LOCATING WOMEN IN THE GLOBAL ECONOMY: THE GENDERED IMPACTS

OF ECONOMIC GLOBALIZATION ON WOMEN

IN DEVELOPING COUNTRIES

By

JULIE ANNE RICE

A dissertation submitted in partial fulfillment of
the requirements for the degree of

DOCTOR OF PHILOSOPHY

WASHINGTON STATE UNIVERSITY
Department of Sociology

AUGUST 2008

To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation/thesis of JULIE ANNE RICE find it satisfactory and recommend that it be accepted.

_____

Chair

_____

_____

ACKNOWLEDGEMENTS

LOCATING WOMEN IN THE GLOBAL ECONOMY: THE GENDERED IMPACTS

OF ECONOMIC GLOBALIZATION ON WOMEN

IN DEVELOPING COUNTRIES

Abstract

by Julie Anne Rice, Ph.D.
Washington State University
August 2008

Chair: Julie A. Kmec

Macro-comparative research on global inequality continues to marginalize women through theoretical and empirical neglect. This dissertation addresses this neglect by empirically showing macroeconomic processes impact women and men in developing countries differently, and by demonstrating socialist feminist theory provides insights into the macroeconomic mechanisms driving global inequality. This dissertation examines these empirical and theoretical issues in three independent chapters which share the common theme that gender relations is a driver of global inequality.

The first study addresses the gender-neutral assumption that informs much macro-comparative research on global inequality by addressing the broad research question, to what extent are macroeconomic processes gender-neutral, if at all? To answer this question I use a socialist feminist perspective to analyze important variables found by previous research to influence "human" well-being. The results of panel OLS regression show that contrary to the gender-neutral assumptions dominating macro-comparative research, macroeconomic structures have different effects on female and male well-being in developing countries.

The second study examines the contradictory effects of economic growth on women in developing countries by addressing the broad research question, how does economic development structure the opportunities available to women, relative to men, in developing countries? To answer this question I test the predictive power of "structural disarticulation," a concept that explains how global capital structures the economies of developing countries. Results of OLS regression show economic development benefit women's well-being, yet may also create a disarticulated economy which is detrimental to women. Theoretically, structural disarticulation does not address gender relations. For insights I draw upon socialist feminist theory.

The third study examines how global trade and finance interact with patriarchy to structure women's and men's labor force participation differently. Results of OLS regression show global trade and finance structure the labor force by sex that varies by region. Theoretically, I use socialist feminist theory to explain how global trade and finance interact with patriarchy to structure gender relations at the regional level. Methodologically, this study shows how macro-comparative research can better account for patriarchal and other forms of regional diversity by placing gender relations at the center of the analysis and conceptualizing patriarchy as a regional phenomenon.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

Macro-comparative research on global inequality continues to marginalize women through theoretical and empirical neglect. This neglect persists despite a substantial body of feminist research, originating in the early 1970's, that demonstrates gender inequality is a central component of global inequality. Three specific characteristics of this neglect by macro-comparative global inequality researchers are particularly noteworthy. First, neglecting the role of gender in economic development processes is at odds with the global policy community. Second, the assumption by macro-comparative theories that macroeconomic processes impact women and men similarly is no longer adequate due to the serious criticisms against grand narratives stemming from postmodernism and the foundations of feminist theories. Third, a substantial amount of regularly updated, cross-national, gender-disaggregated data exists and is readily available. These three points are elaborated upon below.

This neglect is at odds with the global policy community

Global policymaking institutions such as the United Nations, World Bank, and the International Monetary Fund (IMF) all recognize economic development must directly address the needs of women if economic and social development is to succeed. A United Nations Development Programme statement embodies this recognition, "Human Development, if not engendered, is endangered" (1995 p.1). The World Bank elaborates upon the necessity of engendering development policies by showing how gender equality is associated with improved child survival rates, improved family health, and reduced fertility rates, all which are important in reducing poverty and contributing to economic development (World Bank 1994; 2001).

Despite the importance the global policymaking community places upon gender inequality and its relation to economic and social development, the dominant theories of macro-comparative sociological research – dependency/world systems theory and the developmental state perspective – largely ignore the role of gender in global inequality processes. I argue this neglect by mainstream sociologists is due to the gender-neutral assumption of economic structures held by these macro-level theories. The first paper in this dissertation, *Are Macroeconomic Structures Gendered? A Cross-National, Quantitative Study on "Human" Well-Being in Developing Countries* directly addresses this gender neutral assumption. Findings of this study provide evidence that macro-comparative theory and research must address gender.

Grand narratives of inequality are no longer adequate.

Macro-comparative research on global inequality and the attendant theories of dependency/world systems and the developmental state continue to present grand narratives of inequality. These grand narratives often assume the macro-level processes of global inequality uniformly impact everyone in the developing world similarly, regardless of gender, race, nationality, and class. This is directly at odds with the postmodernist critique of the 1980's and feminist theories, which are deeply influenced by postmodernism. Postmodernism and feminism are highly critical of grand narratives because these narratives exclude the perspectives of women, racial and ethnic minorities, non-western nationalities, and other minority groups.

This postmodern critique and the consequent body of theory and research often bifurcates theory and research into an oppositional framework of structure/agency, micro/macro or modernist/postmodernist paradigms. Stemming from this critique is a vast body of micro-level research which continues to document the diverse experiences and actions of people in the developing world as they confront and address economic globalization in their everyday lives.

2

Macro-comparative theory contributes to this oppositional bifurcation by continuing to neglect the insights of postmodernism and feminism. Macro-comparative research typically focuses upon identifying the structures of global inequality without acknowledging the role of human agency and the diverse experiences of people along the intersecting axes of gender, social class, race, and nationality, whose daily lives are shaped by global inequality structures.

Theoretically, I believe there are some points of theoretical commonality between the macrocomparative theoretical paradigms and the postmodern paradigm, such as linkages between Nietzsche and Foucault as explored by Weeks, a socialist feminist scholar (1998). However, it is beyond the scope of this introduction and research to address these larger theoretical issues. Methodologically, in this dissertation I explore some ways to address the postmodern critique, such as incorporating case study research to illustrate the often highly abstract concepts and findings of macro-level research, and to shift the analytical focus in a manner that allows for measuring regional differences in the world system.

A substantial amount of regularly updated, cross-national, gender-disaggregated data exists

Empirically, macro-comparative global inequality research continues to use gender neutral indicators such as the Human Development Indicator. When macro-comparative researchers examine gender issues it is usually indirectly through measures such as fertility rates or maternal mortality rates. This ignores a large and growing body of cross-national data, disaggregated by sex and collected by global policymakers since the early 1990's. These data are regularly updated, often annually, through publications such as the United Nation Development Programme's *Human Development Report*, the World Bank's *World Development Indicators,* and the International Labour Organization's *Key Indicators of the Labour Market*. A wealth of underutilized, sex-disaggregated, cross-national data exists on indicators such as income,

political representation, occupations, education, and health. Further, much of these data are easily accessible, often at no cost, on the Internet.

LOCATING WOMEN IN THE GLOBAL ECONOMY: AN OVERVIEW OF THIS DISSERTATION

This dissertation directly addresses these various dimensions of neglect in macro-comparative research on global inequality. Specifically, this dissertation has two primary purposes. One purpose is to empirically demonstrate that macroeconomic processes impact women and men differently. As a consequence, this dissertation provides evidence that macro-comparative global inequality research is misleading by assuming that macro-level processes are gender neutral in their impacts. The second purpose is to show that socialist feminist theory provides important insights into the macroeconomic mechanisms of global inequality. These two objectives inform the three main chapters of this dissertation, as described below.

Are Macroeconomic Structures Gendered? A Cross-National, Quantitative Study on "Human" Well-Being in Developing Countries

This article directly addresses the gender-neutral assumption that informs much of macro-comparative research on global inequality by addressing the broad research question, to what extent are macroeconomic processes gender-neutral, if at all?

To answer this question I analyze important variables found by previous research to affect "human" well-being from a socialist feminist perspective. My dependent variables are the components of the Human Development Index, disaggregated by sex. The HDI is an indicator of human well-being in developing countries widely used in mainstream macro-comparative research on global inequality (e.g. Huang 1995, Wickrama and Mulford 1996; Lai 2003; Lind 2004; Roberts 2005; Veenhoven 2005; Davies and Quinlivan 2006). I focus upon indicators used

4

in previous research and that stem from the dominant theories of global inequality: neoclassical economics, dependency/world-systems theory, and the developmental state perspective. A common thread tying these disparate theories together is the assumption that macroeconomic processes impact women and men similarly in developing countries. To test the competing theoretical assumption that macroeconomic processes impact the well-being of women and men differently, with women disproportionately disadvantaged, I test indicators suggested by socialist feminist theory.

To preview my findings, panel OLS regression analyses for 1994 and 2004 from 116 developing countries demonstrate macroeconomic processes impact the literacy rates – a component of the HDI – of women and men differently. For example, export dependency and democracy both consistently exert a negative effect on female literacy rates but not on male literacy rates. This finding sharply contrasts with previous mainstream macro-comparative research, which assumes macroeconomic processes impact the literacy rates of women and men similarly. For brevity, only findings from literacy are reported in this study.

The results of this study show that contrary to the gender-neutral assumption of mainstream macro-comparative research, macroeconomic structures have different effects on female and male literacy rates. As a result, much mainstream macro-comparative research has likely produced invalid conclusions about the effects of macroeconomic processes on the well-being of people in developing countries.

The findings of this study have both methodological and theoretical implications as well. Methodologically, macro-comparative global inequality researchers must recognize that economic globalization has gendered impacts. Measures used to examine global inequality need to consider potential gendered dimensions of the problem being addressed. Theoretically, the

gender-neutral assumption informing macro-comparative research is likely caused by a general neglect of the feminist literature examining gendered dimensions of global inequality. I briefly discuss how engendering the mainstream theories of global inequality is possible. This requires, however, a greater dialogue with feminist research on global inequality which must address important epistemological differences. This study stimulates such a dialogue.

The Dark Side of Economic Development: A Cross-National Quantitative Study of Structural Disarticulation and Women's Well-Being in Developing Countries

This chapter empirically examines the contradictory effects of economic growth on women's well-being in developing countries. At first glance, the impacts of economic development on the well-being of women, relative to men, in developing countries appear largely positive. Over the last several decades, women worldwide have made large advances in achieving equality with men, with the gap between women and men closing in areas such as labor force participation, educational attainment, literacy rates, and political participation (ILO 2007; UNESCO 2005; UN 2006).While economic development has improved various aspects of the lives of women in developing countries, there also appears to be a darker side to the effects of economic development on women's well-being. A close inspection of the literature reveals that in many countries, economic development may contribute to gender inequality. The gender gap appears to stagnate and even increase in areas such as education, health, and women's labor rights (ILO 2007; UNESCO 2005; UN 2006).

These contradictory effects of economic development lead to the broad research question underpinning this study, how does economic development structure the opportunities available to women, relative to men, in developing countries? To answer this question I test the predictive power of "structural disarticulation," a concept that explains how global capital structures the

6

economies of developing countries. To measure women's well-being I use the Gender

Development Index (GDI), a composite measure created by the United Nations Development

Programme to assess gender inequality.

Results show that structural disarticulation has a consistently significant negative effect

on changes in the GDI, net of economic development and other political and cultural factors such

as democracy, women's political participation in parliament, and patriarchal cultures. However,

economic development also consistently exerts a strong positive effect upon women's well-

being, net of structural disarticulation and other political and cultural variables. Taken in sum,

these results show that economic development benefits women's well-being, yet these very

processes may create a disarticulated economy, which is detrimental to women's well-being.

Theoretically, structural disarticulation provides an inadequate explanation of the

contradictory effects economic growth has upon women's well-being because it does not address

gender relations and how a disarticulated economy may disadvantage women's well-being

relative to men. For insights I draw upon socialist feminist theory to describe the contradictory

outcomes of economic development. I support my theoretical argument by describing two

competing scenarios that draw upon secondary use of case study research on Latin America and

Sub-Sahara Africa. I argue that taken together, the concepts of structural disarticulation and

socialist feminist theory provide the building blocks for a more theoretically sophisticated

understanding of the gendered contradiction of global capital accumulation.

*Exploring Patriarchy's Response to Global Capital through Sex Differences in Labor Force
Participation: A Quantitative, Cross-National Study Of Developing Countries*

The shift towards export-oriented economic development continues to create change in

the gender composition of the labor force. Women's labor force participation and employment

continue to trend upward, both on a worldwide level and in most developing regions of the

world. Conversely, men's labor force participation and employment rates continue to decline. This study seeks to understand how the interests of global capital compete with the interests of patriarchy in the dimension of paid labor by addressing the broad research question, how does economic globalization interact with patriarchal forces to structure women's and men's work opportunities in developing countries?

