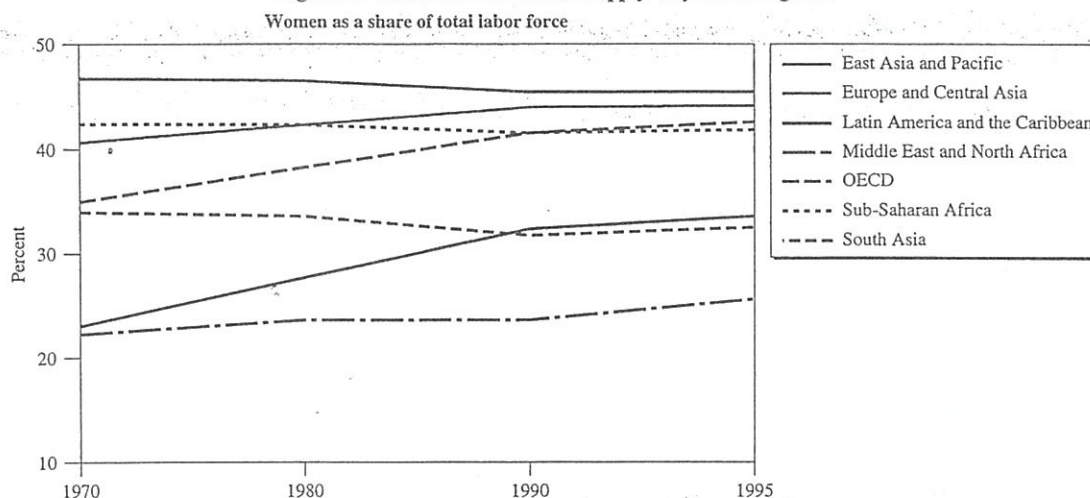
from 25 percent in Africa in 1995 to about Central Asia and in 2). Regional trends 1995 women's share slightly in the Middle East Asia and Pacific America and the Caribbean women's relative participation but in South Asia and they declined slightly.

In the labor force perform different tasks. For example, majority of production worldwide. There is variation by gender in both countries, with women paying formal sector the unpaid and informal employment is on average employment, with women subcontracting, temporary in the home.

One measure of gender divides the women employed in proportion of all work

<sup>2</sup>Particularly in less developed tend to understate female. Some of the measured generation arise because much home and is not captured in

Figure 2. Trends in female labor supply vary across regions.



Source: World Bank (1999b).

from 25 percent in the Middle East and North Africa in 1995 to about 45 percent in Europe and Central Asia and in East Asia and Pacific (Figure 2). Regional trends also vary. Between 1970 and 1995 women's share of the labor force increased slightly in the Middle East and North Africa and in East Asia and Pacific, and considerably in Latin America and the Caribbean. In Sub-Saharan Africa women's relative participation rates were stable, but in South Asia and in Europe and Central Asia they declined slightly.<sup>2</sup>

In the labor force women and men commonly perform different tasks and work in different sectors. For example, women constitute the vast majority of production workers in the garment sector worldwide. There is persistent occupational segregation by gender in both developed and developing countries, with women underrepresented in better-paying formal sector jobs and overrepresented in the unpaid and informal sectors. Moreover, female employment is on average less secure than male employment, with women more often involved in subcontracting, temporary, or casual work, or work in the home.

One measure of occupational segregation by gender divides the proportion of all working women employed in a particular occupation by the proportion of all working men employed in that oc-

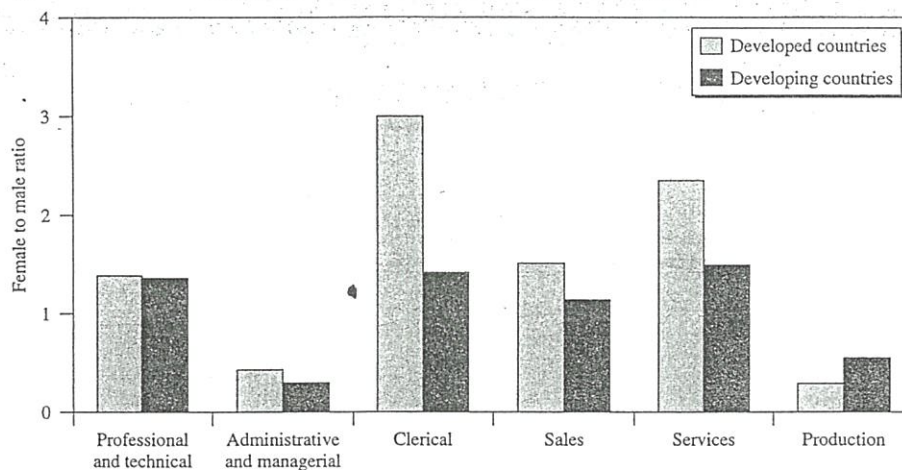
cupation. So, a ratio greater than one indicates that women are overrepresented, a ratio less than one that women are underrepresented. When this measure is applied to data from both developed and developing countries, several dimensions of occupational segregation emerge (Figure 3). For example, women are overrepresented in service occupations, professional and technical jobs, and clerical and sales jobs—in both developed and developing regions. And men are greatly overrepresented in production jobs as well as in higher-paying administrative and managerial positions.

There appears to have been some decline in employment and occupational segregation by gender over the past several decades. For example, a recent study by Tzannatos (1999) examines a measure of "employment dissimilarity" called the Duncan index and analyzes changes between the 1950s–60s and 1980s–90s. The study finds slight convergence in female and male employment profiles across industrial sectors, with faster convergence in wage employment than in self-employment or family work. There is also some evidence of convergence in occupational profiles between female and male wage employees, but little evidence of such convergence among self-employed or family workers. In developing countries, even with recent increases in the relative education and work experience of women in the labor force, occupational segregation remains a salient feature of labor markets.

