Micro-Macro Linkages Between Gender, Development, and Growth:

Implications for the Caribbean Region

Stephanie Seguino
Professor, Department of Economics
Old Mill 340
University of Vermont
Burlington, VT 05401
Tel. 1 802 656-0187
Fax 1 802 656-8405
Email sseguino@zoo.uvm.edu

July 2008

Acknowledgements: I am grateful for helpful comments and insights from Rhoda Reddock, Christine Barrow, Caren Grown, three anonymous referees, and participants at the Building Capacity for Gender Analysis in Policy Making, Programme Development, and Implementation: Research Seminar and Workshop, University of West Indies, Barbados, November 2007.
Micro-Macro Linkages Between Gender, Development, and Growth: Implications for the Caribbean Region

Abstract

Over the last two decades, scholars have investigated the two-way relationship between gender inequality on the one hand, and economic development and growth on the other. Research in this area offers new ways to address the economic stagnation and crisis developing countries have experienced over the last two decades. This paper contributes to that literature, exploring the channels by which gender inequality affects, and in important ways, constrains economic development and growth in the Caribbean region. It further explores the endogeneity of gender inequality to the macroeconomic policy environment. The paper concludes with a discussion of economic policies that can promote a win-win outcome—greater gender equality and economic development and growth.

Key Words: gender, inequality, development, household economics, macroeconomic policy, Caribbean.
Micro-Macro Linkages Between Gender, Development, and Growth: Implications for the Caribbean Region

I. Introduction

Since the 1970s, developing countries have faced substantial challenges to improving living standards. With the exception of some Asian economies, economic growth has slowed and inequality increased in both developing and industrialized countries. Stimulated by these trends, development economists have exhibited a resurgent interest in exploring the sources of inequality and their consequences for economic development and growth.

An important focus of that research agenda has been on inequality between women and men. Feminist economists\(^1\) have explored the causes of gender inequalities that persist over time and across countries, integrating research methods and findings from a variety of disciplines including sociology, anthropology, and psychology in order to understand the mechanisms that contribute to the embeddedness and persistence of an unequal gender system. A major finding of this new research agenda is that gender inequality affects development and growth, and is itself endogenous—that is, macroeconomic policies and the pace of growth influence the degree of gender equality. Gender research has visibly influenced the work of the United Nations Millennium Project, which established gender equality as one of the Millennium Development Goals (MDGs). Achievement of gender equality is seen to be a catalyst for realization of the

\(^1\) Research termed feminist takes as a starting point that gender inequality is problematic. Many scholars that fall under this rubric adhere to the capabilities approach, whereby well-being is related to the extent individuals possess the functionings required to live a decent life—to include education, good health, equality, freedom of movement, to name a few (Nussbaum 2003).
remaining MDGs, in particular poverty reduction and sustainable growth (Buvinic, Morrison, Ofusu-Amaah, and Sjöblom 2008).

This paper contributes to the gender, development and growth literature, exploring the channels by which gender inequality affects, and in important ways, constrains economic development and growth in the Caribbean region. To carry out this task, I address three key questions regarding gender inequality. First, what institutional factors and structures cause women to live in economically precarious conditions to a greater extent than men? Second, what are the social benefits—the spillover effects—of reducing gender inequality for society as a whole? And finally, what policies might promote gender equity in well-being while simultaneously promoting Caribbean development and growth?

II. Causes and Consequences of Gender Inequality

Gender inequality occurs along a number of trajectories; one of the most pivotal is unequal access to and control over material resources that generate income. Women on average receive significantly lower income than men. The data in Table 1, from the United Nations Development Programme’s *Human Development Report* (2008), represent the ratio of female to male income by region and for selected Caribbean countries. Countries in the Caribbean region show a wide gender income gap—and surprisingly, great variation among countries, with women’s income as a share of men’s as low of 39.5% in Belize, compared to a high of 70.5% in the Bahamas. The Middle East and North Africa region exhibits the widest gap, with women’s income less than one

---

2 This data set has some weaknesses, in particular, gaps in wage data. See note to Table 1.
third of men’s, but even in industrialized economies, the ratio of female to male income is low—around 60%.

Table 1 about here.

There continues to be some debate about the causes of income inequality. A human capital approach links income inequality to differences in individual productivity, attributable to gaps in education, job experience, and effort. Feminist economists acknowledge differences in education and job experience. They adopt, however, a more systemic analytic approach, emphasizing the institutional factors and power dynamics that perpetuate gender inequalities. Further, attention is given to puzzles not explained by the human capital approach, such as why, among women and men with the same educational attainment and mental abilities, women have a higher probability of being poor and on average, earn less than similarly qualified men.

The institutional factors that contribute to gender inequality operate in three key spheres: within the household (family), in the productive sphere (e.g., labor and credit markets), and the broader institutional and policy environment. The discussion that follows highlights the channels in each sphere through which gender equality affects prospects for development and long-run growth.

A. Gender Relations in the Household

The household is an important site for the distribution of resources and income, and the place where a significant amount of socially useful but unpaid labor is performed. What is the nature of decision-making in the household with regard to the allocation of resources and the performance of unpaid labor? Earlier research assumed adult members agreed to specialize in either paid or unpaid labor in order to maximize household
resources (Becker 1981). Women’s specialization in (caring) unpaid labor was seen as economically rational, given their lower market wages. Because models further assumed adults pooled resources, women’s lack of access to paid work was not deemed problematic or a source of economic inequality. In this class of models—called unitary or common preference household models—disagreements or conflicts over how to spend or save and how household tasks are divided up did not exist.