To answer this question I examine how the mechanisms driving economic globalization – trade and finance – interact with patriarchal cultures at the regional level to structure women's and men's labor force participation differently. Socialist feminist theory provides insights as to how the interests of capital accumulation and patriarchy coincide and contradict each other in regional contexts. Distinctive regional differences shaping the relation between global capital and patriarchy in terms of the sex composition of the labor force include differences in labor force feminization rates; the economic sectors that are feminized; and gender relations resulting from the restructuring of the labor force. Results of OLS regression analyses show that the macroeconomic processes of trade and finance have gendered effects that vary by region. These effects are particularly stark in Sub-Sahara Africa. I discuss the relation between global capital accumulation processes and patriarchy, as occurring within Sub-Sahara Africa, through a review of case study research.

By assessing the regional effects of these gendered processes, this study captures a more nuanced understanding of the macroeconomic processes shaping the global division of labor of both women and men. This also allows for better use of case study research to add context to otherwise highly abstract findings. There are both theoretical and methodological implications to this study. Theoretically, this study contributes to socialist feminist theory by illuminating the processes by which the macroeconomic mechanisms of global trade and finance interact with

patriarchal forces to structure gender relations at the local level. Methodologically, this study shows how macro-comparative research can better account for diversity by placing gender relations at the center of the analysis and conceptualizing patriarchal relations at the regional level. This focus on gender relations contrasts with the widespread approach of using a hierarchical conception of the world system used by macro-comparative researchers, who often structure analyses using the level of economic development as indicated by a country's gross domestic product (GDP), or position in the world system.

CONCLUSION

This dissertation empirically and theoretically locates the women of developing countries in the global economy. Empirically, results show that the gender-neutral assumptions of mainstream global inequality research are misguided. In addition, despite the advantages acquired through economic development, women may not necessarily experience increased access to the various advantages economic globalization provides. In contexts where global capital accumulation processes upset patriarchal dominance, the gendered effects of economic globalization are often changing to the disadvantage of women. Theoretically, I argue that socialist feminism provides insights into global capital accumulation processes. In this dissertation I provide a basic theoretical and empirical framework to better understand how in some contexts global capital and patriarchy work in concert to exploit and oppress women, and in other contexts how global capital and patriarchy work in competition with one another. In sum, this dissertation establishes the gendered effects of economic globalization. It is for future research to build upon the empirical findings and theoretical arguments presented here.

CHAPTER TWO

ARE MACROECONOMIC STRUCTURES GENDERED? A CROSS-NATIONAL,

QUANTITATIVE STUDY ON "HUMAN" WELL-BEING

IN DEVELOPING COUNTRIES

Macro-comparative research examining global inequality typically assesses the well-being of women and men in developing countries through "human" well-being indicators such as life expectancy, education enrollment rates, infant mortality rates, and composite measures such as the United Nation's Human Development Indicator (HDI).[1] This research on global inequality consistently finds that human well-being in developing countries is contingent upon macroeconomic structures. Economic structures found to negatively impact human well-being include trade (Delacroix and Ragin 1981; Ragin and Bradshaw 1992), foreign debt (Bradshaw and Huang 1991; Bradshaw and Wahl 1991; Glasberg and Ward 1993; Mogford 2004), and foreign direct investment (Jaffee and Stokes 1985; London and Williams 1988; 1990). Political factors such as state strength and the level of democracy have also been found to be important indicators of human well-being, as these influence a country's ability to implement redistributive policies and improve the collective good (Moon and Dixon 1985; London and Williams 1990; Wickrama and Mulford 1996; Shen and Williamson 1997; 1999; 2001; Frey and Al-Roumi 1999; Tsai 1999; 2006).

An unstated assumption underpinning macro-comparative research is that the negative effects of macroeconomic and mediating political processes impact women and men similarly – hence the focus on "human" well-being. This gender neutral assumption is in direct contrast to

---

[1] The HDI first appeared in the 1990 Human Development Report, an annual report published by the UN. A widely used index predating the HDI is the PQLI (Physical Quality of Life Index), developed by Morris (1979).

feminist research, which argues that macroeconomic processes impact women and men differently with women being disproportionately disadvantaged (Elson 1995; Pyle and Ward 2003). Markets are social institutions that reflect and reinforce gender inequality because men and women differ in their economic and social status, and their access to private and public resources (Elson 1995; 1999; Çağatay and Özler 1995; Durano 1999). Foreign debt and the associated austerity measures disproportionately impact women, who try to maintain their families' standards of living despite decreased government expenditures on housing, health, education, and other areas (Çağatay and Özler 1995; Elson 1995; Floro 1995; Pyle and Ward 2003; Çağatay 2003; Assaad and Arntz 2005). Some states attempt to mitigate the effects of patriarchy by increasing women's access to education and health services (Fuller 1991; Buchmann and Hannum 2001; Stromquist 2001; Ramirez-Valles 2003; WHO 2003; Bornschier et al. 2005; Onah et al. 2005; Gray et al. 2006; Kay 2006; UNESCO 2006). Democracy aids women in gaining access to the political system, but this is no guarantee of equality (Paxton 1997; Kenworthy and Malami 1999; Meer 2005; Paxton and Hughes 2007).

This chapter examines these competing assumptions of mainstream macro-comparative versus feminist research by asking, to what extent are macroeconomic processes gender-neutral, if at all? To answer this question I analyze important variables found by previous research to influence "human" well-being from a socialist feminist perspective. My dependent variables are the components of the HDI, disaggregated by sex. The components of the HDI are the following: life expectancy at birth; adult literacy rate; combined primary, secondary, and tertiary education gross enrollment ratio; and GDP per capita. I do not analyze GDP per capita as it cannot be disaggregated by sex. The HDI is an indicator of human well-being in developing countries widely used in mainstream macro-comparative research on global inequality (e.g. Huang 1995,

Wickrama and Mulford 1996; Lai 2003; Lind 2004; Roberts 2005; Veenhoven 2005; Davies and Quinlivan 2006). I focus upon indicators used in previous research that stem from the dominant, mainstream theories of global inequality: neoclassical economics, dependency/world-systems theory, and the developmental state perspective. A common thread tying these disparate theories together is the assumption that macroeconomic processes impact women and men similarly in developing countries. To test the competing theoretical assumption that macroeconomic processes impact the well-being of women and men differently, with women disproportionately disadvantaged, I test indicators suggested by socialist feminist theory.

To preview my findings, analyses from 70 developing countries demonstrate that macroeconomic processes impact the literacy rates – a component of the HDI – of women and men differently. For example, export dependency and democracy both consistently exert a negative effect on female literacy rates, but not on male literacy rates. This finding sharply contrasts previous mainstream research, which assumes that macroeconomic processes impact the literacy rates of women and men similarly.

The HDI and its disaggregated components are central to this analysis for several reasons. First, the HDI is a commonly used composite variable in mainstream macro-comparative research on global inequality (e.g. Huang 1995; Wickrama and Mulford 1996; Sharma and Gani 2004). The use of this variable is, itself, indicative of the gender-neutral assumption informing this research, as a gendered version of the HDI exists and is published annually along with the HDI.[2] Second, disaggregating the HDI and testing its components by sex allows an examination of the gender-neutral assumptions informing this research. Third, because this study aims to replicate previous research, the findings reported here suggest that previous research findings

---

[2] These comments refers to the GDI (Gender Development Index). In addition, numerous indicators disaggregated by gender are widely available and annually updated by organizations such as the UN, the World Bank, and the IMF.

have reported women's well-being rather than "human" well-being. Fourth, this study provides evidence that mainstream macro-comparative research on global inequality must address gender in order to gain a more complete understanding of global inequality processes. Testing the HDI's disaggregated components by sex exposes the flawed assumptions informing previous research by expanding the scope of this research.

My intent in this chapter is to theoretically and empirically examine the gender-neutral assumptions underlying mainstream macro-comparative research. Examining sex differences in literacy is not the focus of this article. I present my findings for the literacy component of the HDI for brevity only. My findings for sex differences in literacy are indicative of my findings for the remaining HDI components not reported here. Taken in sum, and illustrated here with sex differences in literacy rates, the findings support my larger argument – and focus of this chapter – that the gender-neutral assumptions of mainstream macro-comparative research are misleading.

This chapter proceeds as follows. First, I review both mainstream and feminist research on global inequality and how the different theories address gender. The second section discusses the data, measures, and methods. The third section reports the findings, which support the alternative hypothesis by showing that macroeconomic structures impact the well-being of women and men differently. The fourth section discusses the findings in relation to previous research in both the feminist literature and in the mainstream literature on global inequality. This article concludes by discussing the implications of this study for global inequality research located in both the feminist perspective and in the mainstream sociological perspective.

EXPLANATIONS OF GLOBAL INEQUALITY: MAINSTREAM MACRO-COMPARATIVE THEORIES VERSUS SOCIALIST FEMINIST THEORY

Mainstream Theories of Global Inequality

Three different theoretical perspectives dominate explanations of how macroeconomic processes influence the well-being of people in developing nations: neoclassical economics, developmental state theory, and dependency/world-systems theory. These theories have all been shown to provide important explanations of the HDI (e.g. Huang 1995, Wickrama and Mulford 1996; Roberts 2005; Veenhoven 2005; Davies and Quinlivan 2006).These theories are briefly described below. An assumption shared by all the theories is that macroeconomic structures are gender-neutral. As a result of this assumption, gender relations have been largely excluded from this research.

Neoclassical Economics

Neoclassical economics is the dominant framework used for explaining global inequality among policymakers. The fundamental premise of neoclassical economics is that economic growth and increased involvement in international trade – particularly through exports – will lead to economic development in developing countries. Global policymakers associated with neoclassical economics, such as those in the World Bank, the IMF and the United Nations have all increasingly recognized that development processes have gendered dimensions, with women being excluded from many economic and political opportunities. Efforts to specifically include women in the economy are seen as "smart economics…that raises economic productivity, and helps advance other development goals" (World Bank 2007, p 3). Conversely, societies that discriminate against women are less able to reduce poverty and to develop in general (World Bank 2001). Societies that discriminate are less able to reduce poverty and to develop in general

(World Bank 2001). Gender equality is associated with improved child survival rates, improved family health, and reduced fertility rates, all of which are important in reducing poverty and contributing to economic development (World Bank 1994; 2001; UNDP 2006c).

As a result of the recognition that a country's development trajectory is greatly influenced by gender equity, neoclassical economics and policy discourse has embraced the concept of "gender mainstreaming." Gender mainstreaming refers to the belief that development policies must specifically address women's exclusion from the economic mainstream in order for women to realize the benefits of development (UN 2002; 2006a, 2006b; World Bank 2006; 2007; IMF 2007). The underlying assumption is that with targeted efforts at the various levels of governance – the supranational level such as the UN down to the local level – gender equality can be eventually be achieved. A common indicator of gender mainstreaming is participation in the United Nations' Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). Cross-national research finds that participation in CEDAW is related to increased female levels of literacy, and economic and political participation in developing countries (Kenworthy and Malami 1999; Gray et al. 2006). However, case study research suggests these policies are often ineffective at addressing the needs of women for several reasons including a lack of understanding as to structural barriers to women's participation and failure to support women's participation through capacity building at all levels (Clisby 2005; Daly 2005; Desai 2005).

Neoclassical economics and gender mainstreaming, as indicated by participation in CEDAW, share common assumptions with liberal feminist theory. While it is beyond the scope of this paper to explore these assumptions, both neoclassical economics theory and liberal feminist theory stem from liberal political philosophy, which believes that all individuals have

intrinsic value and should be able to pursue her or his own self-interest as he or she defines it. According to liberal feminist theory, the prevailing liberal ideals of equal rights under the law should be given to women (Jaggar 1983). This shared assumption concerning the ideals of equal rights under the law leads me to presume that neoclassical economics, as indicated by gender mainstreaming, assumes that macroeconomic structures impact women and men similarly.

The Developmental State

Traditionally neoclassical economics has viewed state intervention as being the enemy of economic growth. However, during the 1990's this perspective underwent a transformation as neoclassical economics realized that state intervention, under certain circumstances, promoted economic growth (Evans and Rauch 1999). Developmental state research examines how the direct and indirect role of the state influences economic development in developing countries. The state and its institutions are seen as important actors in national economies by allocating and redistributing resources that benefit human well-being by providing a corrective to the private market. Theory and research examine, for example, the institutional norms, the bureaucratic instruments, and the internal organizational structure of power needed to formulate and implement effective economic policies (Gereffi and Fonda 1992; Evans 1995; Evans and Rauch 1999; Chibber 2002; Tsai 2006).

The specific role of gender is largely excluded from the developmental state perspective. This neglect is puzzling given the recognition by neoclassical policymakers that political initiatives promoting gender mainstreaming are necessary for the economic and social development of developing nations. Given this perspective's neglect of gender relations and its links to neoclassical economics, I presume that the actions of the state influence women and men similarly.