Women also continue to earn less than men. Recent empirical studies from 71 countries indicate that on average in developed countries women earn

<sup>2</sup>Particularly in less developed countries, labor force statistics tend to understate female participation in economic activities. Some of the measured gender differences in labor force participation arise because much of women's work takes place in the home and is not captured in the labor force data.

**Figure 3.** Women and men hold different occupations.



*Source:* Based on data from Anker (1998).

Table 1. Relative Earnings of Women and Men

|                               | Female to male earnings ratio | Gender gap | Portion of gap unexplained (percent) |
|-------------------------------|-------------------------------|------------|--------------------------------------|
| Developed countries (n = 19)  | 0.77                          | 0.23       | 80.4                                 |
| Developing countries (n = 42) | 0.73                          | 0.27       | 82.2                                 |

*Note:* The gender gap in earnings is the proportional difference between average female and male wages (1 minus the female to male earnings ratio). The unexplained portion of the gender gap in earnings is the portion not explained by an individual's characteristics, such as educational attainment and work experience, and by job characteristics.

Source: Various studies.

77 percent as much as men, and in developing countries, 73 percent as much (Table 1).<sup>3</sup> These averages, derived from the latest estimates available for these countries, mask wide variation across countries. Among developed countries, for example, the female to male earnings ratio ranges from 43 percent in Japan (1993–94) to 87 percent in Denmark (1995); among developing countries, it ranges from 43 percent in Nicaragua (1991) to 90 percent in Thailand (1989) and 101 percent in Chile (1996). While most studies do not measure the gender earnings ratio for exactly comparable groups of workers over time, evidence from several countries in Asia, Latin America, Sub-Saharan Africa, and the OECD suggests that female earnings tend to be rising relative to male earnings.

<sup>3</sup>The survey reviewed evidence from 19 developed countries and 42 developing and transition economies.

But comparing an unadjusted ratio of earnings for women and men can be misleading for three reasons. First, the average earnings (or Wage) data generally used to compute the ratio have not been adjusted for the characteristics of workers, such as education, work experience, and skills training. To the extent that women and men have different levels of education or experience, unadjusted ratios are not comparing earnings across similar types of workers. Second, data on earnings (or wages) reflect differences in occupations, and as previously shown, women and men tend to be concentrated in different types of occupations. And third, earnings figures often reflect differences in hours worked, since a larger proportion of men than women work full-time. If women work fewer hours per month for pay than men, a comparison of the monthly earnings of women and men would indicate lower relative earnings for women than would a compar-

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ison of hourly wages. The greater the gender differences in hours worked for pay, the lower the unadjusted gender earnings ratios will be relative to ratios that adjust for differences in hours worked.

Studies in developed and developing countries have analyzed the relative wages of women and men, controlling for such worker characteristics as education and experience. They usually decompose the gender gap in observed wages to separate the effect of discrimination from other factors. In the Republic of Korea women's wages are 51 percent of men's with half of the gap explained by differences in the characteristics of workers (Horton 1996). In Brazil women earn 70 percent of what men earn, but only 10 percent of this difference is due to differences in measured characteristics (Psacharopoulos and Tzannatos 1992). In Denmark, France, Germany, and the United Kingdom differences in measured human capital characteristics account for 20–30 percent of the earnings gap—and in Portugal and Spain, even less (Rice 1999). In general, workers' characteristics explain about a third or less of the gender earnings gap in developing countries. This suggests that although the way households allocate human capital investments between boys and girls has direct consequences for their children's prospects in the labor market, other important forces are at work.

Few studies of developing countries include measures of job attributes, usually because of lack of data. Those that do indicate that gender differences in job characteristics affect relative wages to some degree (controlling for worker characteristics)—but the impact appears to differ considerably across developed and developing countries. In developed countries adjusting the gender earnings gap for information on job characteristics significantly reduces the proportion of the gap that remains unexplained, confirming that men, on average, hold better-paying jobs (Rice 1999; Zabalza and Tzannatos 1985). Different patterns of employment explain up to a third of the gender wage gap in some countries (Tzannatos 1998). But occupational segregation appears to account for a relatively small share of the gender wage gap in developing countries. In Latin America employment differences between women and men appear to account for little, if any, of the earnings differences.

In sum, in developed and developing countries differences in observed worker and job characteristics explain only about 20 percent of the gender gap in earnings (See Table 1). The rest of the gap results from factors that are difficult to measure directly, such as differences in workers' abilities or differences in labor market treatment (discrimination).

## Voice

Limited command over productive resources and weaker ability to generate incomes—whether in self-employed activities or in wage employment—constrain women's power to influence resource allocation and investment decisions within the home. Unequal rights and poor socioeconomic status relative to men also limit women's ability to participate in political processes as active agents and to influence decisions in their communities and at the national level. . . .

Women in the 20th century have gained the right to vote in nearly all countries. The gender gap in voting is declining, especially in countries where a high proportion of the population votes. Even so, substantial disparities still exist in more active forms of participation, such as demonstrations and boycotts. And women remain significantly less likely to discuss politics than men, especially among older cohorts and those with less education (Inglehart 1997).