The unitary model, now viewed a special case, has been supplanted by a plethora of theoretical models that allow adult preferences to differ. Such ‘collective’ (as opposed to unitary) models describe the distribution of resources and tasks as the outcome of cooperative or non-cooperative bargaining between household members (Folbre 1986; Alderman, Chiappori, Hoddinott, Haddad, and Kanbur 1995; Katz 1997). Adult preferences are allowed to differ, implying that some type of negotiation occurs in order to determine distribution of tasks and resources. Negotiations are influenced by adults’ fallback position—the next best alternative should the bargaining fail to lead to an agreement (in this case, divorce or dissolution of the household). Bargaining power is enhanced by a variety of factors—access to outside income, education, divorce laws that protect the party’s access to marital resources, and child support legislation that obligates non-custodial parents to support children.

Non-cooperative models emphasize the gendered nature of bargaining. In many societies, women are likely to become custodial parents and their needs, post-divorce or post-household dissolution, differ from those of men—and in general, are greater, given the labor and monetary cost of supporting children. This implies, in the words of

---

3 The theoretical work in this area is extensive. See, for example, Manser and Brown (1980), McElroy and Horney (1981), Lundberg and Pollak (1993, 1997), and Katz (1997).
Elizabeth Katz (1997: 33), the existence of ‘asymmetric exit options’ by gender that influence household negotiations and distribution, weakening women’s bargaining position. In contrast, the more equal the exit options, the stronger women’s fallback position, increasing the strength of women’s ‘voice’ as evidenced by the greater weight given to their preferences in negotiations over how to use family resources and labor.

Household distribution is of particular importance for development and growth. A large body of empirical evidence finds that when measures of women’s bargaining power increase, household expenditures on children’s health care, schooling, and food rise (Xu 2007). In Jamaica, for example, a mother’s education is found to be positively correlated with children’s nutrition, even controlling for household income (Handa 1999). A higher share of income accruing to women leads to improvements in children’s nutritional status in Guatemala (Engle 1993), Nicaragua (Lamontagne, Engle, and Zeitlin 1998), and the Dominican Republic (Johnson and Rodgers 1993). In Mexico, Chant (1985) found that men spend only 50% of their income on the family while women’s share is close to 100%. A case study in the Ivory Coast determined that to achieve the benefits on children’s health and nutrition of a $10 per month increase in women’s income, men’s income would have to rise by $110 (Hoddinott and Haddad 1995).

Results for the Caribbean are interesting insofar as most theoretical and empirical models in this rapidly expanding literature posit a two-adult household as the norm. Intrahousehold and intrafamilial bargaining (where parents are not co-residents) is likely to differ in the Caribbean, given the heterogeneity of family formations and household structures. Results do not appear to vary significantly from other regions, however, insofar as women in the Caribbean typically spend a larger share of household income on
children than men (Johnson and Rodgers 1993; Handa 1994, 1996, 1999; Wyss 2001). Handa (1996) finds in Jamaica, for example, that compared to female-headed households, male-headed households tend to spend a greater share of income on alcohol and tobacco and a smaller share than women on food and children’s clothing.

Motivations for differential spending by sex are not yet well explained; more research is needed to understand the factors that shape preferences, especially in the Caribbean. Presumably, the returns—material and/or social—to males and females for spending on household and children differ. For example, if gender norms and stereotypes influence women’s spending to be more ‘other’ oriented, we would expect that women spend more on children than men. Similarly, norms of masculinity may require men to spend more time in activities outside the home in order to maintain social networks and status.4

Whatever the motivations for gender differences in spending patterns, gender inequality at the household (family) level has implications for Caribbean development and growth. Gender imbalances in income (and more generally, bargaining power) result in lower investments in children’s well-being—education, nutrition, and health care. Since the 1980s, economists have stressed the importance of education for long-run productivity growth and rising living standards (Hill and King 1995; Klasen 2002; Knowles, Lorgelly, and Owen 2002). Education raises potential earnings and improves health at the individual level and at the macro level, translates into lower production costs, making countries more cost competitive in international trade. Rectifying gender

---

4 Women, too, may be swayed by gender norms that reduce spending on children. Handa (1996) finds, for example, that women in female-headed households spend more on adult wear than male headed households.
inequalities in bargaining power at the household level, then, could leverage additional investment in children’s well-being with long-run economy-wide beneficial effects.

B. Gender Inequality at Work

Women’s ability to earn income in the paid labor market is hampered by gender norms that designate them as primary caretakers of the household, children, the sick, and elderly. These unpaid labor burdens constrain participation in paid labor activities. While estimates vary across countries, a consistent finding is that women perform the bulk of unpaid reproductive labor, spending less time on paid work than men. Even in the Caribbean, where women head many households, their labor force participation rates are significantly lower than men’s, indicative of the time constraints imposed by care work in the household.

Inequality in unpaid labor is substantial. In Dominica, for example, it was found that women in the agricultural sector perform 6 to 7 hours a day of household or reproductive labor with another 6 to 7 hours spent in agricultural farm work. This compares to men’s 30 minutes a day of reproductive labor, with the remainder spent in paid labor or leisure (Momsen 1993). These patterns are found globally and gaps tend to be widest in agricultural economies, where women frequently engage in subsistence farming and spend a significant amount of time in activities such as procuring clean water and fuel.

---

5 Women’s labor force participation rates are lower than men’s in all Caribbean countries, though with some variation. The female share of the labor force ranges from a low of 36% in Guyana to a high of 48% in the Bahamas in 2003 (World Development Indicators 2006).