Research informed by the developmental state perspective shows state strength promotes economic growth and benefiting human well-being. High state strength is seen as an indicator of an effective bureaucracy because it extracts resources to improve the collective good and implements redistributive policies towards strong interest groups (Moon and Dixon 1985; London and Williams 1990; Wickrama and Mulford 1996; Shen and Williamson 1997; 1999; 2001; Frey and Al-Roumi 1999; Tsai 1999; 2006). Research has also found that democracy improves social well-being. In a democracy, the government is accountable to the general population. As a result, the state is more likely to redistribute resources to the general population when the general population is allowed to vote (Wickrama and Mulford 1996; Tasi 2006). It is important to note that research outside of the developmental state perspective finds that democracy is no guarantee of women's equality (e.g. Gawaya and Mukasa 2005; Hassim 2005; Nyamu-Musembi 2007; Paxton and Hughes 2007; Waylen 2007). Taken together, this raises the question of what is the relationship between democracy and gender equality and whether the development state literature does not adequately address such issues because of a gender neutral assumption? As with the linkages between neoclassical economics and liberal feminist theory, discussed above, the developmental state perspective is consistent with liberal political philosophy. The assumptions of liberal political philosophy assume democratic participation is sufficient to allow women equal access to the law. As a consequence, and consistent with the developmental state perspective, one presumes democracy mitigates gender disparities arising from macroeconomic processes.

Dependency/World-Systems Theory

In stark contrast to the assertion of neoclassical economics that increased involvement in the global economic system will result in economic development, dependency/world-systems

17

theory asserts that the global economic system structures economic relations in such a manner that promote inequality and often underdevelopment. Dependency/world-systems theory argues the causes of inequality are found in global economic relationships between wealthy and poor countries, and the way these relationships influence economic structures within developing nations. Inequality is seen as an enduring characteristic of the modern world because of the economic structures of global capital, and specifically, through three major types of economic dependence: trade, debt, and investment dependence.

Despite dependency/world-systems theory being explicitly focused upon global inequality, gender relations have been largely excluded in both its theory and empirical research (Misra 2004). The scant research that does exist has found that position in the world system influences fertility rates (Ward 1984; Gallagher et al. 1996) and female labor force participation rates (Meyer 2006). As with the developmental state perspective, this neglect of gender relations leads one to presume that trade, debt, and investment dependence must impact women and men similarly.

Research examining the impact of trade dependence has consistently shown that trade dependency increases economic inequality and has negative impacts on social well-being (Delacroix and Ragin 1981; Ragin and Bradshaw 1992). Foreign debt and associated austerity measures which emphasize policies that save money and facilitate exports have also been shown to depress economic growth and negative influence well-being (Bradshaw and Huang 1991; Bradshaw and Wahl 1991; Glasberg and Ward 1993; Mogford 2004). Foreign investment has been shown to promote dependence and to negatively impact well-being due to its tendency to lock nations into historically determined patterns of commodity concentration and the economic

underdevelopment that results as a consequence (Chase-Dunn 1975; Bornschier and Chase-Dunn 1985; Jaffee and Stokes 1985; London and Williams 1988; 1990).

One of the intervening mechanisms of trade dependency and foreign aid/investment is the concept of "structural disarticulation." (Amin 1974; 1982). Trade-reliant economies, given their external orientation, have weakly established links between productive sectors. This can result in structural disarticulation, a situation in which the economy of a less developed country is characterized by an economic distortion such that the dominant economic sector is integrated outwardly, with the global economy, rather than with domestic economic sectors. Consequences of this economic distortion include a downward pressure on wages and a lack of incentive by local governments to invest in increasing local consumption and improving mass welfare. As a result of these processes, structural disarticulation contributes to unequal income distribution and negative impacts on social well-being (Amin 1974; 1982; Gallagher et al. 1996). Research indicates dependency operates through structural disarticulation, and to the extent dependency produces disarticulation, dependency will have negative effects on the well-being of the population (De Janvry and Sadoulet 1982; Stokes and Anderson 1990; Gallagher et al. 1996; Breedlove and Armer 1996; 1997; Teubal 2001). As a consequence, it is curious that scholars do not investigate the possibility of structural disarticulation upon women.

Socialist Feminist Theory

Socialist feminist theory contrasts with the mainstream theories reviewed above in that socialist feminism assumes the global economy is a gendered structure. Socialist feminist theory arose in the 1970's in response to the inability of Marxism to address the oppression and exploitation of women. Socialist feminism retains much of Marxist thought, but adds to and

19

transforms Marxist thought by incorporating the role of patriarchy.[3] Marxism locates the source

of oppression and exploitation in economic class structures. Socialist feminism believes

women's oppression occurs not only from their exploitation as formal wage and salary laborers,

but also from patriarchal relations that define women as mothers, domestic laborers, and

consumers (Eisenstein 1981; Hartmann 1979; 1981; Young 1981).

Research has consistently found that global economic processes of trade, finance, and

debt are gendered structures and, as a consequence, have gendered effects.[4] The effects of

export-oriented trade policies upon women's well-being are mixed. Export-oriented trade

policies may lead employers to prefer women workers. This preference for women workers is

primarily due to the needs of global capital for low-paid, flexible, unskilled, and docile labor –

traits widely believed as distinctly feminine in a patriarchal culture (e.g. Çağatay and Özler 1995;

Howes and Singh 1995; Elson 1999; Standing 1999; Pyle and Ward 2003). For women, this

preference is likely to lead to increased wages compared to wages obtained from work in the

informal sector or being unemployed. In turn, increased wages may lead to increased

empowerment within the household and increased access to a variety of opportunities including

education and healthcare. Yet due to the availability of cheaper imports, women working in

sectors other than export processing may be subject to greater difficulties finding and keeping

work (Fontana and Wood 2000; Pyle and Ward 2003). When trade preferences are switched to

other regions, women workers employed in export manufacturing facilities may be

disproportionately unemployed relative to men. Even if the lost jobs impact men more than

---

[3] There have been debates as to the appropriate name for socialist feminist theory due to its reliance upon Marxist thought. Socialist feminism continues to be the name most widely used, but it has also been called "materialist feminism" and "Marxist feminism." In addition, Standpoint Theory is a strand of socialist feminist thought.
[4] Much of the research cited in the following section is from the field of feminist economics and other researchers who do not self-identify as socialist feminists. However, findings of this research are consistent with socialist feminist theory.

women, women may be adversely affected, either by reducing household consumption or being forced to take additional paid work in either the formal or informal sector. Reduced wages may lead to reduced empowerment within the household; reduced household consumption may be gendered in that women and girls do without food, healthcare, and education; and informal work – ranging from domestic labor to the sex trade – is unregulated and often dangerous (Fontana and Wood 2000; Pyle and Ward 2003; UNESCO 2003; WHO 2003; Mabala 2006).

Research finds the effect of foreign direct investment on women's well-being is contradictory. Macro-comparative research finds foreign investment depresses both women's share of the labor force, and women's labor force participation rates (Ward 1984). More recent research contradicts these findings by showing that foreign investment is positively related to women's labor force participation (Meyer 2003; 2006). One reason for these contradictory findings may be the thirty year time span between these studies, a period of time in which numerous technological changes, macroeconomic policy changes such as gender mainstreaming, and other events occurred. Case-study research finds foreign direct investment promotes the commercialization of agriculture, which inhibits the employment of women in the production and export of agricultural products (Vanfossen and Rothstein 1997). However, efforts to develop the agricultural sector in Kenya have restructured land, labor, and economic relations that increased women's participation in the labor force in the agricultural export sector (Dolan 2005).

Foreign debt also has gendered effects. Feminist economic researchers found that the economic models that inform austerity measures are gender-blind, yet gender plays a significant role in the parameters and processes of these austerity measures (Çağatay and Özler 1995; Elson 1995). The effects of austerity measures disproportionately affect women, who try to maintain their families' standards of living despite decreased government expenditures on housing, food

subsidies, health, education, and other areas (Elson 1995; Floro 1995; Pyle and Ward 2003; Çağatay 2003; Assaad and Arntz 2005). Austerity measures often force women to seek additional income-earning possibilities, often in the informal sector which is likely unregulated and dangerous, thus potentially impacting their health and life expectancy (Benería 1995; Çağatay and Özler. 1995; Assaad and Arntz 2003; Pyle and Ward 2003; Massey et al. 2006; Plaza and Stromquist 2006). It is useful to note the informal sector in some cases can also be a source for resistance and present opportunities for challenging dominant political-economic structures. Yet the export-oriented policies promoted by debt policies have led to the increased employment of women and contributed to the unemployment of men (Howes et al. 1995; Ganguly-Scrase 2003).

Research finds the state plays an important mediating role in mitigating the effects of patriarchy by providing increased access for women to education and health services (Fuller 1991; Buchmann and Hannum 2001; Stromquist 2001; Ramirez-Valles 2003; WHO 2003; Bornschier et al. 2005; Onah et al. 2005; Gray et al. 2006; Kay 2006; UNESCO 2006). Patriarchal cultures play a central influence in the education and health of women in developing countries. The gap between male and female literacy and educational attainment rates has been well-documented, and continues to be a prominent concern among global policymakers who recognize that patriarchal cultures continue to place lower value upon the literacy and education of females rather than males (Stromquist 2001; UNESCO 2002; 2003; 2006; Mabala 2006). Patriarchal cultures are also negatively related to women's health and life expectancy (e.g. Williamson and Boehmer 1997; Shen and Williamson 1999; Young 2001; Wickrama and Lorenz 2002; Halder and Mosley 2004; McIntosh and Thomas 2004; Onah et al. 2005; Pillai and Gupta 2006). For example, low literacy rates coupled with patriarchy mean medical instructions for

drugs are often given to husbands rather than women. As a result, women's ability to use medicine correctly is impeded (WHO 2003). Patriarchal norms concerning access to healthcare can delay or prevent women's healthcare (WHO 2003). Clinics may also be located some distance from the household. Assuming that women have the mobility to travel freely in the public sphere, their daily tasks such as childcare and food production may deter women's decisions to travel long distances (WHO 2003). In Africa, HIV rates are higher among women than men. This is due to both biological factors dealing with the reproductive tract and social norms such as men having more sexual partners than women. The two widely used means of preventing HIV/AIDS is abstinence and wearing a condom, both of which require male cooperation (WHO 2003; McIntosh and Thomas; 2004; Klomegah 2006; Mabala 2006).

Methodological and Epistemological Differences Between Mainstream Macro-Comparative Research and Feminist Research

A methodological and epistemological divide separates mainstream and feminist research on global inequality. This divide is due to four primary factors. First, the existence of a masculinist bias in globalization studies and academic life in general. Second, epistemological and methodological differences between feminist theories and the dominant theories of globalization. Third, a focus on economic explanations which assume gender is a secondary dynamic to global inequality processes. Fourth, the ghettoizing of gender topics to the field of "gender studies" (Mohanty 2003; Eschle 2004; Misra 2004; Epstein 2007).

Masculinist bias. The masculinist bias that exists in mainstream global inequality research is located in the assumption that global relations are gender neutral. This assumption is found in the tendency to adopt a high level of abstraction disconnected from concrete human

relations (Eschle 2004). This masculinist bias has influenced the different epistemologies and methodologies of feminist theory and the mainstream theories of global inequality.

Epistemological and methodological differences. The epistemology informing much of feminist theory is in reaction to this masculinist bias. Feminist theory is largely opposed to grand narratives, which present a totalizing understanding of the world. Feminist researchers largely balk at any attempt at a metanarrative that explains "How the World Is for All Women." Following from this epistemological stance is that any quantitative, macrolevel analysis is at risk of attributing totalizing characteristics to its subjects.[5] Feminist researchers recognize that there is a tremendous amount of diversity to the experiences of women throughout the world. Rather than further obscuring the lives and experiences of women by employing highly abstract theories and methodologies, feminist researchers are committed to making this diversity visible through methods which are sensitive to concrete realities. As a result, feminist researchers examining global inequality issues typically employ qualitative, case-study research methodologies (Fernandez-Kelly 1989; Fernandez-Kelly and Wolf 2001; Pyle and Ward 2003; Eschle 2004; Misra 2004). This stands in contrast to mainstream sociological research on global inequality which typically favors a quantitative and cross-national approach.

Economic explanations. An emphasis on economic explanations of globalization processes assumes economic dynamics and class relations are the primary mechanisms of global inequality. Gender relations are relegated to a secondary mechanism, and, as a result, it is difficult to see gender relations as being causal of global inequalities and thus integral to

---

[5] This is a critique that could be leveled against the research presented here. However, it is important to note that socialist feminists (such as Hartsock, Harding, Weeks, and Mohanty) argue that despite the vast diversity of women's experiences, there are certain commonalities to their experiences. It is important to document and understand the commonalities that arise from capitalist structures in order to better understand how to subvert the structures that continue to oppress women and to create alternative subjects.

reshaping global inequalities (Eschle 2004). Socialist feminists argue that gender relations are a primary mechanism of global inequality. Patriarchy existed before capitalism and will not necessarily disappear with the end of capitalism. Patriarchy and capitalism are interlocking processes, and a change in one process creates movement, tension, or contradiction, in the other (Hartmann 1979; 1981).

Ghettoization. There is a tendency to relegate, if not ghettoize, work on gender relations to the field of "gender studies" (Epstein 2007; Mohanty 2003). Contributing to this ghettoization is the self-exclusion of feminists from mainstream global research and debates (Eschle 2004). This ghettoization inhibits a dialogue between the field of gender studies and mainstream sociological research.

HYPOTHESIS

In summary, the mainstream theories of global inequality – neoclassical economics, the development state, and dependency/world-systems theory – suggest macroeconomic and supporting political structures will impact the well-being women and men similarly. However, given the theory and research findings of socialist feminism, I expect to find that macroeconomic and supporting political structures will impact the well-being of women and men differently.