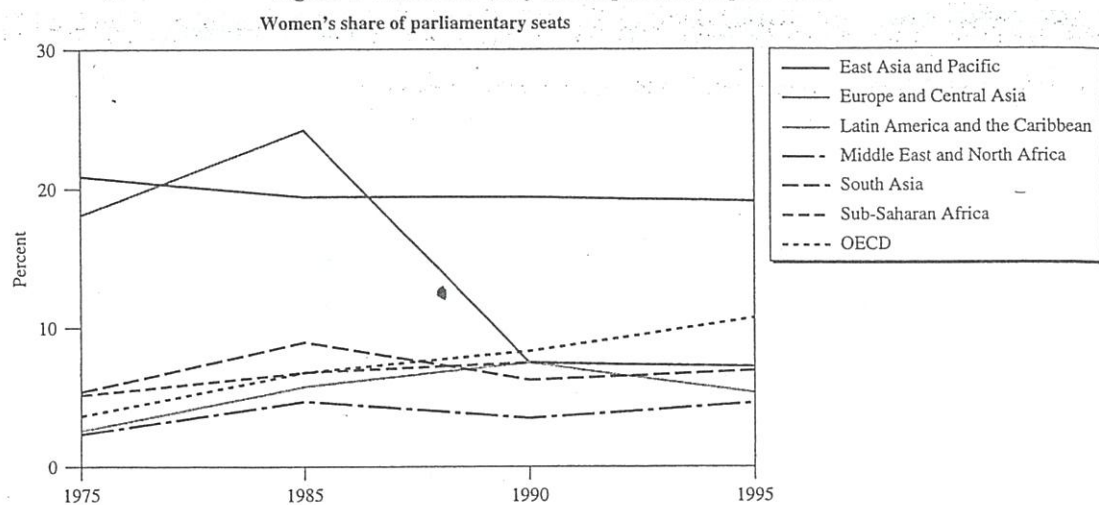
Moreover, there still are large gender disparities in political participation and representation at all levels of government—from local councils to national assemblies and cabinets. Women continue to be vastly underrepresented in elected office (Figure 4). In all regions except East Asia and the Pacific and Europe and Central Asia, the average shares of parliamentary seats held by women remained at less than 10 percent between 1975 and 1995. In East Asia women's share has consistently been just less than 20 percent. The most dramatic change has occurred in Europe and Central Asia, where the high levels of female representation (relative to most of the rest of the world) fell dramatically in the late 1980s—from nearly 25 percent to 7 percent—following the start of the economic and political transition.<sup>4</sup> Substantial gender disparities also persist in local and regional assemblies.

Women also remain vastly underrepresented in the executive branch of government. In no developing region did women make up more than 8 percent of cabinet ministers in 1998 (UNDP 2000). In the Middle East and North Africa women held only 2 percent of cabinet positions, while in East Asia

<sup>4</sup>Time series data are lacking for most countries in Eastern Europe, so this pattern is based on data from only five countries: Albania, Bulgaria, Hungary, Poland, and Romania. The steep decline in female representation in parliament is attributed to the abolition of Eastern Europe's 25–33 percent quotas for women (UN 2000). This decline in female representation took place precisely at the time that national parliaments were beginning to play an active role in policymaking and governance in those countries.

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Figure 4. Women are vastly underrepresented in parliaments.



Sources: Parliamentary data from WISTAT (1998); population weights from World Bank (1999a).

and Pacific they held 4 percent, and in South Asia and sub-Saharan Africa, roughly 6 percent. In Latin America and Eastern Europe and Central Asia women made up between 7 and 8 percent of cabinet ministers. Female representation in sub-ministerial positions tends to be only slightly greater, and in South Asia, it is lower.<sup>5</sup>

Women who do hold cabinet appointments are more likely to be in ministries of women's or social affairs than ministries of finance, economics, or planning, which make mainstream policy and budgetary decisions. Of the 466 female ministers holding portfolios in 151 countries in early 2000, 95 (about 20 percent) were heads of ministries of women's and social affairs, but only 22 (just less than 5 percent) were heads of ministries of finance and of the economy and development (IPU 2000). . . .

### Are Women Poorer Than Men?

Estimating the number of men and women living in poverty is difficult. Why? There is no adequate summary measure of individual welfare that can be compared for males and females. The most

<sup>5</sup>In South Asia women held less than 1 percent of subministerial positions (UNDP 2000). Compare this with about 4 percent in the Middle East and North Africa, 6 percent in East Asia and the Pacific, approximately 8 percent in Sub-Saharan Africa and Eastern Europe and Central Asia, and 13 percent in Latin America and the Caribbean.

commonly used indicator of poverty (or current welfare) is consumption. But most household-based surveys collect consumption data on households, not individuals. While this may partly reflect a traditional view of the household as the basic unit of economic decisionmaking . . . , it also reflects serious difficulties in measuring individual consumption. For example, many goods consumed by household members, such as housing and consumer durables, are consumed jointly. It is thus difficult, if not impossible, to assign some elements of household consumption to specific household members. This makes direct comparisons of consumption poverty between female and male members of the same household problematic.<sup>6</sup>

The lack of adequate data on individual consumption has led to a tendency to compare poverty

<sup>6</sup>Consumption data tend to be preferred to income data for measuring poverty, particularly in developing countries. For example, because income can vary from year to year (because of a variety of production shocks), while consumption is more stable, consumption is generally considered a better measure of long-term welfare. Moreover, income tends to be subject to more measurement error than consumption. For assessing the welfare of individuals within households, income and consumption data share some limitations. Particularly in rural areas of developing countries, many elements of household income are jointly produced, such as income from family-run farms or nonfarm enterprises. Therefore, like consumption, income is often difficult to assign to specific individuals within a household. And as with consumption, often little is known about how income is shared among different members of a single household.

between female-headed households. The interest has arisen from both concerns. One substantial portion of female-headed households in several countries (Bruce, Lloyd, and Loe) these households may be, both because they are to productive inputs working-age males will being equal (Haddad).

It is difficult to draw gender dimension of household analysis. Male-headed households can be extremely, ranging from young men and women to two families to single-parent. Although household, divorced women may be represented among the households may be person households of working in urban labor which an absent husband, may experience poverty. Moreover, studies provide only poverty among female little or nothing about males in male-headed male-headed households.