6 Other examples include India, where women spend 297 minutes per day in unpaid work compared to men’s 31 minutes (Chakraborty 2005). In South Africa, women and men spend 216 and 80 minutes, respectively, in unpaid labor (Budlender and Brathaug 2002), while in Ireland, women spend 305 minutes a day in such work, almost triple men’s contribution to such activities (McGinnity and Russell 2008).
When they do participate in the paid labor market, women are more likely than men to work part-time, intermittently, and in the informal sector, contributing to their lower incomes. In part, responsibilities at home account for these work patterns. Constraints due to unpaid labor responsibilities are not the only cause of gender income inequality. Globally, female wages are lower than men’s on average. A portion of the gap is due to wage discrimination with women earning less per hour than men who possess the same educational attainment.  

Statistical analyses can be used to calculate the degree of wage discrimination, measured as the size of gender wage residuals, that is, the unexplained portion of the gender wage gap after controlling for differences in women’s and men’s productivity. Estimates of the discriminatory portion of the gender wage gap for several Caribbean and Central American countries are shown in Table 2. While instructive, it should be noted these estimates are quite dated—reflective of the limited time-series gender-disaggregated earnings for the region. The largest discriminatory wage gap is found in Jamaica, 49.7%. That is, almost half the wage gap between men and women in that country is unexplained by differences in skill, occupation, job tenure and other productivity-related characteristics. In Trinidad and Tobago, too, the discriminatory portion of the wage gap is large—34.1%.

Table 2 about here.

Although conditions differ by country, a major contributing factor to gender wage inequality globally is job segregation by gender (Anker 1998). Job segregation arises for a variety of reasons. Gender norms and stereotypes contribute to a sex stereotyping of

---

7 See, for example, Psacharopoulos Tzannatos (1992) for Latin American case studies. For Trinidad and Tobago, see Olsen and Coppin (2001), and for Barbados, Coppin (1996).
jobs. For example, with the adoption of export-led growth in the 1980s, women’s ‘nimble’ fingers were argued to render them more suited to detail work in electronics and garment factories (Pearson 1998). Of course, job segregation on its own should not necessarily lead to wage inequality. In the case of the ‘nimble fingers’ argument, since women are presumed to have a special characteristic that men purportedly do not possess, we might expect that they would earn higher, not lower, wages than men. And yet, almost without exception, jobs in female-dominated industries and occupations pay less than those that are male-dominated.

Elliott (2006) attributes gender wage gaps in Jamaica to women’s different occupational choices as compared to men’s, emphasizing the role that social identities play. She argues that women’s socialization as caregivers makes them more likely than men to choose service sector jobs where earnings are lower. Such a decision is not economically irrational if the cost-benefit analysis accounts for the psychic cost and benefit of conforming to one’s gender role as embodied in a particular job. Take, as an example, the psychic cost a woman might pay for taking a job as a higher wage construction worker rather than, say, a lower paid office job. The latter occupation, because it conforms to gender stereotypes, may be a more attractive option even with the monetary cost of such an occupational decision. Social psychology teaches us that deviance—departing from socially prescribed norms and stereotypes—imposes costs of isolation, estrangement, and shunning—and in the case of gender, can threaten the likelihood of attracting a partner. This suggests that women’s decisions on employment

---

8 Freeman (2000) provides an interesting discussion of the role of gender identities in women’s work choices in Barbados.
in fact are not ‘choices’ so much as social conditioning based on a gender system, whereby ironically, ‘female’ jobs are those that pay the lowest wages.

Occupational concentration is not entirely the result of individual decisions. Employers also influence outcomes, sometimes deeming women unsuitable for certain types of jobs and channeling them into a limited set of occupations. This process of ‘crowding’ creates an artificial oversupply of women workers competing for a limited number of job slots, thereby bidding down their wages. Men, on the other hand, compete for a wider array of jobs, which makes them effectively a ‘scarcer’ supply of labor, causing their wages to be relatively higher. 9

Women workers in the Caribbean have tended to be concentrated not only in services, but also in export manufacturing jobs that are labor-intensive and low-wage, such as garments, footwear, and electronics assembly (Standing 1989; Yelvington 1995). They have also been a primary source of labor in data entry, informatics, and tourism ‘export’ jobs [insofar as these industries generate foreign exchange] (Freeman 2000; Kempadoo 2004). Labor-intensive goods rely on cost competitiveness to expand product demand, and employers thus seek out women as workers due to their lower wages. This reduces unit labor costs, with a positive effect on demand for price-elastic manufactured exports in particular. Employment in such jobs, however, tends to be insecure 10 and there are few opportunities for on-the-job training or upward mobility. Further, higher wages for women can cause demand for exports to decline, leading to a slowdown in economic

---

9 Industrial concentration also plays a role. For example, for the case of Trinidad and Tobago, Olsen and Coppin (2001) find that the incomes of women of African and Indian descent are 20% below men’s with similar human capital. This does not seem to be strongly related to occupational segregation, but instead is at least partially attributable to the distribution of women and men in industry.

10 Jamaican export firms are characterized by a high level of turnover, suggestive of the footlooseness of these industries in response to wage increases and labor organizing (Kluk 1996). Data entry jobs in the Caribbean, in contrast, tend to be more stable than typical labor-intensive jobs in female-dominated manufacturing industries (Freeman 1998).
growth and therefore job loss (Seguino 2000a, 2000c). Men, on the other hand, are more concentrated in non-import competing industries such as electricity and gas, construction, and, in general, capital-intensive industries (e.g., petroleum in Trinidad and Tobago).