DATA, MEASURES, AND METHODS

This study uses panel OLS regression to test whether global economic processes are comparable in their impacts upon men and women in developing countries. The sample consists of all low and middle-income countries as defined by the World Bank in 2004, for which data

was available. See Table A1 in Appendix A for the list of the 116 countries used in the analysis.[6]

Countries with populations below 1 million are excluded because of the extreme value they

typically register on variables of interest, a widely used practice in cross-national research (e.g.

Gallagher et al. 1996; Frey and Al-Roumi; 1999; Kenworthy and Malami 1999; Shen and

Williamson 2001). Detailed variable descriptions and data sources are presented in Table A2 of

Appendix A. The variables used in this study are discussed below.

Dependent Variables: The Human Development Indicator

The HDI is a composite index, published annually by the United Nations that measures

the well-being and life chances of people throughout the world based upon three dimensions: life

expectancy; knowledge, as measured by literacy rates and educational enrollment for primary,

secondary, and tertiary schools; and standard of living, as measured by gross domestic product

(GDP) per capita. My study disaggregates the HDI into three components, by sex: female/male

literacy rates, female/male educational enrollment, and female/male life expectancy. The

remaining component, standard of living, cannot be disaggregated by gender. For brevity, this

study will report results on one component: female and male literacy rates. All other components

of the HDI were tested and results are similar to those of female and male literacy.[7]

Literacy rates are the percentage of males/females ages 15 and older who can both read

and write a simple statement about their everyday life in 2004.[8] The lagged dependent variables

are measured in 1994. A ten-year lag is widely used within cross-national research, including

---

[6] All high-income industrialized countries, with their already high levels of development and diversified economies are excluded from the analysis because the causal mechanisms of global inequality, as discussed above, are limited in their application to developing countries.

[7] See Tables A 5 through A8 in Appendix A for these results.

[8] The education dimension of the HDI calculation consists of creating an education index using education enrollment rates and literacy rates. Literacy measures the most basic level of education, but as the U.N. notes, knowledge consists of more than literacy. As a result, an education measure was added to the HDI formula in the *1991 Human Development Report*, as mean years of schooling. In the *1994 Human Development Report* the mean years of schooling was replaced with the percentage of education enrollment, as it is a more precise indicator.

studies using the HDI as a dependent variable (Bornschier and Chase-Dunn 1985; London and Williams 1988).

Independent Variables

Most independent variables are measured in 1994, a year adjacent to 1994, or are averaged over a time period including 1994, a technique in cross-national research that is applicable to this study because of data limitations. A few independent variables are measured in 2004 because the associated impacts are more immediate and lagging them would be inappropriate. See the table in Appendix A for specific years, sources, and other details of the variables. The independent variables used represent the major predictors of well-being (measured by the HDI) identified and used in previous research.

Level of economic development is measured by GDP per capita, PPP (gross domestic product per capita, in purchasing power parity, US dollars). This variable is logarithmically transformed using the natural logarithm to correct for a skewed distribution. Consistent with neoclassical economic theory, *exports* and *imports,* measured as a percent of GDP, indicates integration into the global economy. Also consistent with neoclassical economics theory is assessing the impacts of *CEDAW* (UN Convention on the Elimination of all forms of Discrimination Against Women). A dummy variable is coded "1" if the country signed CEDAW and coded "0" if the country did not sign by Dec. 31, 1994.

Development state theory and research suggest that *state strength* and *democracy* are important influences on mediating the effects economic globalization. State strength is measured as central government revenue as a percentage of GDP. The degree of democracy is measured on a scale of 1 (low democratic freedom) and 7 (high democratic freedom). This widely-used scale is constructed by the Freedom House (2004).

27

Consistent with dependency/world-systems theory and research, three common economic dependency measures are examined. All three variables are logarithmically transformed using the natural log to address skewed distributions. *Export commodity concentration* indicates the degree to which a nation's exports are concentrated in a few goods. It is calculated as the total of the monetary values of the largest exports as a percentage of all exports. *Foreign direct investment* is measures as a percentage of a country's GDP. *Debt dependence* is measured as the percentage of total debt service to the GDP (Bradshaw and Huang 1991; Bradshaw and Wahl 1991; Frey and Field 2000). Also consistent with dependency/world-systems research is a measure of *structural disarticulation*. This measure is constructed by taking the sum of the absolute difference between a sector's share of labor force and that sector's contribution to GDP across the three major sectors of the economy: agriculture, industry, and services (Stokes and Anderson 1990, Huang 1995; Gallagher et al. 1996; Frey and Field 2000).

In general, feminist theory argues that a *patriarchal culture* promotes inequality. Due to the lack of any concrete, cross-national measures of patriarchy, researchers typically rely upon admittedly crude proxy measures such as the main religion practiced in a country (Paxton 1997; Kenworthy and Malami 1999; Paxton and Kunovich 2003). While all religions are patriarchal to some degree, Catholicism and Islam are both religions which emphasize traditional roles for women and that have been empirically shown to promote gender inequality (Çağatay and Özler 1995; Paxton 1997; Kenworthy and Malami 1999; Paxton and Kunovich 2003; Haghighat 2005; Moghadam 2005; Saktanber 2006). Researchers using religion typically use dummy variables, which likely stems from the lack of variation in the distribution among certain religions in countries within the developing world. For example, Muslims, Buddhists, and Hindus are all generally located in a few countries, with a country often being 95 to 100 percent Muslim,

Buddhist, or Hindu. The proportion of Muslims, Buddhists, and Hindus in remaining countries throughout the developing world are extremely small, often at 10 percent or less. The distribution of these religions is thus highly bimodal. In contrast, a generally more normal distribution exists for other religions in the developing world, such as Protestantism. These skewed distributions are problematic for cross-national, quantitative analyses of the developing world. Using dummy variables is a solution to this problem.

The other proxy measure of patriarchy used by researchers is region. However, given the structure of this study, region is highly correlated with GDP and is thus inappropriate for this analysis. While other national level measures of patriarchy exists, such as condom use or abortion rates, at the present time these measures cannot be used in cross-national analyses due to high levels of missing data, particularly in the Sub-Saharan countries.

Given these problems with measuring patriarchy, this study uses religion coded as dummy variables. Countries are coded "1" if more than 50 percent of the population is either Catholic or Muslim. Countries are coded "0" if 50 percent or more of the population is another religion, including protestant, Jewish, Hindu, Buddhist, and indigenous religions.

Methods

A panel OLS regression model regresses a dependent variable at a later point in time (t_2) on its value at an earlier point in time (t_1) and on the independent variables at the earlier point in time (t_1):

$$Y_2 = a + B_1 Y_1 + B_2 X_1 + B_3 X_2 + e$$

where Y_2 is the dependent variable at the later point in time; a equals the intercept; Y_1 equals the lagged dependent variable (the dependent variable at the earlier point in time); X_1 and X_2 equals independent variables at the earlier point in time; and e equals the error term.

Panel OLS regression is a widely used statistical technique in macro-comparative research on global inequality for several reasons. First, the assumption is that any effect of economic structure on well-being will not be instantaneous, but will require some time to become apparent. Second, it is useful for making causal inferences, as it examines the effect of the independent variable over time. Third, the inclusion of an earlier measure of the dependent variable helps reduce reciprocal effects and reduces the threat of spuriousness (Ragin and Bradshaw 1992; Finkel 1995).

Following others (e.g. Gallagher et al. 1996; Frey and Al-Roumi 1999; Kenworthy and Malami 1999; Shen and Williamson 2001; Moore et al. 2006), to maximize the use of available data, the sample size varies from one model to another depending upon data availability. Countries with missing cases for any of the variables were dropped from the sample for the regression analysis. Due to data availability constraints, most models range between 70-73 countries. Descriptive statistics and Pearson correlation coefficients are displayed in Table A3 and Table A4 in Appendix A. Regression diagnostics were used to detect outliers and influential cases. To detect problems of multicollinearity under multivariate conditions Variance Inflation Factors (VIF) were used. Tables 2 and 3 report all VIF's with the least squares regression estimates. Due to the inclusion of the lagged dependent variable, these models in effect test the direct effects of the various predictors on change for female/male literacy rates. Among the control variables, the lagged dependent variables are always significant. The plot of residuals against estimates showed little presence of heteroscedasticity in the data.

RESULTS

Table 1 shows the results of paired sample t-tests on the means of female and male literacy rates for 1994 and 2004. Both female and male literacy rates increased significantly over

the decade. The following sections discuss results of the panel OLS regression for both female

and male literacy rates.

TABLE 1. Results of paired sample *t*-tests of literacy, 1994-2004

	1994	2004	1994 - 2004	*t*
Female	67.3	73.3	5.9	6.0**
(N=81)	(28.6)	(26.4)	(8.9)	
Male	78.9	82.3	3.3	4.1**
(N=81)	(19.5)	(18.1)	(7.1)	

*p≤.05   **p≤.01   (two-tailed tests)
Numbers in parentheses represent standard deviations.

TABLE 2: Panel OLS Regression Estimates of Predictors on Female Literacy Rates, 2004

	Model 1	Model 2	Model 3	Model 4
Female Literacy 1994	.795***	.791***	.819***	.829***
	[.876]	[.875]	[.877]	[.887]
	(.044)	(.039)	(.053)	(.049)
	2.327	*2.441*	*2.978*	*2.989*
GDP PC (log)	4.286***	6.014***	3.258	4.558**
	[.129]	[.181]	[.096]	[.135]
	(1.586)	(1.414)	(1.992)	(1.887)
	2.201	*2.372*	*3.177*	*3.361*
CEDAW	.788	.104	2.589	3.023
	[.015]	[.002]	[.046]	[.054]
	(1.908)	(1.706)	(2.148)	(1.992)
	1.284	*1.351*	*1.366*	*1.384*
Exports (% GDP)	-.248***	-.304***	-.192**	-.209**
	[-.163]	[-.190]	[-.117]	[-.127]
	(.086)	(.075)	(.095)	(.088)
	3.090	*2.891*	*3.038*	*3.061*
Imports (% GDP)	.258***	.252***	.247***	.258***
	[.206]	[.186]	[.177]	[.185]
	(.067)	(.061)	(.079)	(.074)
	2.804	*2.651*	*2.938*	*3.080*
Democracy		2.278***		2.223***
		[.132]		[.124]
		(.572)		(.652)
		1.433		*1.437*
State Strength		.194**		.103
		[.063]		[.031]
		(.096)		(.120)
		1.272		*1.446*
Export Dependency (log)			1.668	2.209
			[.047]	[.062]
			(1.455)	(1.362)
			1.518	*1.570*

	Model 1	Model 2	Model 3	Model 4
FDI (log)			-1.506	-1.377
			[-.046]	[-.042]
			(1.167)	(1.076)
			1.173	*1.176*
Debt Dependency (log)			1.165	.864
			[1.282]	[.030]
			(.040)	(1.184)
			1.795	*1.805*
Disarticulation			-.101**	-.082**
			[-.109]	[-.089]
			(.041)	(.040)
			1.813	*2.023*
Catholic	.558	2.336	-1.049	.513
(reference: other religions)	[.009]	[.040]	[-.017]	[.008]
	(2.246)	(1.987)	(2.416)	(2.305)
	1.388	*1.479*	*1.392*	*1.494*
Muslim	.728	-2.036	.104	-2.255
(reference: other religions)	[.010]	[-.029]	[.001]	[-.031]
	(2.377)	(2.146)	(2.639)	(2.522)
	1.104	*1.234*	*1.235*	*1.330*
R^2	.931	.953	.937	.948
Adjusted R^2	.924	.946	.925	.936
N	75	72	70	70

Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, and the number in parentheses is the standard error. The italicized number is the VIF statistic.

*p≤ .10   **p≤ .05   ***p≤ .01   (two-tailed tests)

Female Literacy Rates

Table 2 shows the panel regression estimates for female literacy rates in 2004. Model 1 tests the direct effects of the neoclassical variables, and shows that economic structures are strong predictors of female literacy rates. Economic development, as measured by GDP has a strong positive effect on female literacy rates with a significance level of *p≤.01*. The transformation of GDP makes meaningful interpretation of the unstandardized regression

coefficient difficult. However, the standardized coefficients show that female literacy rates increase.876 standard scores given each one standard score that GDP increases. The two variables measuring the level of a country's integration into the global economy also have strongly significant, yet differing effects. The level of exports has a strong negative influence on female literacy rates. In contrast, the level of imports, also measured as a percentage of a country's GDP, has a strong positive effect on female literacy rates. This finding is surprising, and may be due to higher literacy requirements required of work in import sectors, as compared to low-skilled factory work that characterizes export-oriented production. The variable CEDAW is not significant.