A much smaller number of data on individuals to assess the relative welfare. This approach avoids individuals the household consumed. These studies in nutrition in static evidence of gender (Appleton and Collie). Even in South Asia the in part because the extent according to the season often manifest themselves. Southern India there is calorie intake only in surplus (Behrman 1981). parent pro-male biases after gender difference energy exerted at work are Huq, and D'Souza 1988 Hasssan 1990). Evidence indicates that the most severe

between female-headed and male-headed households. The interest in such poverty comparisons has arisen from both substantive and statistical concerns. One substantive concern is that the proportion of female-headed households has been rising in several countries (Baden and Milward 1995; Bruce, Lloyd, and Leonard 1995). Another is that these households may be more vulnerable economically, both because they tend to have poorer access to productive inputs and because they have fewer working-age males who earn income, other factors being equal (Haddad and others 1996). . . .

It is difficult to draw hard conclusions about the gender dimension of poverty from standard headship analysis. Male- and female-headed households can be extremely heterogeneous in any society, ranging from young, single, well-educated men and women to two-parent nuclear or extended families to single-parent households and widows. Although households headed by widows or divorced women may be disproportionately represented among the poor, other female-headed households may be better off. For example, single-person households of young, unmarried women working in urban labor markets, or households to which an absent husband regularly sends remittances, may experience relatively low levels of poverty. Moreover, even sophisticated headship studies provide only limited information about poverty among females and males, since they tell little or nothing about the relative welfare of females in male-headed households or males in female-headed households.

A much smaller number of studies have analyzed data on individuals' food intake or nutrition to assess the relative welfare of females and males. This approach avoids the problem of assigning to individuals the household goods that are jointly consumed. These studies have found gender disparities in nutrition in South Asia but little systematic evidence of gender differences in other regions (Appleton and Collier 1995; Alderman 2000). Even in South Asia the evidence is not uniform—in part because the extent of disparities can vary according to the season and because gender biases often manifest themselves in subtle ways. In Southern India there is gender discrimination in calorie intake only in the lean season, not in the surplus (Behrman 1988). And in Bangladesh apparent pro-male biases in calorie intake disappear after gender differences in caloric need or in energy exerted at work are taken into account (Chen, Huq, and D'Souza 1981; Pitt, Rosenzweig, and Hassan 1990). Evidence from Bangladesh also indicates that the most severe gender inequalities of-

ten are not in calories consumed, but in the distribution of preferred foods rich in micronutrients (Bouis 1998).

In sum, even while there is extensive evidence on persistent gender inequalities in rights, resources, and voice that affect the relative abilities of women and men to participate in and benefit from development, the evidence on how such disparities translate into poverty (measured by consumption) is still very limited. This argues for efforts to collect new types of data and to develop empirical methods better suited to capturing the gender dimensions of poverty (as traditionally defined). At the same time, the combined evidence makes clear the importance of focusing on a variety of dimensions of female and male well-being to understand the full implications of gender disparity (Box 1). . . .

### Households Reproduce Gender Roles

No matter where they are or how they are organized, households regularly transmit gender roles to the next generations. Households are the first place of gender socialization, passing along knowledge, skills, and social expectations. Children acquire a gender identity that shapes the set of socially acceptable activities for women and men and the relations between them. Children are socialized through explicit instruction, through punishment for inappropriate behavior, and by observing and imitating their parents and other female and male role models in the family (Whiting and Edwards 1988).

Allocating resources is another way households shape gender roles. In extreme cases differences in the allocation of food, health care, and attention to young boys and girls mean greater female malnutrition, limiting girls' ability to learn and women's capacity to participate productively in society. But even in less extreme cases family decisions about investing in boys' or girls' education—or about involving sons in farming but daughters in household maintenance and care activities—all help reproduce and reinforce socially accepted gender roles.

The difference in girls' and boys' gender roles become more pronounced as children get older. In most of the world, differences in household expenditure on girls' and boys' education tend to increase when children move from primary to secondary school. When girls reach adolescence they are generally expected to spend more time on such household activities as cooking, cleaning, collecting fuel and water, and caring for children. Meanwhile, boys tend to spend more time on farm or

### Box 1 Are Women "Time Poor" Relative to Men?

Worldwide, women perform the bulk of child care and household maintenance. Women in most settings combine household work with market or nonmarket work to generate income or raise household consumption—work often not captured in traditional labor force statistics. And women tend to work significantly more hours than men when both market and household work are taken into account (Bevan, Collier, and Gunning 1989; Juster and Stafford 1991; Brown and Haddad 1995; UNDP 1995; Ilahi 2000).

The gender differences in time spent working vary across developing countries. But women commonly work an hour or more a day than men. In rural Kenya women work nearly three hours more a day than men. While few studies compare time use by gender across households at different income levels, evidence suggests that gender disparities in time use tend to be greater among the poor than the rich (Ilahi 2000).

This raises questions about how women's primary responsibility for household work, along with more total hours of work, affects their welfare relative to that of men. To the extent that the gender division of labor in the family means that women undertake household work at the expense of income-generating activities, this limits their bargaining power and decisionmaking capacity in the home. And that has implications for their well-being. Moreover, gender disparities in hours worked imply that even if there are no gender biases in consumption in a household, women will work more hours than men to achieve the same consumption (Lipton and Ravallion 1995).

wage work. When young children get sick, teenage girls, not boys, tend to increase their time providing care—often at the expense of their schooling (Pitt and Rosenzweig 1990; Ilahi 1999a). Meanwhile, boys are increasingly engaged in market work, preparing to become the main bread-winner of their own household.

This division of tasks by gender means that by the time girls and boys become adults and form new households, women generally work longer hours than men, have less experience in the labor force, and earn less income. In almost all countries—both developed and developing—there is a strikingly consistent gender division of labor, in which men work more in the market and women more in the home (Figure 5; UNDP 1995). Moreover, women often undertake multiple activities at once—such as taking care of children while working in the household or in home- or farm-based income-generating activities (Floro 1995).