The pressure on firms to keep prices and therefore wages low is less intense than in female-dominated export industries. In comparison, firms in female-dominated industries tend to be more mobile. That is, they can more easily relocate, should local costs rise. The low-skilled nature of labor employed in these industries accounts for the relative ease with which firms can replace higher cost workers in one country with cheaper workers in another with little loss in productivity. Because women are more concentrated in this type of industry than men, they have less wage bargaining power vis-à-vis firms (Seguino 2000b, 2006).  

Gender differences in unemployment rates can also lead to wage inequality. In the case of the Caribbean, women’s unemployment rates (almost double men’s) may contribute to their relatively lower wages, since this constrains the ability to negotiate with employers for wage increases (Seguino 2003). The source of gender differences in unemployment rates is not clear. One factor may be that employers see women as responsible for childcare and men more deserving of regular, formal sector employment and training when jobs are scarce. This has been dubbed the ‘male breadwinner’ model, whereby there appear to be social norms that lead employers to prefer to hire men

\[11 \text{ Proponents of trade and investment liberalization hold that the gender wage gap will narrow over time as a result of sustained demand for lower cost female labor, making gender wage gaps unproblematic in the long run. Gender wage differentials have declined globally, but much of this is due to increases in women’s labor market characteristics. The discriminatory portion of the gender wage gap shows no evidence of narrowing (Weichselbaumer and Winter-Ebmer 2005). In two rapidly growing economies with a strong demand for female labor—China and Vietnam—the discriminatory portion of the gender wage gap has in fact been widening (Maurer-Fazio, Rawski, and Zhang 1999; Liu 2002).} \]
when jobs are scarce in anticipation that women will eventually quit their job to care for children (Seguino 2007a).

In some parts of the world, women may also of course be more likely to be concentrated in low wage jobs because of lack of education. The Caribbean region is noted for more equitable educational attainment between men and women, so much so that concern has been registered that young men are falling behind (Elliott 2006).

Educational patterns differ by country, however, with Jamaica and Trinidad and Tobago experiencing continued gender gaps in higher education as compared to Barbados—although in all countries, women’s years of secondary education have been on par or exceeded men’s at least since 1980 (Figure 1).

Figure 1 about here.

Educational differences may therefore be a factor in gender wage and income gaps. It should be noted, however, that educational equality does not correlate well with income equality, as can been seen in Figure 2 which plots educational ratios against gender income ratios for the Caribbean and Central America. That is, we do not observe a strong effect of educational ratios on income ratios. Clearly, although closing gender gaps in education may be part of the solution, it is not sufficient as a means to achieve gender equality in wage payments. Rectifying gender wage inequality requires an alteration of the conditions that cause women’s bargaining power in the workplace to be lower relative to that of their employers and relative to working men’s.

Figure 2 about here.

A spillover effect of gender disadvantages in labor market outcomes is that women’s more limited access to and control over income systematically limits their
ability to influence resource allocation decisions in household and in families. Gender inequalities constrain investments in children’s well-being, with a potentially negative effect on the quality of the future labor supply, productivity, and growth. Further, as a result of low earnings, in many cases, women are inhibited from leaving unhealthy and abusive relationships, with detrimental effects not only for themselves but also for their children’s psychological and economic well-being.

Some studies have found direct effects of gender on productivity and economic growth, via the labor market. Cavalcanti and Tavares (2007) argue that labor market discrimination and thus gender wage gaps lower the opportunity cost of unpaid home work and children. Female labor force participation rates are lower as a result, contributing to a decline in average labor productivity due to selection distortion: the quality of the labor pool is reduced with less qualified males hired in place of more qualified women. Inequality between men and women due to different occupational choices can also slow growth due to selection distortion (Boschini 2003). Efforts then to reduce gender job segregation and reduce wage gaps can potentially boost labor productivity, stimulating growth in the Caribbean region.

C. The Two-Way Relationship Between Gender and the Macroeconomy
A major contribution of recent research is the empirical identification of a linkage between gender relations and macroeconomic policies and performance. This section delineates the channels by which macro policies have been demonstrated to affect women and men differently. I then discuss the growing literature on how gender equality (or inequality) affects macroeconomic outcomes, including employment and the rate of
economic growth, emphasizing the linkages in economies with structures similar to the larger Caribbean islands.

1. The effects of macroeconomic policies on women and gender equality

The feminist macroeconomics research agenda was initially stimulated by concern over the negative effects of structural adjustment policies (SAPs) on women in the 1980s and 1990s. A significant body of Caribbean research traces the differential gender effects of government economic policies, including trade, investment, and financial market rules (Bolles 1983; Deere, et. al, 1990; McAfee 1991; French 1994; Klak 1996; Black 1997). The theoretical and policy framework that led to the SAPs of the 1980s continues to hold sway. The major features are fiscal austerity; liberalization of trade, investment, and financial flows; devaluation; and restrictive monetary policy. The channels by which this policy regime, whether under SAPs or current conditions, affect women and men differentially are discussed here.

Beginning with fiscal austerity, a notable effect of a shift to this policy stance is cuts in public budgets for health expenditures and food subsidies. This occurred in the Caribbean and elsewhere in the 1980s and 1990s, and led to an intensification of unpaid labor in the household (Deere, et al. 1990; French 1994; Black 1997; Elson and Cagatay 2000). Because women play a major role in household survival strategies, they have borne a large share of the burden for adjustment, including increases in unpaid labor in the home to compensate for cuts in social services (Floro 1995). Women also respond to crisis (including financial crises) by increasing their participation in the labor force,

12 There has been less emphasis in recent years on wage controls and downsizing of the public sector. In part, that is because firm mobility has held down wages and a once-over decline in public sector employment in the 1980s and early 1990s has led to a more permanent reduction in fiscal deficits.
engaging in ‘distress sales’ of their labor in response to rising male unemployment and falling wages prevalent during such periods.