Model 2 tests the direct effects of the developmental state perspective while controlling for the effects of the neoclassical economic variables. Results show that economic and political variables are both important in predicting female literacy rates, and inclusion of these variables increases the adjusted R^2 to .946. Specifically, 95 percent of variance in female literacy can be accounted for by the linear combination of the nine neoclassical economic and developmental state variables in the sample data. A comparison of the neoclassical economic variables in both Model 1 and Model 2 shows the variables GDP and imports continue to be strongly and positively significant at the $p \leq .01$ level. Similarly, exports continue to be strongly and negatively significant. An examination of the standardized regression coefficients in Model 2 show that exports and imports predict similar levels of change in female literacy rates, albeit in opposite directions. Specifically, female literacy rates decrease .190 standard scores for every one standard score that exports increase. Conversely, female literacy rates increase .186 standard scores for every one standard score that imports increase. For the developmental state variables,

the level of democracy is strongly significant in a positive direction. State strength is also positively related to female literacy rates, and is moderately significant with a $p \leq .05$.

Model 3 tests the direct effects of dependency/world-systems theory while controlling for the effects of the neoclassical economic variables. The effects of GDP that are present in Models 1 and 2 disappear in Model 3. The negative effect of exports diminishes slightly, with a $p \leq .05$. Conversely, the positive effect of imports continues to be strong. Structural disarticulation has a negative effect that is moderately significant. The remaining dependency/world-systems variables are not significant, a result that is not surprising given that research shows these variables tend to operate through a disarticulated economy (De Janvry and Sadoulet 1982; Stokes and Anderson 1990; Gallagher et al. 1996; Breedlove and Armer 1996; 1997; Teubal 2001). The neoclassical economic and dependency/world-systems variables in Model 3 account for 93 percent of the variance in female literacy rates.

Model 4 tests the effects of all predictors of female literacy, and shows that the economic variables of GDP, imports, and democracy, are significant positive predictors of female literacy, while exports and disarticulation are significant negative predictors of female literacy. The adjusted R^2 of this model is .936 which is nearly the same as Model 3. Economic growth (GDP) is moderately significant. As in the other models, exports and imports continue to have contradictory effects on female literacy, with exports having a moderate, negative effect and imports having a strong, positive effect. Structural disarticulation continues to be a moderate, negative predictor of female literacy. Of the two political variables tested here, democracy continues to be an important predictor with strong, positive effects while state strength is not significant.

In reviewing the results of Table 3 one may note that the measures of patriarchy, while not statistically significant, are often in the positive direction to female literacy. One could interpret this in a manner that suggests patriarchy is a positive phenomenon for women. It is also possible these dummy variables are capturing regional effects rather than patriarchal effects; however, as noted in the methods section of this chapter, the structure of the analyses is such that religion is the most appropriate variable given data and statistical constraints to capture patriarchy. Regardless of one's interpretation, the dummy variable outcomes do indicate the difficulties in measuring patriarchy at the cross-national level using such a broad measure of patriarchy, as religion. There are several ways for future research to address this measurement dilemma. It may be that, given the pervasiveness of patriarchy in all aspects of women's daily lives, no patriarchy measure is needed; rather, the strength of socialist feminist theory is in its ability to acknowledge the existence of patriarchy in its explanations. Future research using the socialist feminist perspective may also consider using more refined measures of patriarchy based upon Walby's theorization of patriarchy along six dimensions, one of which is the mode of production (1996).

TABLE 3: Panel OLS Regression Estimates of Predictors on Male Literacy Rates, 2004

	Model 1	Model 2	Model 3	Model 4
Male Literacy 1994	.740***	.774***	.745***	.738***
	[.878]	[.853]	[.799]	[.792]
	(.040)	(.051)	(.058)	(.058)
	1.798	*1.990*	*2.203*	*2.220*
GDP PC (log)	2.318**	3.423***	2.046	2.848
	[.111]	[.149]	[.087]	[.122]
	(1.029)	(1.332)	(1.677)	(1.740)
	1.904	*2.151*	*2.899*	*3.171*
Exports (% GDP)	-.005	-.065	.018	.010
	[-.006]	[-.060]	[.016]	[.008]
	(.059)	(.072)	(.081)	(.081)
	3.113	*2.819*	*2.868*	*2.902*
Imports (% GDP)	.003	.024	-.045	-.040
	[.004]	[.027]	[-.046]	[-.042]
	(.047)	(.060)	(.069)	(.070)
	2.924	*2.769*	*2.891*	*3.019*
Democracy		1.072*		1.007
		[.090]		[.081]
		(.564)		(.619)
		1.433		*1.440*
State Strength		.113		.060
		[.053]		[.026]
		(.094)		(.113)
		1.235		*1.427*
Export Dependency (log)			.560	.800
			[.023]	[.032]
			(1.278)	(1.288)
			1.511	*1.557*
FDI (log)			-1.142	-1.088
			[-.051]	[-.048]
			(1.023)	(1.017)
			1.161	*1.165*

	Model 1	Model 2	Model 3	Model 4
Debt Dependency (log)			-.102	-.269
			[-.005]	[-.013]
			(1.071)	(1.067)
			1.615	*1.629*
Disarticulation			-.101***	-.092**
			[-.159]	[-.144]
			(.035)	(.037)
			1.746	*1.978*
Catholic	1.276	2.257	.769	1.594
(reference: other religions)	[.035]	[.055]	[.018]	[.037]
	(1.447)	(1.865)	(2.040)	(2.116)
	1.232	*1.326*	*1.279*	*1.398*
Muslim	1.646	-.177	-.104	-1.267
(reference: other religions)	[.037]	[-.004]	[-.002]	[-.025]
	(1.659)	(2.117)	(2.255)	(2.339)
	1.080	*1.219*	*1.162*	*1.270*
R^2	.917	.900	.896	.901
Adjusted R^2	.909	.887	.878	.880
N	72	73	70	70

Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, and the number in parentheses is the standard error. The italicized number is the VIF statistic.
*p≤.10   **p≤.05   ***p≤.01   (two-tailed tests)

Male Literacy Rates

Table 3 shows the panel regression estimates for male literacy rates in 2004. The results sharply contrast the results for female literacy rates in 2004. Model 1 tests the direct effects of the neoclassical economic variables. Results show that economic structures have little predictive power for male literacy rates. The only variable that is significant is the level of economic development (GDP) which has a moderate, positive effect. This differs with the results for female literacy rates where the trade measures (exports and imports) have strong, albeit contradictory, effects. Model 1 is the best fitting model, with 91 percent of the variance in male literacy rates accounted for by neoclassical variables.

The inclusion of the developmental state variables in Model 2 makes GDP strongly significant. The transformation of this variable makes meaningful interpretation difficult. The standardized coefficients show that male literacy rates increased .149 standard scores for every ones standard score increase in GDP. Democracy is only marginally significant, at $p \leq .10$. The other political predictor, state strength, has no significant effect. Again, these results starkly differ from the results for females, where both the economic variables and political variables are important predictors of female literacy. The adjusted R^2 of Model 2 is .887.

Model 3 tests the direct effects of dependency/world-systems theory. The only result that is similar to females is that structural disarticulation is a strong, negative predictor of male literacy rates. This variable is the only significant variable in the model. The effects for all economic and political variables on male literacy rates are tested in Model 4. The results, again, sharply contrast with those of females. The only significant predictor for males is disarticulation, which has a moderate negative influence. The variables in Models 3 and 4 both account for 88 percent of the variance in male literacy rates.

DISCUSSION

The purpose of this article is to empirically assess the sex differences in effects of macroeconomic indicators on a component of the HDI, female and male literacy rates. This is despite the fact that mainstream macro-comparative research assumes sex similarities. This assumption starkly differs from that of feminist theory, which assumes sex differences in the impact of global economic structures on human well-being. Findings reported here suggest that global economic structures are gendered, disadvantaging women's well-being more than men's. Unreported findings on the remaining disaggregated components of the HDI are similar.

Literacy remains an important measurement of knowledge because people in many countries still lack access to formal education opportunities. Literacy is thus a manifestation of poverty (UNESO 2003; 2006; Nussbaum 2003; Sato 2004). The results reported here support the policy and scant scholarly research that does exist on women's and men's literacy. [9] Women are among those most likely to be illiterate (UNESCO 2003; 2006). The positive relationship between GDP and literacy for both females and males is therefore not surprising. It is also not surprising that disarticulation is important predictor of both female and male literacy rates, as research has shown disarticulation occurs in the poorest countries (Stokes and Anderson 1990).

Of interest is the finding that exports as a percent of a country's GDP consistently exert a negative effect on female literacy rates. This indicates export-oriented economic development strategies negatively impact women's well-being but not for men. It is useful to note that this export-oriented growth strategy is the driving mechanism of structural disarticulation, and is also an important predictor of women's literacy. Together these results on exports and disarticulation suggest that the current trends of economic globalization are negatively impacting women in certain aspects of their lives. This is despite women's increasing employment opportunities in these export-oriented economies, a phenomenon that has been widely documented (e.g. Çağatay and Özler 1995; Vanfossen and Rothstein 1997; Elson 1999; Standing 1999; ILO 2007).

The finding that democracy is important for female literacy but not for male literacy is also consistent with previous research. Nussbaum (2003) has argued that democracy is important in holding the state accountable for addressing literacy and educational problems. More generally, research finds that democracy has significant and positive effects upon the social well-being and upon the political power of women largely because freely elected and open regimes

---

[9] This neglect of literacy is perhaps due to a western bias in defining the concept of knowledge acquisition.

respond to popular demands and accountable to their citizens. (Wickrama and Mulford 1996; Paxton 1997; Kenworthy and Malami 1999; Paxton and Kunovich 2003).

This study draws upon socialist feminist theory to argue for the gendered effects of macroeconomic structures. It is interesting that empirically, the patriarchy variables are not significant. This may be due to the admitted crudeness of these measures given data limitations associated with measuring such an abstract concept cross-nationally. Theoretically, however, socialist feminism provides important insights into these findings which, for females, are consistent with dependency/world-systems theory and with the developmental state perspective. As noted previously, both these mainstream theories have neglected gender relations. I argue that this neglect is due to the gender-neutral assumption held by these two theories concerning the forces driving global inequality. Results reported here contradict this assumption and support the gendered assumption held by socialist feminism by providing evidence of the gendered effects of macroeconomic structures.

CONCLUSION

The results of this study show that contrary to the gender-neutral assumption of mainstream macro-comparative research, macroeconomic structures have different effects on female and male literacy rates. As a result, much of mainstream, macro-comparative research has likely produced invalid conclusions about the effects of macroeconomic processes on the well-being of people in developing countries. As a consequence, the findings of this study have both methodological and theoretical implications.

Methodologically, mainstream global inequality researchers must recognize that economic globalization has gendered impacts. As a result, measures used to examine global inequality need to consider potential gendered dimensions of the problem being addressed. There

41

is a substantial amount of regularly updated cross-national data that is disaggregated by gender readily available from global policymakers such as the UN, World Bank, ILO, and the IMF that is, in the opinion of this researcher, underutilized. Recognizing the gendered dimensions of global inequality provides a more sophisticated understanding of global inequality, and provides numerous opportunities for future research.

Theoretically, the gender-neutral assumption informing mainstream macro-comparative research is likely caused by a general neglect of the feminist literature examining gendered dimensions of global inequality. As discussed above, there are several dimensions to this neglect: a masculinist bias, epistemological and methodological differences; an emphasis upon economic explanations, and a tendency to ghettoize feminist research. A dialogue between feminist research on global inequality is needed to remedy this neglect. Such a dialogue provides a valuable source of contextualization and concrete detail that is often lacking in the highly abstract, macrostructural theories that dominate global inequality research. The result is a much more nuanced understanding of global inequality that provides numerous avenues for future research at both the macro and micro levels.

Providing a detailed discussion as to how a dialogue between socialist feminist research on global inequality and the dominant stands of research on global inequality can occur is beyond the scope of this article. However, I have a few suggestions. Such a discussion must address epistemological and methodological differences between mainstream sociological research on global inequality and feminist research examining similar issues. In addition, larger theoretical issues must be answered to thorny questions such as the following. Should socialist feminist theory be enveloped within the dominant perspectives? This is essentially asking the question, what can feminist theory contribute to dependency/world-system theory, the

development state perspective, and neoclassical economics? Should the dominant perspectives be enveloped within feminist theory? In other words, what can dependency/world-systems theory, the developmental state perspective, and neoclassical economics contribute to feminist theory? Or, is there a need to transform both feminist theory and the dominant perspectives into a new theory? Regardless of how one views the theoretical problem, a dialogue needs to begin between socialist feminist theory and the dominant theories on the issue of global inequality. This article demonstrates that a dialogue is necessary and desirable.

CHAPTER THREE

THE DARK SIDE OF ECONOMIC DEVELOPMENT: A CROSS-NATIONAL QUANTITATIVE STUDY OF STRUCTURAL DISARTICULATION AND WOMEN'S WELL-BEING IN DEVELOPING COUNTRIES

At first glance, the impacts of economic development on the well-being of women, relative to men, in developing countries seem to be largely positive. Over the last several decades, women worldwide have made large advances in achieving equality with men, with the gap between women and men closing in areas such as labor force participation, educational attainment, literacy rates, and political participation (ILO 2007; UNESCO 2006; UNDP 2006c). Latin America exemplifies these trends. This region had the greatest increase in female labor force participation between 1995 and 2004, at 5.9 percent (ILO 2007).Women in Mexico, Guatemala, Ecuador and Brazil have experienced increased economic and political empowerment (Pitanguy 2002; Prebeisch et al. 2002; Carter 2004; Frank 2005; Mendez 2005; Lovell 2006; Brickner 2006; Rudel et al. 2006). The education and health of women in many countries of Latin America, relative to men, also appears to be improving (Stromquist 2001; Fuentes and Montes 2004; García-Aracil and Winter 2005).