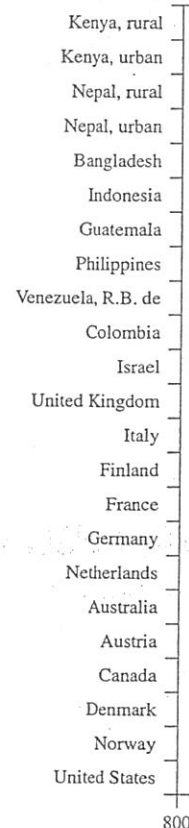
Even when women work in the labor market they continue to do most of the unpaid work at home. For example, women in the former Soviet Union had a relatively high level of equality with men in labor force participation and occupational attainment, but they still tended to be responsible for most in-home child care (Lapidus 1993).

This division of time and tasks has important implications. For instance, if parents consider it unlikely that their daughters will join the labor

force and earn income as adults, they may see less justification for sending their daughters to school. This is true whether or not women become part of their husband's family after marriage (a custom that reduces parents' incentives to invest in girls' schooling relative to boys'). In addition, lower education and labor force participation generally mean lower incomes for women—and thus limited power to influence resource allocation and investments in the home.

Since much of women's work in developing countries is unpaid and done inside the home, it is often "invisible" and not accounted for by policymakers.<sup>7</sup> But failing to recognize gender divisions of time and task allocations within households can result in policies that don't achieve their objectives or that produce unintended outcomes. For example, policies that increase demand for female labor may not elicit the expected supply response if

<sup>7</sup>By virtue of being outside the monetized economy, women's economic contribution tends to be undervalued (Elson 1992; Folbre 1998). For example, a much smaller proportion of female work than male work is captured in national income accounting systems. And the asymmetries, by gender, appear to be considerable. In industrial countries about two-thirds of men's total work time is spent in activities that are captured and valued in national accounts; this compares to about a third of women's total work time (UNDP 1995). In developing countries the gap is larger. More than three-quarters of men's total work time is spent in activities captured in national accounts, compared to about a third of women's total work time.



Note: The time use data p  
Source: UNDP (1995).

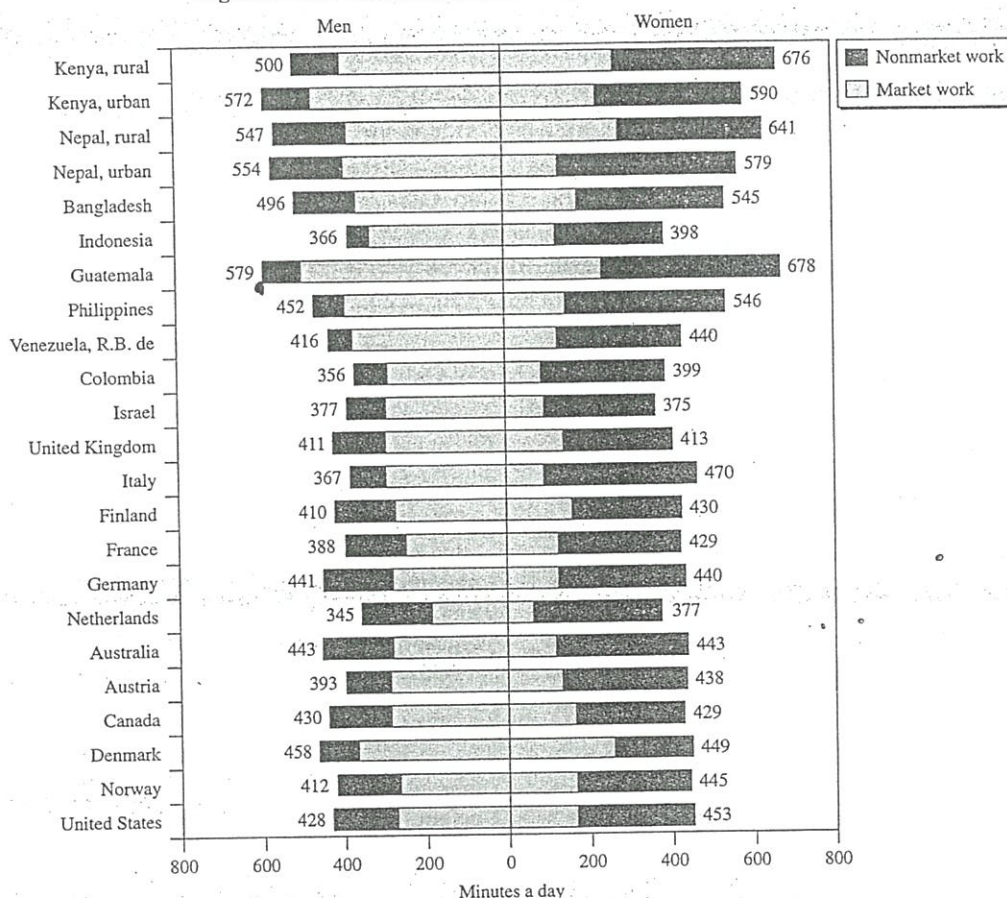
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### Resource Control ar Affect Household Al

#### Household Consumpt

Studies from a divers ing Bangladesh, Brazil

Figure 5. Men work more in the market, women more in the home.



Note: The time use data pertain to productive activities, both market and nonmarket.  
Source: UNDP (1995).

women cannot reduce their time on household maintenance or care activities. Or girls may be taken out of school to cover for mothers who enter the labor force (Grootaert and Patrinos 1999; Ilahi 1999b; Lokshin, Glinskaya, and Garcia 2000). Understanding how households allocate time and other resources by gender can thus provide the basis for more effective policies—and policies that generate fewer unintended and undesirable consequences. . . .