While fiscal austerity in the Caribbean was initially triggered under SAPs, constraints on public sector spending continue, owing in part to financial liberalization. Financial markets respond negatively to public sector deficits and inflation, thereby pressuring countries to maintain low inflation and curtail public sector spending. The deflationary bias of macroeconomic policy, evidenced by the slowdown in economic growth since the mid-1970s relative to the postwar period, limits the possibilities for achieving greater gender equality.13 Women in the Caribbean have fared worse than men when jobs are scarce (Seguino 2003).14 The difference in access to jobs weighs heavily, especially on female-headed households with consequent effects for children. Some research notes that gender tensions worsen when gender roles change in the context of declining economic opportunities for men (Barritteau 2003; Lewis 2006).15

Trade and investment liberalization, coupled with devaluations to rectify balance of payments problems, have led to structural changes in Caribbean economies, with important gender implications. Employment opportunities initially expanded with trade liberalization, and women, as noted, have been concentrated in lower wage labor-

13 There are, of course, some important exceptions, including Trinidad and Tobago, which has experienced robust growth in recent years.
14 In developing countries, including the Caribbean, the use of monetary policy to keep inflation low shows some evidence on producing stronger negative employment effects on women than men (Heintz and Seguino 2007; Braunstein and Heintz 2008).
15 Men’s loss of self-esteem, derived primarily from paid work, has been documented to lead to increases in domestic violence during periods of economic crisis in the Caribbean and Latin America (Black 1997; Larraín 1998). It is difficult to quantify these effects, and as a result, to empirically link trends on macroeconomic performance to violence, however, and until more comprehensive data do become available, at most, we can identify this as a tendency. Similarly, there are linkages between women’s greater vulnerability to HIV/AIDS, their disadvantaged economic position relative to men, and economic crisis and stagnation in the Caribbean region (Gupta 2002). Time series data, however, are sparse, making quantitative estimates of effect of macroeconomic policies on gender inequality in HIV/AIDS impossible at this stage.
intensive manufacturing industries (Klak 1996; Yelvington 1995; Standing 1989).
Growing competition from other low wage countries such as China, Pakistan, and India, however, has led to a decline in the manufacturing sectors of many Caribbean economies—and with it, women’s formal sector employment opportunities.

A theme that emerges from this discussion is that the gender division of labor in the household and within the labor force, coupled with the structure of the economy (e.g., manufacturing-intensive or agriculturally-based, the types of goods imported and exported) lead to different outcomes for men and women. This suggests that the soundness of macroeconomic policies should be evaluated not only for their impact on macroeconomic aggregates—inflation, trade balance, GDP growth—for example. They should also be based on an integration of their ability to achieve social objectives, including the extent of broadly shared well-being. More generally, policy formulation requires awareness of the distributional effects by gender in order to avoid unintended negative effects (Berik and Rodgers 2008).

2. Gender Effects on Macroeconomic Outcomes
A growing body of evidence demonstrates that gender relations at the micro level affect macroeconomic outcomes and economic growth. The effect of gender inequality on growth is influenced by the structure of the economy, the gender division of labor, and the macro-level policy regime (e.g., the degree of central bank independence and the rules on trade and investment). The direction of that relationship varies, depending on which measure of gender inequality is used. The gender wage gap is a price variable that

---

16 See Seguino (2007b) for an empirical evaluation of the effect of Caribbean macroeconomic policies since the 1980s on several indicators of gendered well-being.

17 See, Stotsky (2006), Berik and Rodgers (2008), and Braunstein (2008) for extensive reviews of this literature.
produces fast-acting effects on output and employment, whereas measures such as educational gaps or even gender job segregation that affect longer run productivity growth therefore impact development and growth with a lag (Seguino 2008). These complexities make it impossible to arrive at universal time-invariant generalizations with regard to gender effects on macro outcomes; such effects instead are context-specific. Given this, the focus in this section is on identifying pathways by which gender produces macro-level effects.

Of particular relevance for Caribbean economies is the effect of gender wage inequality in export-oriented, semi-industrialized economies. Job segregation and low female wages in export manufacturing industries contribute to low unit labor costs that stimulate export demand, investment, and growth (Braunstein 2000; Blecker and Seguino 2002; Seguino 2000a, 2000c; Busse and Spielmann 2006). Manufactured exports have declined in the Caribbean with trade and investment liberalization, and services, including tourism, have taken on more importance as economic drivers. Low female wages continue to have relevance for growth, given that women are the largest share of workers in the services export sector in industries such as data processing and in tourism. Competition from other low wages countries makes it likely that product demand in services is also elastic, and that higher female wages can trigger declines in demand and thus employment in these sectors.

In contrast to the research on the role of wage inequality, some theoretical and empirical research finds gender gaps in education can retard growth. The links are both direct and indirect. More education raises women’s productivity, and may also reduce fertility and improve children’s well-being. The growth effects of gender education gaps
can be quite large. Klasen (2002) finds, for example, that between 0.4–0.9 percentage points of differences in annual per capita growth rates between East Asia on the one hand, and Sub-Saharan Africa, South Asia, and the Middle East on the other, can be accounted for by differences in gender gaps in education between these regions.  

While at first glance, these results may appear to be incompatible with those that find a positive effect of gender wage inequality on growth in semi-industrialized economies, on closer examination, they are not. Education that raises productivity can provide the basis for non-inflationary wage increases. Women’s ability to bargain for wage hikes, however, is limited by global competition from other low wage countries. As a result, improvements in education—at least in semi-industrialized economies—may primarily benefit firms in the form of lower unit labor costs and thus higher profits—stimulating investment and therefore growth (Erturk and Cagatay 1995). The adoption of trade and investment liberalization in the Caribbean, coupled with the way that jobs are gendered has thus not created the necessary conditions for reducing gender wage and income inequality in the region, and indeed, has made it more difficult to achieve this goal.