While economic development has improved various aspects of the lives of women in developing countries, there appears to be a dark side to the effects of economic development on women's well-being. While this dark side may occur in many countries, for the purposes of exploring this issue here, the Sub-Sahara African region exemplifies this dark side. This region had the highest female labor force participation rates, as a percentage of male rates, for the developing world in 2004 at 73 percent (ILO 2007). Countries in Sub-Sahara Africa continue to

have the highest rates of gender inequality in the world (UNDP 2006a). While South Africa may have higher economic development levels than many other countries in the Sub-Saharan region, the GDP is such that it remains a developing country according to the World Bank (2006). Despite these economic gains, research indicates primary education in South Africa does not lead to employment and wage returns (Fryer and Vencatachellum 2005). Exacerbating this trend is the lack of safety in schools for girls and women in a country where one in three women will be raped in her lifetime and one in four experience domestic abuse (Mabala 2006; Moffett 2006). Women throughout Sub-Saharan Africa disproportionately contract HIV/AIDS, relative to men due largely to patriarchal attitudes (WHO 2003; McIntosh and Thomas; 2004; Klomegah 2006; Mabala 2006; O'Sullivan et al. 2006; Ray and Madzimbamuto 2006). Women workers seeking to unionize in Lesotho have experienced extreme violence and discrimination (Gibbs 2005).

These contradictory effects lead to the broad research question underpinning this study, how does economic development structure the opportunities available to women, relative to men, in developing countries? To answer this question I examine the macrostructural mechanisms of economic development. I test the predictive power of "structural disarticulation," a concept that explains how global capital structures the economies of developing countries. To measure women's well-being I use the Gender Development Index (GDI), a composite measure created by the United Nations Development Programme to assess gender inequality. The GDI measures women's well-being relative to men's along three dimensions: knowledge,[10] life expectancy, and income ratio.[11]

---

[10] The UN makes a very clear distinction between the acquisition of knowledge versus educational attainment. In much of the developing world access to formal education is highly limited, and literacy is obtained through informal channels. The UN thus uses the term "knowledge' in reference to the GDI, which includes measures of informal knowledge acquisition (literacy rates) and formal knowledge acquisition (educational attainment).

[11] As noted, the GDI is a composite measure that specifically examines various dimensions of women's well-being, relative to men. As a consequence, this study does not examine the effects of disarticulation upon men in addition to women as it is unnecessary.

The concept of structural disarticulation does not address the issue of gender relations; specifically, how a disarticulated economy may disadvantage women's well-being relative to men. For insights into the gendered effects of global capital accumulation processes and structural disarticulation I draw upon socialist feminist theory. Socialist feminism informs my description of two competing scenarios in Latin America and Sub-Saharan Africa that describe the contradictory outcomes of economic development. Taken together, the concepts of structural disarticulation and socialist feminist theory provide the building blocks for a more theoretically sophisticated understanding of the gendered contradiction of global capital accumulation.

Results from panel OLS regression models show that structural disarticulation has a consistently significant negative effect on the GDI, net of change in economic development levels and other political and cultural factors such as democracy, women's political participation in parliament, and patriarchal cultures. However, change in economic development also consistently exerts a strong positive effect upon change in women's well-being, net of structural disarticulation and other political and cultural variables. Taken in sum, these results show that change in economic development levels benefits women's well-being, yet this very process may create a disarticulated economy, which is detrimental to women's well-being, relative to men's.

This article proceeds in the following manner. The first section reviews explanations as to why economic growth may increase gender inequality. I review the concept of structural disarticulation in addition to alternative theoretical explanations of how economic and political factors may influence women's well-being. The second section discusses data, measures and methods, and the third section presents the results. The fourth section discusses the findings, including how socialist feminism provides a more complete theoretical explanation of the results. To support my argument for the use of socialist feminism, this fourth section describes two broad

scenarios which refer to findings from Latin America and Sub-Saharan Africa. The concluding section discusses implications of this study for future research.

HOW ECONOMIC GROWTH CONTRIBUTES TO GENDER INEQUALITY

To understand how economic development contributes to gender equality requires an examination of how global economic processes structure local economies. The concept of structural disarticulation provides useful insights into these processes. This section briefly reviews structural disarticulation and identifies two major processes that may negatively impact women's well-being: an export oriented focus and the extraverted focus of government resources. These two processes in turn structure my review of competing economic, political, and cultural explanations found in competing theoretical explanations of socialist feminist theory, neoclassical economics, the developmental state perspective, and dependency/world systems theory. It is important to note that each of these theoretical perspectives place different emphases upon the relation of gender to global inequality, and some nearly exclude discussions of gender. However, each of these theoretical perspectives provides important insights as to possible mechanisms underlying the relationship between economic growth and gender equality.

Structural Disarticulation

The concept of structural disarticulation was developed in the 1960s and 1970s by Amin (1974; 1976; 1982), deJanvry (1981; 1982) and others (Teubal 2001). Structural disarticulation explains how the development of capitalism in developing countries is extraverted, or based on the external, global market. This extraversion inhibits the development of these developing countries.

Disarticulation is characterized by three types of distortion that are interrelated and which lead to the lack of development (Amin 1976). First, "extraversion" is a distortion of the country's

47

economy which results from a reliance on export-oriented activities. Both financial resources such as direct investments and the infrastructure that serves the exporting sectors, and human needs such as training and education, are oriented towards the needs of the global market. Second, a distortion of the tertiary sector (such as commerce, services, and administration) in which the proportion of the labor force engaged in tertiary activities is much greater than that engaged in secondary sector activities.[12] The hypertrophy of administrative activities within the tertiary sector also characterizes the underdevelopment of third world countries.[13] A third distortion is in the country's choice of branches of industry, towards lighter branches such as textile manufacturing. As a result, disarticulated economies produce consumer goods rather than also producing heavy machinery and other equipment goods. This is in sharp contrast to industrialized economies, which are articulated and are characterized by the production of both consumer goods and equipment goods.

Consequences of structural disarticulation include a downward pressure on wages and a lack of incentives by local governments to invest in increasing local consumption and improving mass welfare. Research has documented the negative impacts upon various facets of social well-being and inequality in income distribution, including the Human Development Indicator (HDI), child mortality rates, education enrollment rates, and crude death rates (Amin 1974; 1976; 1982;

---

[12] According to Amin (1976) this hypertrophy of the tertiary sector is distinctive from advanced economies because developing economies have never fully developed the secondary, or industrial sector as have industrialized economies. Rather, global capital has distorted the economies of developing nations so that capital is diverted away from expanding the industrial sector and instead to activities which complement the export sector. This is in sharp contrast to the phases of evolution experienced by industrialized countries, in which the first phase, development of the secondary sector occurs at the expense of the primary sector; and in the second phase the tertiary sector grows at the expense of the secondary sector. The relative share of economic activity in the tertiary sector in industrialized countries continues to increase at the expense of both the primary and the secondary sectors.

[13] Amin states that this hypertrophy of administrative activities is "one of the commonplaces of 'underdevelopment'" (1976 p. 241). Amin is unable to provide an explanation for this, stating that an analysis of this particular characteristic would involve answering numerous questions related to the connection of underdevelopment and hypertrophy of the administrative sector.

DeJanvry and Sandoulet 1983; Huang 1987; Stokes and Anderson 1990; Wickrama and Mulford 1996; Breedlove and Armer 1997).

Amin and others do not consider differences between women and men in disarticulation processes. Based on this omission, they presumed that the negative impacts of disarticulation impacted men and women similarly.[14] Yet empirical studies from a variety of literature which I review below suggest that structural disarticulation may disproportionately impact women. Specifically, I argue two main processes of structural disarticulation may directly impact women: 1) the focus of the economy towards export-oriented products, a sector which typically favors women workers over men; and 2) the focus of government resources on outside matters rather than educational and social spending, which may negatively affect women because these services mitigate the oppressive effects of patriarchy, and women use these services to improve their well-being.

Export-oriented focus. Neoliberal economic policies focus on export-oriented activities. Developing nations are encouraged to concentrate on exporting products such as raw materials and labor-intensive manufacturing in order to engage more competitively in world markets (Gereffi and Fonda 1992; Aslanbeigui and Summerfield 2001; Çağatay 2003; World Bank 2006; 2007; IMF 2007).

This focus upon export-oriented production directly impacts women through increased labor force participation, which has been highly documented (e.g Elson 1995; Howes and Singh 1995; Çağatay 2003; Pyle and Ward 2003; Wright 2006; ILO 2007). While the labor force participation of women is not the focus of this paper, women's labor force participation directly

---

[14] The exception is a study by Gallagher et al. (1996) which found that disarticulated economies are significant predictors of increased fertility rates, net of the effects of the economic development level. However, this is primarily an empirical article which provides little, if any, theoretical discussion of specific gendered consequences of structural disarticulation beyond increased fertility rates.

translates into higher incomes compared to incomes received through the informal sector and unemployed women. Women's income, relative to men's, is also an indicator within the GDI, the dependent variable examined in this study. This emphasis upon export-oriented growth coupled with a competitive global market may lead employers to prefer women workers due to the need for low-paid, flexible, unskilled, and docile labor – traits widely believed as distinctly feminine in patriarchal cultures (Howes and Singh 1995; Elson 1999; Standing 1999; Pyle and Ward 2003). Structural disarticulation may amplify this preference for female labor and increase the gender wage gap due to a large and growing labor pool from the combined effects of population growth and the displacement of agricultural workers off their lands.

Extraverted focus of government resources. The focus of government resources on outside matters rather than infrastructural needs such as education and social spending may disproportionately impact women. Efforts to improve literacy are important for eradicating women's poverty. In turn, poverty impacts the overall quality of life for women relative to men in areas such as employment opportunities, health, and life expectancy. Educational attainment is also important for increasing women's employment opportunities and incomes, which in turn improves women's quality of life (Arrow 1997; Iyigun and Owen 1999; Card 1999; Stromquist 2001). Research indicates that the state plays a central role in shaping general educational opportunities and the educational structure as a whole (Fuller 1991; Buchmann and Hannum 2001; Bornschier et al. 2005).

The detrimental effects upon women's education are likely to also negatively impact women's life expectancy rates, for research indicates women's educational and economic status both influence women's life expectancy rates (Williamson and Boehmer 1997; Wickrama and Lorenz 2002). An extraverted focus of government resources may also reduce women's life

expectancy. Research has found that the state is an important predictor in reducing maternal mortality, a leading cause of women's mortality in developing countries, by providing increased education and access to quality healthcare (Shen and Williamson 1999; Onah et al. 2005). The state also plays an important mediating role in providing access and education of various health services (Fuller 1991; Buchmann and Hannum 2001; Stromquist 2001; Ramirez-Valles 2003; Bornschier et al. 2005; Onah et al. 2005; Gray et al. 2006; Kay 2006).

Socialist Feminist Theory

Socialist feminist theory locates the source of gender inequality within two spheres: capitalism and patriarchy. Socialist feminists add to, and transform Marxist thought by incorporating the role of patriarchy. Marxism locates the source of oppression and exploitation in economic class structures. Socialist feminists argue women's oppression occurs from exploitation as a wage laborers, as well as from the patriarchal relations that define women as mothers, domestic laborers, and consumers. Although patriarchy existed before capitalism and may exist after capitalism, it is the present relationship between capitalism and patriarchy that is important to understanding women's exploitation and oppression.

I argue important linkages exist between structural disarticulation and socialist feminist theory. As discussed above, two characteristics of structural disarticulation may impact women's well-being: the economy's focus upon export-oriented production, and reduced state expenditures on educational and other social programs in lieu of supporting the export-oriented economy. Socialist feminist theory provides insights into both processes, by explaining how patriarchy and capitalism interact to the benefit or detriment of women's well-being.[15]

---

[15] Some of the work cited in this section are not necessarily informed by socialist feminism. Yet their findings, as argued here, are consistent with socialist feminism.

Export-oriented focus. The increased participation of women working in export-oriented activities is widely recognized and documented (e.g Çağatay and Özler 1995; Elson 1995; Howes and Singh 1995; Çağatay 2003; Pyle and Ward 2003; Dolan 2005; Wright 2006; ILO 2007). The neoliberal emphasis upon export-oriented growth may lead employers to prefer women due to the pressures of global competition and the need for low paid, flexible (temporary) labor that is unlikely to organize and that appears to excel at repetitive, unskilled tasks – characteristics ascribed to women by patriarchal cultures. (Çağatay and Özler 1995; Howes and Singh 1995).