### Resource Control and Bargaining Power Affect Household Allocations

#### Household Consumption Patterns

Studies from a diverse set of countries, including Bangladesh, Brazil, Canada, Côte d'Ivoire,

Ethiopia, France, Indonesia, South Africa, Taiwan (China), and the United Kingdom, indicate that women's and men's relative control of resources has significant—and different—impacts on household consumption and expenditure. While the precise effects of female and male resource control differ from place to place, some consistent patterns emerge across countries. The most obvious: increases in the relative resources controlled by women generally translate into a larger share of household resources going to family welfare, and especially to expenditures on children—even after controlling for per capita income and demographic characteristics of the household. Greater resource control by women also leads to expenditure patterns and outcomes that strengthen women's well-being and status in the household.

How do women's contributions to household income affect household expenditure patterns? In Côte d'Ivoire increasing women's share of cash income in the household significantly increases the share of the household budget allocated to food, controlling for average per capita expenditure (income), household size, and demographic characteristics (Hoddinott and Haddad 1995). It also decreases the shares devoted to alcohol and cigarettes. In Brazil it is the same story. At the margin additional income in the hands of women results in a greater share of the household budget devoted to education, health, and nutrition-related expenditures (Thomas 1997).

Because the same factors that affect income control may affect household expenditure choices . . . , the Brazil and Côte d'Ivoire studies attempt to control econometrically for the possible "endogeneity" of current labor income using two-stage least squares. Moreover, the Brazil study analyzes both labor and nonlabor income. While not completely immune to concerns about endogeneity, nonlabor income may be less influenced by such factors as past or current labor supply choices that affect the outcomes of interest. In Brazil the finding that female and male income control have different effects on household expenditure patterns is robust to the choice of the income measure.

Another study analyzes the impact of assets brought to marriage by women and men and of relative education levels on resource allocation and investment in households in Bangladesh, Ethiopia, Indonesia, and South Africa (Quisumbing and Maluccio 1999). Comparable methodologies are used across countries. The data were collected specifically to analyze intrahousehold allocations and investments and to address concerns about the endogeneity of labor and nonlabor income. In particular, the assets and education men and women bring to marriage are exogenous to decisions made within the marriage.<sup>8</sup>

As in Brazil and Côte d'Ivoire the unitary household model is rejected in all four country cases. While the precise impact of female and male asset control and education differs across countries, the general patterns are consistent with those in the earlier studies. Additional resources and bargaining power in the hands of women have a greater impact on expenditure allocations toward the next generation—such as on education, health,

and nutrition—than additional resources in the hands of men.

A policy change in the United Kingdom that transferred income from fathers to mothers led to similar patterns. In the late 1970s the national Family Allowance program transferred control of a substantial child allowance benefit from fathers to mothers. This shift was followed by significant changes in household expenditure patterns that benefited women and children. Relative spending on women's and children's goods (such as clothing) rose, while relative spending on men's goods (clothing and tobacco) fell (Lundberg, Pollak, and Wales 1997; Ward-Batts 1997).

#### *From Children's Well-being to Women's Empowerment*

Female and male control of income, assets, and education affect more than household consumption patterns. In Brazil additional labor and nonlabor income in the hands of women tends to have a greater positive impact on child survival and nutrition than additional income in the hands of men (Thomas 1990, 1997). Regardless of who controls it, an increase in total household income is associated with improvements in child survival and nutrition (as measured by child height for weight and height for age). But at the margin, improvements are substantially larger if the mother controls the income.

Additional evidence on the gender-differentiated impacts of resource control on household outcomes comes from recent microfinance initiatives in Bangladesh.<sup>9</sup> Two related studies examine the impact of female and male borrowing—from Grameen Bank, the Bangladesh Rural Advancement Committee (BRAC), and government program RD-12—on such outcomes as per capita household expenditure (income) and girls' and boys' schooling and nutritional status (Khandker 1998; Pitt and Khandker 1998). The impacts often differ substantially based on whether the borrower is a woman or a man—and often the marginal impacts of borrowing are greater for women than for men.

<sup>9</sup>Quantifying the impact of such programs as microfinance is often problematic. Researchers are rarely able to collect "experimental" data, which would allow them to make inferences that are not confounded by the effects of nonrandom program placement and self-selection of participants into the program. Nonetheless, several recent studies of microfinance programs in Bangladesh use data based on a "quasi-experimental" survey design that enable their authors to correct for these problems (Khandker 1998; Pitt and Khandker 1998; Menon 1999).

For all three micro of female borrowing expenditure (income) i impact of male borro increase in female bc roughly 40 percent in ture—an effect that i cally. Compare this v crease in per capita ex same percentage inci male borrowing also male borrowing on ho consumption over ti (1999).

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**Table 2.** Impacts (percentage change)

| Household outcome     |
|-----------------------|
| Per capita spending   |
| Net worth             |
| Boys' school enroll   |
| Girls' school enroll  |
| Boys' height for age  |
| Girls' height for age |
| Contraceptive use     |
| Recent fertility      |

Note: Figures in bold are

<sup>a</sup>Percentage changes rep

Source: Khandker (1998)

<sup>8</sup>This is the case even if assets and education are endogenous due to marriage market selection. For further discussion on assets brought to marriage in the context of analyzing household bargaining behavior see Quisumbing and Maluccio (1999).

For all three microfinance programs the impact of female borrowing on per capita household expenditure (income) is about twice as large as the impact of male borrowing (Table 2). A 10 percent increase in female borrowing is associated with a roughly 40 percent increase in per capita expenditure—an effect that is strongly significant statistically. Compare this with a roughly 20 percent increase in per capita expenditure associated with the same percentage increase in male borrowing. Female borrowing also has a greater impact than male borrowing on households' ability to "smooth" consumption over time (Khandker 1998; Menon 1999).