The relationship between gender inequality and growth in low-income agricultural economies may differ from that of semi-industrialized economies (Seguino 2008). In many developing countries, such as South Asia and Sub-Saharan Africa—and on some Caribbean islands—women are heavily engaged in agricultural production, often

---

18 A concern about the cross-country approach to assessing gender effects on growth is that the significance of various indicators of equality differs by country, structure of economy, and gender division of labor. For example, while gender gaps in literacy rates may be a meaningful measure of gender inequality in Sub-Saharan Africa, secondary or higher education may be a more appropriate measure in the Caribbean. The debate over which indicator of gender inequality to use in cross-country growth regressions—or if one can even pool countries at very different stages of development—has not yet been resolved.
for household consumption as compared to men’s concentration in cash crop production. Women’s lack of access to inputs, including credit, suppresses agricultural output and women’s income (Saito 1994; Udry 1996), with a consequent negative effect on children’s well-being and leading to a greater demand for imports, worsening the balance of payments.

The research identifying the two-way relationship between the gender distribution of labor, resources, and income and macroeconomic outcomes illuminates the role that a gender awareness can play in shaping policies to promote development and growth in the Caribbean. The next section discusses policy avenues that can create an economic environment in which greater gender equality in wages and more generally, access to resources, can promote rising living standards.

III. Policies to Enhance Gender Equality: The Role of the State

Policies to promote gender equity can beneficially be undertaken by a wide variety of institutions, including international financial institutions, non-governmental organizations, and more generally, civil society. This section focuses more narrowly on the types of governmental policies that can promote gender equality while simultaneously stimulating development and growth.19 Policy goals include alleviation of women’s care burden in order to permit more time to be spent in paid labor, and policies that promote women’s access to well-paying jobs in the labor market. Attention must also be paid to ensuring that greater gender equality does not come at the expense of a decline in men’s

---

19 An anonymous referee usefully points to the important role that civil society, in conjunction with the state and the private sector, can play in promoting development and gender equality. Those linkages, particularly in the Caribbean where civil society organizations play an important role, bear further investigation but are beyond the scope of this paper.
well-being. Such a strategy is conflictual and likely to increase male resistance to gender equality; that approach also fails on developmental grounds. This implies that gender equality must be pursued in the context of an expanding economic pie, with employment growth high on the macroeconomic policy agenda.

Possibilities for state action to achieve these goals are divided into three groups: 1) redistributive policies, 2) rules of the game, and 3) industrial/agricultural policy.

A. Redistributive policies

The state’s ability to tax and spend is an important mechanism for redistributing income in a way that can alter inequalities in other institutions. One area for gender-sensitive policy is in social safety net legislation. Social safety nets can be a means to rectify inequalities in the household and at work, and to thus increase women’s bargaining power as well as their well-being and that of the children they care for. Support for social services can, for example, help alleviate women’s unpaid work at home. In particular, health care spending, food subsidies, housing subsidies, child care subsidies, and child allowances can reduce women’s burden for reproductive labor, and can also make it easier for women to engage in paid work.

Household dynamics are recognized to have important policy implications for social welfare programs, particularly those focused on children, such as Conditional Cash Transfer (CCT) programs in Latin America.\textsuperscript{20} Programs have been structured to take into account gender differences in the division of labor with women assumed to have primary responsibility for the care of children, and based on women’s tendency to spend a higher portion of income on goods and services for children than men. CCT programs offer cash

\textsuperscript{20} These include Progresa/Opportunidades in Mexico, Chile/Solidario in Chile, Nicaragua’s Red de Protección Social, Red Solidaria in El Salvador, Bolsa Familia in Brazil, PATH in Jamaica, and the TCCTP in Trinidad and Tobago.
transfers, usually to mothers, in households with children. With some variation across
countries, transfers are conditional on children being immunized and enrolled in school
with a high attendance rate.

These extensively evaluated programs are found to be highly successful in
improving children’s outcomes (Adato and Hoddinott 2007). For example, Skoufias and
McCafferty’s (2001) evaluation of Mexico’s Progresa/Oportunidades determined the
program contributed to higher secondary school enrollment rates for boys (10%) and girls
(20%), narrowing the gender educational gap. CCT programs in Colombia, Turkey,
Bangladesh, and Nicaragua have registered similarly positive effects on both primary and
secondary school enrollments. Program impacts point to the importance of taking gender
into account in designing social policy and the potential benefits for long-run well-being
of children. Women, too, report benefits, noting that participation in these programs has
raised their self-esteem (Escobar Latapí and González de la Rocha 2003, cited in
Molyneux 2007), although some scholars have raised concerns that such programs
reinforce gender stereotypes and can have negative labor market effects on women
(Molyneux 2007).

To offset this tendency, efforts to ease women’s participation in paid labor are
required. One area for reform is unemployment insurance, which tends to be geared
towards year-round full-time workers, favoring men. Women are largely excluded
because of the insecure forms of work they perform. Reform of unemployment insurance
so as to support informal sector workers and part-time workers, rather than only full-time
workers, would reach more women.
As noted earlier in this paper, a factor contributing to persistent gender wage differentials is occupational segregation, whether due to internalized gender norms or discrimination in hiring. Four types of government policies can promote gender job integration. First, publicly funded training programs, especially in conjunction with civil society organizations, can help women gain the skills to enter non-traditional jobs. Second, to the extent that central governments shape the educational curriculum, a revision of the school curriculum to promote the use of less gender stereotypical teaching materials can be beneficial. Third, publicly funded child care can help women balance full-time, skill-intensive jobs and care of family. Further, government policies might be aimed at making it easier for men to fulfill their share of unpaid labor. Paternity leave, for example, might be instituted so that men can share in caring of children.