Socialist feminism suggests the effect of the export-oriented focus of structurally disarticulated economies is likely to have mixed impacts on the well-being of women. The focus upon export-oriented production, coupled with the interlocking processes of capitalism and patriarchy are likely to provide women with more employment opportunities, yet keep women's wages low and maintain, even increase, the wage gap between men and women. When trade preferences are switched to other regions, women employed in export manufacturing facilities may be disproportionately unemployed relative to men. Even if the lost jobs impact men more than women, women may be adversely affected, either by reducing household consumption or being forced to take additional paid work in either the formal or informal sector – the latter being unregulated and often dangerous (Fontana and Wood 2000). Women working in sectors other than exports are likely to be negatively impacted. Due to the availability of cheaper imports, women working in sectors other than export processing may have difficulty finding and keeping work, largely due to patriarchal attitudes about women's secondary status in the home which discourage women from participating in the formal labor force (Fontana and Wood 2000; Pyle and Ward 2003).

Extraverted focus of government resources. Reduced state expenditures on educational and other social programs in lieu of support for the various needs associated with the export-oriented economy is likely to negatively impact women's well-being. This is consistent with the argument of structural disarticulation. Patriarchal cultures play a central role in the structure of educational and health services in a manner that disadvantages women in developing countries. The gap between male and female literacy and educational attainment rates has been well-documented, and continues to be a prominent concern among global policymakers who recognize that patriarchal cultures place lower value upon the literacy and education of females rather than males (Stromquist 2001; UNESCO 2002; 2003; 2006; Mabala 2006). Patriarchal cultures are also negatively related to women's health and life expectancy (e.g. Williamson and Boehmer 1997; Shen and Williamson 1999; Young 2001; Wickrama and Lorenz 2002; Wickrama and Lorenz 2002; Halder and Mosley 2004; McIntosh and Thomas 2004; Onah et al. 2005; Pillai and Gupta 2006). For example, low literacy rates coupled with patriarchy mean medical instructions for drugs are often given to husbands rather than women. As a result, women's ability to use medicine correctly is impeded (WHO 2003). Patriarchal norms concerning access to healthcare can delay or prevent women's healthcare (WHO 2003). Clinics may also be located some distance from the household. Assuming that women have the mobility to travel freely in the public sphere, their daily tasks such as childcare and food production may deter women's decisions to travel long distances (WHO 2003). In Africa, HIV rates are higher among women than men. This is due to both biological factors dealing with the reproductive tract and social norms such as men having more sexual partners than women. The two widely used means of preventing HIV/AIDS is abstinence and wearing a condom, both of which require male cooperation (WHO 2003; McIntosh and Thomas; 2004; Klomegah 2006; Mabala 2006).

Research finds the state plays an important mediating role in mitigating the effects of patriarchy, and providing increased access for women to education and health services (Fuller 1991; Buchmann and Hannum 2001; Stromquist 2001; Ramirez-Valles 2003; WHO 2003; Bornschier et al. 2005; Onah et al. 2005; Gray et al. 2006; Kay 2006; UNESCO 2006). Reducing the role of the state is therefore likely to negatively impact the literacy, educational, and life expectancy rates of women, who are already lagging behind men in these areas.

Neoclassical Economics

Neoclassical economics is the dominate theory informing global policymakers. It is closely associated with the policies of the World Bank and the International Monetary Fund (IMF), both whom condition their lending decisions on the willingness of developing nations to conform to neoclassical economic policies and associated institutional reforms (Gereffi and Fonda 1992; World Bank 2006; 2007; IMF 2007). The neoclassical economic framework, also referred to as the Washington Consensus, includes laissez-faire trade policies, a free labor market, and a limited, non-interventionist role of government in the economy. Neoclassical economics argues that development can only occur through a country's increased involvement with the global economic system. Developing nations are thus encouraged to concentrate on export-oriented activities, such as exporting raw materials and labor-intensive manufacturing (Gereffi and Fonda 1992; World Bank 2006; 2007; IMF 2007).

Export-oriented focus. Neoclassical economics argues that women's well-being is likely to improve with an increased focus on export-oriented activities and inclusion in the labor market. Neoclassical economics sees the relationship between gender equality and economic growth as being tightly coupled. Efforts to specifically include women in the economy are seen as "smart economics…that raises economic productivity, and helps advance other development

goals" (p.3, World Bank 2007). Conversely, societies that discriminate against women are less able to reduce poverty and to develop in general (World Bank 2001).The neoclassical emphasis upon export-oriented growth and the associated neoliberal trade policies may lead employers to prefer women due to the pressures of global competition (Çağatay and Özler 1995; Howes and Singh 1995). As a consequence, women's formal labor force participation may increase with increased trade. This, in turn, is likely to lead to increased wages compared to wages obtained from work in the informal sector or being unemployed. Increased wages may lead to increased empowerment within the household and increased access to a variety of opportunities including education and healthcare access.

Extraverted focus of government resources. In general, neoclassical economics does not directly address the issue of governmental distribution of resources. This is primarily because of its faith in the power of the free market to provide for the collective good. However, the World Bank, the IMF and the UN have all recognized that gender equality is associated with improved child survival rates, improved family health, and reduced fertility rates, all which are important in reducing poverty and contributing to economic development (World Bank 1994; 2001). As a result of this recognition neoclassical policy discourse has embraced the concept of "gender mainstreaming." The underlying assumption is that with targeted efforts at the various levels of governance – the supranational level (such as the UN) down to the local level – gender equality can be achieved. General actions that have been identified by neoliberal policymakers to improve a country's economic development trajectory include targeted policies that promote gender equality in health, education, and wage labor (World Bank 1994; UNDP 2006c).

Research examining the effectiveness of gender mainstreaming on women's well-being is mixed. Researchers criticize gender mainstreaming policies for obscuring the needs of women,

and empirical case study research suggests these policies are often ineffective at addressing the needs of women (Clisby 2005; Daly 2005; Desai 2005). However, cross-national research finds that participation in the United Nations' Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), an indicator of gender mainstreaming and overall recognition of the unique needs of women, has increased female levels of literacy, and economic and political participation in developing countries (Kenworthy and Malami 1999; Gray et al. 2006).

The Developmental State Perspective

Neoclassical economics has historically viewed state intervention as being the enemy of economic growth. However, during the 1990's neoclassical economics realized that state intervention, under certain circumstances, strongly promoted economic growth in developing countries (Evans and Rauch 1999). Developmental state research builds on these insights by examining how the direct and indirect role of the state influences economic development in developing countries. The state and its institutions are seen as an important actor in national economies by allocating and redistributing resources. The state can benefit human well-being by mitigating the worst effects of a market economy, such as guaranteeing a minimum standard of living and education (Gereffi and Fonda 1992; Evans and Rauch 1999; Tsai 2006). The developmental state perspective is not overly concerned about the effects of an export-oriented economy. It is, however, directly relevant to one component of the argument advanced here concerning structural disarticulation: the extraverted focus of government resources.

Extraverted focus of government resources. The developmental state perspective is generally consistent with argument that structural disarticulation is likely to negatively impact the well-being of women in part because of reduced state expenditures on education, health, and

other social programs. The developmental state perspective is generally consistent with this argument. Developmental state research often focuses upon state strength, typically measured by central government revenue. High state strength is an important corrective to the private market because the state extracts resources to improve the collective good and implements redistributive policies (Moon and Dixon 1985; London and Williams 1990; Wickrama and Mulford 1996; Shen and Williamson 1997; 1999; 2001; Frey and Al-Roumi 1999; Tsai 1999; 2006).

Democracy also is seen as improving human well-being because open regimes respond to popular demands and are accountable to their citizens. (Wickrama and Mulford 1996; Tsai 2006). Democracy also is an important predictor of women's political representation which is necessary for women to receive various governmental resources (Paxton 1997; Meer 2005; Paxton and Hughes 2007)[16]. In turn, while political representation is obviously an important step towards advancing women's rights and addressing issues, it is no guarantee (Gawaya and Mukasa 2005; Hassim 2005; Fish 2006; Hames 2006; Sekhon 2006; Nyamu-Musembi 2007; Paxton and Hughes 2007; Waylen 2007).

Dependency/World-Systems Theory

Dependency/world-systems theory asserts that the causes of inequality are found in global economic relationships between wealthy and poor countries, and the way these relationships influence economic structures within developing nations. Inequality is seen as an enduring characteristic of the modern world because of the economic structures of global capital, and specifically, through three major types of economic dependence: global trade, foreign debt, and foreign investment dependence. The concept of structural disarticulation is located within

---

[16] Research directly examining the relation between democracy and women's participation is not necessarily from a developmental state perspective. However, for the purposes of this article, this literature provides important insights into the developmental state perspective.

this theoretical framework. Dependency operates through structural disarticulation, and to the extent dependency produces disarticulation, dependency will have negative effects on the well-being of the population (Breedlove and Armer 1997; Gallagher et al. 1996; Teubal 2001; De Janvry and Sadoulet 1982; Stokes and Anderson 1990).

Export-oriented focus. Because of the relation between structural disarticulation and dependency/world-systems theory there is substantial overlap on the impacts export-oriented processes on human well-being. Research examining the impact of trade dependence has consistently shown that trade dependency increases economic inequality and has negative impacts on social well-being (Delacroix and Ragin 1981; Ragin and Bradshaw 1992). Dependency/world-systems research directly examining the gendered impacts of trade is extremely scarce. The scant research that exists suggests international trade and integration in the global market improves the social well-being and labor force participation of women (Gray et al. 2006; Meyer 2006).

Research examining the influence of foreign direct investment on underdevelopment asserts that foreign investment locks nations into a pattern of world economic interaction into historically determined patterns of commodity concentration which inhibits development. (Chase-Dunn 1975; Jaffee and Stokes 1986; London and Williams 1990; Glasberg and Ward 1993). Research examining the impact of foreign investment on women's well-being is extremely scarce and contradictory. Overall foreign investment has been shown to depress both women's share of the labor force, and women's labor force participation rates (Ward 1984). More recent research indicates that foreign investment is positively related to the integration of women into the workforce (Meyer 2003; 2006). Gray et al. (2006) found that foreign direct investment improves the overall well-being of women. Research by Vanfossen and Rothstein

(1997) suggests that foreign direct investment promotes the commercialization of agriculture, which inhibits the employment of women in the production and export of agricultural products and thus favors men's labor over women's.

Extraverted focus of government resources. Dependency/world-systems theory and its focus on foreign debt provides a competing explanation for negative impacts on human well-being in contrast to structural disarticulation's explanation based upon the extraverted focus of government resources. Foreign debt and the associated austerity measures which emphasize policies that save money and facilitate exports have had negative economic and social effects on developing countries. Debt dependency has been found to have a negative effect on economic growth overall due to three major impacts: 1) Devaluation of currency leads to inflation and reduced purchasing power, which harms economic development and quality of life; 2) Reduced government spending eliminates food subsidies and other state-sponsored programs; and 3) Wage freezes and reduced government employment results in inflation exceeding individual earnings and an increase in unemployment because the state is a major employer (Glasberg and Ward 1993; Bradshaw and Huang 1991; Mogford 2004).

Again, research directly examining the gendered impacts of foreign debt from the theoretical perspective of dependency/world-systems theory is extremely scarce. However, insights can be obtained from research located outside this theoretical perspective in the feminist literature. The effects of foreign debt and the associated austerity measures fall heavily on women, who try to maintain their families' standards of living despite decreased government expenditures on housing, food subsidies, health, education, and other areas. As a result of this increased burden, women seek additional income-earning possibilities, often in the informal

sector which is unregulated and often dangerous (Pyle and Ward 2003; Massey et al.2006; Plaza and Stromquist 2006).

HYPOTHESIS

The concept of structural disarticulation and the associated literature suggests the very factors that drive economic development within a developing country may cause the domestic economy to be distorted in such a manner that negatively impact women through the dual processes of global capitalist production and patriarchy. This leads me to the following general hypothesis:

> H_1: *Structural disarticulation will be negatively related to women's well-being in developing countries, net of other economic, political, and cultural processes.*

DATA, MEASURES, AND METHODS

This study uses panel OLS regression to test the effects of structural disarticulation and other macrostructural processes upon women's well-being in developing countries. The sample consists of all low and middle-income countries as defined by the World Bank in 2004, for which data was available. See Table B1 in Appendix B for the list of the 77 countries used in the analysis.[17] Countries with populations below 1 million are excluded because of the extreme value they typically register on variables of interest, a widely used practice in cross-national research (e.g. Gallagher et al. 1996; Frey and Al-Roumi; 1999; Kenworthy and Malami 1999; Shen and Williamson 2001).

---

[17] All high-income industrialized countries, with their already high levels of development and diversified economies are excluded from the analysis because the causal mechanisms of global inequality, as discussed above, are limited in their application to developing countries.

Measures

Detailed variable descriptions and data sources are listed in Table B2 of Appendix B. The dependent variable is the *Gender Development Index (GDI),* created by the United Nations Development Programme (UNDP). The GDI consists of four components of women's well-being, relative to men's: life expectancy, literacy rates, education enrollment rates, and income ratio. The GDI is measured in 2004. The lagged dependent variable is measured in 1994 in order to account for a sufficient period of time needed for the effects of structural disarticulation to occur.[18] The general principle of the GDI is that it begins with the overall achievement of a country's human development, and then subtracts the female gap on the associated measures (Dijkstra 2002). A composite index which measures gender equality cross-nationally presents certain challenges, such as the choice of variables and the construction of the overall index (Bardhan and Klasen 2000; Tisdell et al. 2001; Dijkstra 2002). Despite these flaws, the GDI has important strengths. The GDI combines several dimensions of equality; it allows researchers to assess the relationship between gender equality and economic growth; it allows comparisons for gender equality across countries; and it can be used to assess progress in achieving gender equality over time (UNDP 1990; Dijkstra 2002).