As with other forms of resource control, female borrowing also appears to have a greater impact on child welfare than male borrowing does. For example, except for BRAC, female borrowing has a greater positive impact on children's school enrollments than male borrowing does. Moreover, in contrast to male borrowing, female borrowing has a large and statistically significant impact on children's nutritional well-being.

At the same time, male borrowing has a greater impact on household net worth than female borrowing. This suggests that while at the margin women seem to invest relatively more than men in the human capital of their children, men appear to invest more than women in physical capital.

Female and male borrowing also have different impacts on household reproductive behavior, suggesting that women and men do not share the same preferences relating to contraception or fertility. For example, female borrowing decreases contra-

ceptive use and, except for Grameen Bank borrowing, increases fertility, whereas male borrowing increases contraceptive use and, except for BRAC borrowing, decreases fertility. At first glance the findings on the impact of female borrowing on contraceptive use and fertility may seem counterintuitive, since a body of empirical literature suggests that factors increasing the opportunity cost of women's time—such as increased education, wages, or labor market opportunities—tend to reduce fertility. But low-income women in Bangladesh may see additional children as assets capable of assisting them with what are often home-based, self-employment activities.

Increasing women's independent access to credit also empowers them in other dimensions. For example, female borrowing increases female control of nonland assets (Pitt and Khandker 1998; Khandker 1998). Women who participate in the credit programs report an increased role in household decisionmaking (Kabeer 1998) and greater acceptance by their husband of their participation in market-based economic activities (Agarwal 1997). A study of BRAC's microfinance program finds that female borrowing enhances women's ability to sell assets without asking their husband's permission (Zaman 1999). Specifically, women who have borrowed more than 10,000 taka are 46 percent more likely to be able to sell poultry without their husband's permission than members who have not borrowed. These borrowers are also twice as likely to be able to sell jewelry and 35 percent more likely to have control of their savings. And women who participate in credit programs have

**Table 2.** Impacts of Female and Male Borrowing on Selected Household Outcomes (percentage change for a 10 percent increase in borrowing)

| Household outcome                  | German Bank    |                  | BRAC           |                  | RD-12          |                  |
|------------------------------------|----------------|------------------|----------------|------------------|----------------|------------------|
|                                    | Male borrowing | Female borrowing | Male borrowing | Female borrowing | Male borrowing | Female borrowing |
| Per capita spending                | 0.18           | <b>0.43</b>      | 0.19           | <b>0.39</b>      | <b>0.23</b>    | <b>0.40</b>      |
| Net worth                          | <b>0.15</b>    | <b>0.14</b>      | <b>0.20</b>    | <b>0.09</b>      | <b>0.22</b>    | 0.02             |
| Boys' school enrollment            | <b>0.07</b>    | <b>0.61</b>      | -0.08          | -0.03            | 0.29           | <b>0.79</b>      |
| Girls' school enrollment           | 0.30           | <b>0.47</b>      | 0.24           | 0.12             | 0.07           | 0.23             |
| Boys' height for age <sup>a</sup>  | -2.98          | <b>14.19</b>     | -2.98          | <b>14.19</b>     | -2.98          | <b>14.19</b>     |
| Girls' height for age <sup>a</sup> | -4.92          | <b>11.63</b>     | -4.92          | <b>11.63</b>     | -4.92          | <b>11.63</b>     |
| Contraceptive use                  | <b>4.25</b>    | -0.91            | 0.40           | -0.74            | 0.84           | -1.16            |
| Recent fertility                   | -0.74          | -0.35            | 0.54           | <b>0.79</b>      | -0.74          | 0.50             |

Note: Figures in bold are based on coefficient estimates that are statistically significant at the 10 percent level or better.

<sup>a</sup>Percentage changes reported for boys' and girls' height for age represent average impacts across all three microfinance programs.

Source: Khandker (1998).

significantly higher demand for formal health care than women who do not (Nanda 1999).<sup>10</sup>

<sup>10</sup>There is a concern raised in the literature on microfinance in Bangladesh that female borrowing has led to increased violence against women in the home (Goetz and Sen Gupta 1996). Violence can erupt when men try to take control of their wife's credit resources or refuse to contribute to loan payments after they have used their wife's loans. Evidence on whether domestic violence has increased is mixed, however, with several studies suggesting that female membership in credit programs tends to be associated with less violence (Hashemi, Schuler, and Riley 1996; Schuler and others 1996; Kabeer 1998).