It may be difficult to achieve these goals if public sector deficits are binding. In those cases, a reallocation of public spending is required. In recent years, gender budgeting audits have been adopted as a means to assess the impact of public expenditures on women and men. These involve analyses of actual expenditures and the gender incidence of taxation. Audits help governments to assess their spending priorities and tax policies to determine whether allocations and receipts are in line with policy commitments and are having the desired impact. Coupling audits with an explicit budgetary planning process to promote gender equity—in schooling and training, access to health care, as well as expenditures on areas such as child care and gender equitable unemployment insurance—that is, achieving gender analytic competence in ministries of finance, is crucial to making government an efficacious actor in alleviating gender
inequality.

The feminist research of recent years tells us that, although costly, expenditures that promote gender equality can produce medium- and long-run economy-wide benefits by stimulating productivity and economic growth. Well-targeted expenditures, in other words, are likely to pay for themselves over time.

2. Setting the Rules of the Game

The state plays an important role in setting the rules of the game—that is, in shaping the boundaries of behavior and interaction in the household and at work—to ensure greater equity. For example, state enforcement of legislation against wage and job discrimination can raise women’s wages and give them greater access to jobs that lead to greater responsibility and more security. States can also promote affirmative action programs in order to eliminate job segregation by gender.

To improve gender relations at the household level, states can enact and enforce child support legislation, requiring non-custodial parents to assist in provisioning for children. Divorce and family law can be revised so that the economic burden of children is more fairly shared, and women’s unpaid labor is rewarded by giving them access to marital assets in the case of marriage dissolution. Efforts to pursue domestic violence offenders make it easier for women to leave abusive relationships. In the case of Jamaica, where women often face difficulties in securing child support from non-custodial parents due to threats of domestic violence (Wyss 2001), police training and the development of special units to deal with domestic violence can have positive impacts on women’s economic well-being and that of their children (Clarke 1998).

For an example of a study on the costs of financing gender equality, see Grown, Bahadur, Handbury, and Elson (2007).
With regard to industrial and agricultural policies, the question is how the state can shape and direct investment to make equity and growth compatible. On their own, trade and market liberalization have constrained the possibilities for gender wage and income equality. The role of the state is increasingly acknowledged to be critical and is required to ensure that trade, investment, and financial market policies are strategically designed to promote broadly shared increases in living standards (Rodrik 2000).

The state’s role is to act as visionary, and to encourage or direct resources to desired activities that will make growth compatible with equity. Such activities might include: 1) the promotion of industries, especially exports, whose products are price inelastic (that is, where higher wages do not result in a large decline in export demand); 2) education targeted to knowledge-based industries; 3) state-subsidized research and development (R&D) or direct R&D by the state in desired industries; and 4) support for firms to invest in targeted industries and to assist them to acquire the managerial or technical expertise required to be competitive.23

These goals should be linked to financial market policies to promote growth of employment that can be beneficial to women’s greater job access. Examples include the development of credit mechanisms that favor small enterprises that are labor-intensive

---

22 Industrial policies include policies on trade in addition to more traditional policies on investment. The topic of gender enabling trade policies is an important one, but is not covered here. On this, see Seguino and Grown (2006) and Cagatay (2001).

23 The notion of government acting as visionary implies that it should chart an economic course that will create dynamic comparative advantage in selected industries for which there are social benefits in terms of high wages and secure employment. Because firms may not have the expertise or conditions may not currently exist to be competitive in those industries, the role of the state is to assist or prod firms to move into the production of these goods or services, and in particular, export goods that are price inelastic. State-level policies or guidance might be needed to promote such types of production and assist firms to achieve those goals. A further goal would be to raise labor productivity so that higher wages do not lead to higher unit labor costs.
and the implementation of credit mechanisms whereby the terms of borrowing ensure women greater access to credit in light of their more limited ownership of assets to collateralize loans. More generally, slow growth in the Caribbean region not only contributes to women’s limited options for employment. It also exacerbates gender tensions, insofar as job scarcity conflicts with men’s gender identity as contributors to family income. Thus, policies that promote employment growth—including a reconsideration of inflation-targeting, trade, and investment policies—can be gender enabling.

How can the goal of more rapid growth be achieved? Norman Girvan (2007) has noted that government policy in the context of a CARICOM single market economy, would benefit from a focus on sectors that are ‘economic drivers’—that is, whose growth has the potential to generate foreign exchange and intraregional trade. To this list we might add that industries that serve as ‘economic drivers’ would also have the potential for strong backward linkages to generate domestic demand and employment. As Girvan notes, an emphasis on high-skilled knowledge-based industries and service activities, such as ecological tourism, can produce results that raise incomes and offer alternatives to the export factory jobs or tourism, which depend on low-wage female labor for competitiveness. The state then can develop policies to incentivize the private sector to invest in activities that result in higher wages and employment, and to take measures to ensure that women have access to those jobs—by responding to their educational needs, and to support them in their household responsibilities. While the ability of small states to take these actions may be circumscribed, there is nevertheless margin for maneuver.24

---

24 See Chang (1998) for more discussion of this topic.
For a number of years, discussion of agricultural policy has been limited to tariff reductions and trade liberalization. The feminist literature on agricultural production, however, has pointed to the role of gender equity in land ownership and credit in improving agricultural output.\textsuperscript{25} The emerging food crisis, due in part to increased product demand from emerging economies, and also the shift away from domestic food production towards export cash crops, can be addressed by putting in place policies that recognize the gender connection with agricultural output, productivity, food security and balance of payments.

The smaller Caribbean islands in particular are more intensively oriented towards agricultural production with a heavy emphasis on exports. Volatile prices and limits on foreign market access have worsened conditions in this sector for farmers. In many cases, the smallest and thus most vulnerable farmers are women. Agricultural policy that promotes production of domestically consumed goods, intraregional trade, and price stabilization mechanisms can improve the incomes of farmers and have beneficial effects on the import bill. An example of a comprehensive approach to industrial and agricultural policy is for CARICOM governments to collectively negotiate with multinational hotel chains to source food domestically.

**IV. Conclusion**

The probability of being poor, of doing the bulk of unpaid labor, of having limited job opportunities, and of being unemployed is greater for women than for men, particularly

\textsuperscript{25} Doss and Morris (2001) finds, for example, that gender differences in adoption of new technologies are due to women’s lack of complementary resources. Greater equality could stimulate the adoption of new technologies, raising economic-wide productivity growth. See also Saito (1995) and Udry (1996) for estimates of increases in agricultural production in Sub-Saharan Africa with a more equal distribution of assets and inputs between women and men,
in the Caribbean region. Society pays the price in reduced efficiency due to continued inequality, evidenced by the effect of women’s relatively lower economic status on children’s well-being. But in its own right, gender equity deserves our attention and efforts at change.

This paper outlines some possible avenues to achieve that goal. But the specific policies depend on household structure, the form the gender division of labor at home and at work takes, the structure of the economy, and cultural factors. There is no one-size-fits-all policy. Rather, each country and region must determine the complex set of policies required to attain the goal of gender equity. In this sense, policy is an art, not a science, because gender relations are so interwoven into the social fabric. The degree to which change is resisted or embraced will in part be determined by a broader human calculation about how we collectively and individually negotiate our sense of self, given that gender norms and stereotypes deeply permeate our psyches. A movement towards gender equity necessarily entails a shift in the distribution of resources and work and this too makes progress a challenging goal. Research indicating that gender equality produces beneficial spillover effects to the entire economy is an incentive to face these challenges.


Table 1. Ratio of Female to Male Income  
(most recent year data available between 1996 to 2005)

<table>
<thead>
<tr>
<th>Region</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America and the Caribbean</td>
<td>50.8%</td>
</tr>
<tr>
<td>Bahamas</td>
<td>70.5%</td>
</tr>
<tr>
<td>Barbados</td>
<td>63.4%</td>
</tr>
<tr>
<td>Belize</td>
<td>39.8%</td>
</tr>
<tr>
<td>Cuba</td>
<td>45.0%</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>42.8%</td>
</tr>
<tr>
<td>Guyana</td>
<td>41.2%</td>
</tr>
<tr>
<td>Haiti</td>
<td>52.2%</td>
</tr>
<tr>
<td>Jamaica</td>
<td>56.5%</td>
</tr>
<tr>
<td>St Vincent</td>
<td>51.0%</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>51.1%</td>
</tr>
<tr>
<td>Suriname</td>
<td>40.1%</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>46.4%</td>
</tr>
<tr>
<td>East Asia and Oceania</td>
<td>54.7%</td>
</tr>
<tr>
<td>Eastern and Central Europe</td>
<td>59.6%</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>32.7%</td>
</tr>
<tr>
<td>North America</td>
<td>63.1%</td>
</tr>
<tr>
<td>South Asia</td>
<td>49.7%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>54.5%</td>
</tr>
<tr>
<td>Western Europe</td>
<td>60.8%</td>
</tr>
</tbody>
</table>

Note: Female and male earned income are estimated, based on data on the ratio of the female to male nonagricultural wage, the female and male shares of the economically active population, the total female and male population, and GDP per capita in 2005 PPP US$. The wage ratios are based on data for the most recent year available between 1996 and 2005. Where such data is missing, a female to male wage ratio of 0.75 is used. The data used to generate the regional averages are not population weighted.

Table 2. Gender wage gap residuals, Caribbean and Central America

<table>
<thead>
<tr>
<th>Country</th>
<th>Year(s) of analysis</th>
<th>Residual gender wage gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbados</td>
<td>1993-94</td>
<td>0.211</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1989</td>
<td>0.185</td>
</tr>
<tr>
<td>El Salvador</td>
<td>1989-91</td>
<td>0.270</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1989</td>
<td>0.184</td>
</tr>
<tr>
<td>Honduras</td>
<td>1989</td>
<td>0.293</td>
</tr>
<tr>
<td>Jamaica</td>
<td>1988-89</td>
<td>0.497</td>
</tr>
<tr>
<td>Mexico</td>
<td>1984-93</td>
<td>0.133</td>
</tr>
<tr>
<td>Panama</td>
<td>1989</td>
<td>0.189</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>1994</td>
<td>0.341</td>
</tr>
</tbody>
</table>

Figure 1. Ratio of female to male educational attainment in selected Caribbean countries, 1960-99

Barbados: Ratio of Female/Male Educational Attainment

Jamaica: Ratio of F/M Educational Attainment
Trinidad and Tobago: Ratio of F/M Educational Attainment

Source: Author’s calculations from Barro and Lee (2000) dataset.
Figure 2. F/M Income and Educational Attainment, Selected Caribbean and Central American Countries

Source: Income data are from UNDP (2008) and educational data are from Barro and Lee (2000).