## References

- Agarwal, Bina. 1997. "'Bargaining' and Gender Relations: Within and Beyond the Household." Food Consumption and Nutrition Division Discussion Paper 27. International Food Policy Research Institute, Washington, D.C. Available online at <http://www.ifpri.cgiar.org/index1.htm>
- Alderman, Harold. 2000. "Anthropometry." In Margaret Grosh and Paul Glewwe, eds., *Designing Household Survey Questionnaires for Developing Countries: Lessons from Fifteen Years of the Living Standards Measurement Study*. Oxford and New York: Oxford University Press.
- Anker, Richard. 1998. *Gender and Jobs: Sex Segregation of Occupations in the World*. Geneva: International Labour Office.
- Appleton, Simon, and Paul Collier. 1995. "On Gender Targeting of Public Transfers." In Dominique van de Walle and Kimberly Nead, eds., *Public Spending and the Poor: Theory and Evidence*. Baltimore, Md.: The Johns Hopkins University Press.
- Baden, Sally, and Kirsty Milward. 1995. "Gender and Poverty." BRIDGE (Briefings on Development and Gender) Report 30. Institute of Development Studies, Brighton, U.K.
- Barro, Robert J., and Jong-Wha Lee. 1994. "Sources of Economic Growth." *Carnegie-Rochester Conference on Public Policy* 40: 1-46.
- Behrman, Jere R. 1988. "Intrahousehold Allocation of Nutrients in Rural India: Are Boys Favored? Do Parents Exhibit Inequality Aversion?" *Oxford Economic Papers* 40 (1): 32-54.
- Bevan, David, Paul Collier, and Jan W. Gunning. 1989. *Peasants and Governments*. Oxford: Clarendon Press.
- Bouis, Howarth. 1998. "Commercial Vegetable and Polyculture Fish Production in Bangladesh: Their Impacts on Income, Household Resource Allocation, and Nutrition." International Food Policy Research Institute, Washington, D.C.
- Brown, Lynn R., and Lawrence Haddad. 1995. "Time Allocation Patterns and Time Burdens: A Gendered Analysis of Seven Countries." International Food Policy Research Institute, Washington, D.C.
- Bruce, Judith, Cynthia B. Lloyd, and Ann Leonard. 1995. "Families in Focus: New Perspectives on Mothers, Fathers, and Children." Population Council, New York.
- Chen, Lincoln C., Emdadul Huq, and Stan D'Souza. 1981. "Sex Bias in the Family Allocation of Food and Health Care in Rural Bangladesh." *Population and Development Review* 7 (1): 55-70.
- Elson, Diane. 1992. "Male Bias in Structural Adjustment." In H. Afshar and C. Dennis, eds., *Women and Adjustment Policies in the Third World*. New York: St. Martin's Press.
- Filmer, Deon, Elizabeth M. King, and Lant Pritchett. 1998. "Gender Disparity in South Asia: Comparisons between and within Countries." Policy Research Working Paper 1867. World Bank, Development Research Group, Washington, D.C. Available online at <http://wbln0018.worldbank.org/research/workpapers.nsf/policyresearch?openform>
- Floro, Maria Sagrario. 1995. "Women's Well-Being, Poverty, and Work Intensity." *Feminist Economics* 1 (3): 1-25.
- Folbre, Nancy. 1998. "The Neglect of Care-Giving." *Challenge* 41 (5): 45-58.
- Goetz, Anne Marie, and Rina Sen Gupta. 1996. "Who Takes the Credit? Gender, Power and Control over Loan Use in Rural Credit Programs in Bangladesh." *World Development* 24 (1): 45-63.
- Grootaert, Christian, and Harry Patrinos. 1999. *Policy Analysis of Child Labor: A Comparative Study*. New York: St. Martin's Press.
- Haddad, Lawrence, Christine Pena, Chizuru Nishida, Agnes Quisumbing, and Alison Slack. 1996. "Food Security and Nutrition Implications of Intrahousehold Bias: A Review of Literature." Food Consumption and Nutrition Division Discussion Paper 19. International Food Policy Research Institute, Washington, D.C. Available online at <http://www.ifpri.cgiar.org/index1.htm>
- Hashemi, Syed M., Sidney R. Schuler, and Ann P. Riley. 1996. "Rural Credit Programs and Women's Empowerment in Bangladesh." *World Development* 24 (4): 635-53.
- Hoddinott, John, and Lawrence Haddad. 1995. "Does Female Income Share Influence Household Expenditures? Evidence from Côte d'Ivoire." *Oxford Bulletin of Economics and Statistics* 57 (1): 77-96.
- Horton, Susan. 1996. *Women and Industrialization in Asia*. London and New York: Routledge.
- Ilahi, Nadeem. 1999a. "Children's Work and Schooling: Does Gender Matter? Evidence from the Peru LSMS Panel Data." World Bank, Latin American and Caribbean Region, Poverty Reduction and Economic Management Unit, Washington, D.C.
- . 1999b. "Gender and the Allocation of Adult Time: Evidence from the Peru LSMS Panel Data." Background paper for *Engendering Development*. World Bank, Washington, D.C.
- . 2000. "Gender Tasks: What Have We Learned?" Background paper for *Engendering Development*. World Bank, Washington, D.C. Available online at <http://www.worldbank.org/poverty/poverty.nsf/policyresearch?openform>
- Inglehart, Ronald. 1997. "The European Citizenship Survey." European Citizenship Survey, University of Sussex, Brighton.
- Juster, F. Thomas, and F. L. Juster. 1997. "The European Citizenship Survey: A Model of Time Use." *Economic Literature* 35 (1): 1-25.
- Kabeer, Naila. 1998. "Measuring Women's Empowerment: Theoretical Issues and Practical Problems." *World Development* 26 (1): 1-13.
- Khandker, Shahidur R. 1998. "The Impact of Microcredit on the Economic Status of Women in Bangladesh." *World Bank*. D.C.: World Bank.
- Lapidus, Gail W. 1993. "The Impact of Perestroika on Women." In Valentin Kravtsov, ed., *Perestroika and the Russian Economy*. Oxford: Oxford University Press.
- Lipton, Michael, and Michael J. Lipton. 1997. "In Jere R. Behrman, ed., *Handbook of Development Economics*. Amsterdam, New York: North-Holland Publishers.
- Lokshin, Michael M., and Michael J. Lokshin. 2000. "Effect of Microcredit on the Economic Status of Women in Bangladesh." *World Bank*. Washington, D.C. Available online at <http://www.worldbank.org/gende>
- Lundberg, Shelley, and Robert J. Lundberg. 1997. "Do Households Have Resources? Evidence from the Child Benefit." *Journal of Human Capital* 1: 463-80.
- Menon, Nidhiya. 1999. "Smoothing and Impact of the Euler Equation Approximation of Economic Growth." *Journal of Economic Surveys* 13 (1): 1-25.
- Nanda, Priya. 1999. "Women's Credit Programmes and the Demand for Formal Health Care." *Health Economics* 13 (1): 415-28.
- Pitt, Mark M., and Shahi. 1999. "The Impact of Group-based Households in Bangladesh." *World Bank*. Washington, D.C.