Most independent variables are measured in 1994, a year adjacent to 1994, or are averaged over a time period including 1994, in order to address data limitations. A few independent variables are measured in 2004 because the associated impacts are more immediate and lagging them would be inappropriate. The independent variables are as follows.

I construct *structural disarticulation* by taking the sum of the absolute difference between a sector's share of labor force and that sector's contribution to GDP across the three major

---

[18] A ten-year lag is widely used within cross-national research because many macroeconomic processes, such as structural disarticulation, takes many years to manifest itself (Bornschier and Chase-Dunn 1985; London and Williams 1988).

sectors of the economy: agriculture, industry, and services (Stokes and Anderson 1990, Huang 1995; Gallagher et al. 1996; Frey and Field 2000). *Level of economic development* is measured by GDP (gross domestic product). I logarithmically transform this variable using the natural logarithm to correct for a highly skewed distribution. *Trade integration,* measured as the percent of trade (total exports and imports) to a country's GDP, indicates a country's integration within the global economy (Frey and Field 2000). Also consistent with neoclassical economics/modernization theory, and commonly used in feminist research, is a dummy variable coded "1" if the country signed *CEDAW* (UN Convention on the Elimination of all forms of Discrimination Against Women) and coded "0" if the country did not sign CEDAW by Dec 31., 2004 (Kenworthy and Malami 1999; Grey et al. 2006)

Development state theory and research suggest that *state strength*, measured as central government revenue as a percentage of GDP, influences socio-economic well-being (Delacroix and Ragin 1981; Huang 1987). The variable representing the degree of *democracy* is an ordinal scale constructed by the Freedom House (2004). I measure the degree of democracy on a scale of 1 (low democratic freedom) and 7 (high democratic freedom). Also consistent with the developmental state perspective is a measure for the effects of the *percent of total seats in parliament held by women* in a lower or single house or senate in 2004 (Paxton and Kunovich 2003).

Patriarchy is a difficult concept to measure cross-nationally. Due to the lack of any concrete, cross-national measures of patriarchy, researchers typically rely upon admittedly crude proxy measures such as the main religion practiced in a country (Paxton 1997; Kenworthy and Malami 1999; Paxton and Kunovich 2003). While all religions are patriarchal to some degree, Catholicism and Islam are both religions which emphasize traditional roles for women and that

have been empirically shown to promote gender inequality (Çağatay and Özler 1995; Paxton 1997; Kenworthy and Malami 1999; Paxton and Kunovich 2003; Haghighat 2005; Moghadam 2005; Saktanber 2006). Researchers using religion typically use dummy variables, which likely stems from the lack of variation in the distribution among certain religions in countries within the developing world. For example, Muslims, Buddhists, and Hindus are all generally located in a few countries, with a country often being 95 to 100 percent Muslim, Buddhist, or Hindu. The proportion of Muslims, Buddhists, and Hindus in remaining countries throughout the developing world are extremely small, often at 10 percent or less. The distribution of these religions is thus highly bimodal. In contrast, a generally more normal distribution exists for other religions in the developing world, such as Protestantism. These skewed distributions are problematic for cross-national, quantitative analyses of the developing world. Using dummy variables is a solution to this problem.

The other proxy measure of patriarchy used by researchers is region. However, given the structure of this study, region is highly correlated with GDP and is thus inappropriate for this analysis. While other national level measures of patriarchy exists, such as condom use or abortion rates, at the present time these measures cannot be used in cross-national analyses due to high levels of missing data, particularly in the Sub-Saharan countries.

Given these problems with measuring patriarchy, this study uses religion coded as dummy variables. Countries are coded "1" if more than 50 percent of the population is either Catholic or Muslim. Countries are coded "0" if 50 percent or more of the population is another religion, including protestant, Jewish, Hindu, Buddhist, and indigenous religions.

Consistent with dependency/world-systems theory and research, this study examines three common dependency measures. All three variables are logarithmically transformed using

the natural log to correct for highly skewed distributions. *Export commodity concentration* indicates the degree to which a nation's exports are concentrated in a few goods (Huang 1995; Breedlove and Armer 1996; Frey and Al-Roumi 1999). It is calculated as the total of the monetary values of the largest exports as a percentage of all exports. Dependence on multinational corporate investment is measured by the *foreign direct investment* as a percentage of a country's gross domestic product (Frey and Field 2000; Meyer 2003; 2006; Roberts 2005). *Debt dependence* is measured as the percentage of total debt service to the GDP (Bradshaw and Huang 1991; Bradshaw and Wahl 1991; Frey and Field 2000).

Methods

A panel model regresses a dependent variable at a later point in time (t_2) on its value at an earlier point in time (t_1) and on the independent variables at the earlier point in time (t_1):

$$Y_2 = a + B_1Y_1 + B_2X_1 + B_3X_2 + e$$

where Y_2 is the dependent variable at the later point in time; a is the intercept; Y_1 is the lagged dependent variable (the dependent variable at the earlier point in time); X_1 and X_2 are independent variables at the earlier point in time; and e equals the error term.

Panel OLS regression is a widely used statistical technique in cross-national research for several reasons. First, the assumption is that any effect of economic structure on gender equality will not be instantaneous, but will require some time to become apparent. Second, it is useful for making causal inferences, as it examines the effect of the independent variable over time. Third, the inclusion of an earlier measure of the dependent variable helps reduce reciprocal effects and reduces the threat of spuriousness (Ragin and Bradshaw 1992; Finkel 1995). Fourth, a panel model with a lagged dependent variable is a common research design in cross-national research in order to assess the effects of macroeconomic processes that often take some time to occur (e.g.

Chase-Dunn 1975; Jaffee and Stokes 1985; London and Williams 1988; Bradshaw and Huang 1991; Ragin and Bradshaw 1992; Breedlove and Armer 1996; 1997; Gallagher et al. 1996; Roberts 2005).

Following others (e.g. Gallagher et al. 1996; Frey and Al-Roumi 1999; Kenworthy and Malami 1999; Shen and Williamson 2001; Moore et al. 2006), the sample size varies from one model to another depending upon data availability in order to maximize the use of available data. Countries with missing cases for any of the variables were dropped from the sample for the regression analysis. Due to data availability constraints, most models range between 70-75 countries. Descriptive statistics and Pearson correlation coefficients are displayed in Table B3 in Appendix B. Regression diagnostics were used to detect outliers and influential cases. To detect problems of multicollinearity under multivariate conditions Variance Inflation Factors (VIF) were used. All VIFs were acceptable, falling below 2.5.

Least squares estimates for the models are displayed in Table 1. Due to the inclusion of the lagged dependent variable, these models in effect test the direct effects of the various predictors on change for the GDI. Among the control variables, the lagged dependent variables are always significant. The plot of residuals against estimates showed little presence of heteroscedasticity in the data.

RESULTS
Table 1 displays the OLS regression results of various predictors on the GDI.

TABLE 1: Panel OLS Regression Estimates of Predictors on the Gender Development Indicator[†] (GDI) 2004

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
GDI 1994	.757***	.703***	.702***	.685***	.697***	.678***	.656***	.665***
	[.864]	[.803]	[.803]	[.783]	[.806]	[.784]	[.759]	[.769]
	(.037)	(.044)	(.044)	(.051)	(.050)	(.059)	(.058)	(.060)
GDP 1994 (log)	.017***	.017***	.016***	.018***	.015***	.015***	.016***	.017***
	[.864]	[.159]	[.149]	[.167]	[.140]	[.143]	[.153]	[.159]
	(.037)	(.004)	(.004)	(.005)	(.005)	(.006)	(.005)	(.006)
Disarticulation 1994		-.001**	-.001**	-.001**	-.001**	-.001**	-.001**	-.000**
		[-.106]	[-.105]	[-108]	[-.092]	[-.100]	[-.096]	[-.079]
		(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
CEDAW 2004			.025*	.028*	.026*	.020	.015	.016
			[.068]	[.076]	[.071]	[.055]	[.042]	[.043]
			(.013)	(.014)	(.015)	(.015)	(.015)	(.014)
Trade Integration 1994				.000	.000	.000	.000*	.000
				[.034]	[.044]	[.056]	[.084]	[.031]
				(.000)	(.001)	(.000)	(.000)	(.000)
Women in Parliament 2004					.001	.001	.001	.001
					[.044]	[.052]	[.041]	[.050]
					(.001)	(.001)	(.001)	(.001)
Democracy 2004						-.004	-.003	-.003
						[-.033]	[-.027]	[-.028]
						(.005)	(.005)	(.005)
State Strength						-.022**	-.037**	-.001
						-[-.081]	[-.085]	-.045
						(.001)	(.001)	(.001)

Catholic 2004							.037** [.093] (.017)	.034** [.085] (.016)
Muslim 2004							.024 [.048] (.019)	.020 [.040] (.018)
Foreign Direct Investment 1994 (log)								.001 [.005] (.007)
Export Dependency 1994 (log)								.006 [.026] (.008)
Debt Dependency1994								-.019** [-.085] (.009)
R^2	.899	.908	.912	.955	.920	.962	.932	.945
Adjusted R^2	.896	.904	.907	.913	.913	.916	.921	.931
N	77	75	74	73	70	70	70	68

[†] The GDI is a composite measure that assesses the equality of women on several dimensions, relative to men.

 Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, and the number in parentheses is the standard error.

*p≤ .10   **p≤ .05   ***p≤ .01   (two-tailed tests)

In Model 1, the level of economic development in 1994 has a significant positive effect on change in the GDI, an effect which is maintained throughout all eight models. Model 2 shows that structural disarticulation in 1994 has a significant negative effect on change in the GDI, net of economic development in 1994. Due to the logarithmic transformation of the GDP variable and the GDI being a composite measure, interpretation of these numbers are difficult. However, Model 2 shows that for every one standard score that the GDP increases, the GDI is predicted to change .159 standard scores while disarticulation is predicted to change .105 in the negative direction. More generally, results in Model 2 show increases in GDP improves women's well-being compared to men, while disarticulation exerts a slightly less, yet significant, detrimental effect.

The remaining models in Table 1 test whether the effects of structural disarticulation remain significant after adding other independent variables. Results in Models 2 through 8 show that structural disarticulation maintains its significance (at $p \leq .05$) with the addition of the other explanatory variables. Further, the slightly larger standardized regression coefficients of GDP compared to disarticulation are maintained throughout all the models. This suggests that while an increase in GDP improves the well-being of women, relative to men, the negative effects of disarticulation upon women's well-being compared to men are slightly less.

Models 3 and 4 include the effects of CEDAW and trade integration, two variables that according to neoclassical economic theory are predicted to have a positive impact upon women's well-being. Models 3 through 5 show CEDAW is marginally significant. The significance of CEDAW disappears in Models 6 through 8 with the inclusion of other variables suggested by the developmental state perspective, feminist theory, and dependency/world-systems theory. Trade integration in 1994 is also only marginally significant in Model 4.

Models 5 through 7 test the effects of political and cultural variables, as suggested by the developmental state perspective and feminist theory. The addition of these variables reduces the effects of CEDAW on the GDI, which loses its marginal significance in Models 6 and 7. Both the percent of women in parliament, and the level of democracy are not significant predictors of GDI. Models 6 and 7 show that state strength in 1994 exerts a significant and negative effect on the GDI in 2004. Model 7 includes the two indicators of patriarchy: the Catholic and Muslim dummy variables. Predominately Catholic countries are a strongly significant predictor of women's well-being compared to countries dominated by other religions (the omitted category). More generally, women's well-being is significantly advanced in predominately Catholic countries compared to countries dominated by other religions and net of the effects of other indicators tested here. The effects of the Catholic dummy variable persist in Model 8, the full model.

It is surprising the effects of patriarchy, as indicated by the Catholic dummy variable, are positively related to the GDI. Further, one may note that the Muslim dummy variable is also positively related to the GDI, although it is not statistically significant. These results suggest patriarchy is a positive phenomenon for women, which feminist researchers would heartily dispute. It is possible these dummy variables are capturing regional effects rather than patriarchal effects; however, as noted in the methods section of this chapter, the structure of the analyses is such that religion is the most appropriate variable given data and statistical constraints to capture patriarchy. The dummy variable outcomes do indicate the difficulties in measuring patriarchy at the cross-national level using such a broad measure of patriarchy, as religion. There are several ways to address this measurement dilemma. It may be that, given the pervasiveness of patriarchy in all aspects of women's daily lives, no patriarchy measure is needed; rather, the strength of

socialist feminist theory is in its ability to acknowledge the existence of patriarchy in its explanations. Future research may also consider using more refined measures of patriarchy based upon Walby's theorization of patriarchy along six dimensions, one of which is the mode of production (1996). Lastly, it may also be that patriarchy at the structural level may be of a different nature than patriarchy at the micro-level. As a consequence, patriarchy at the structural level may have beneficial consequences for women such as promoting their entrance into the labor force. The seemingly beneficial consequences of patriarchy are discussed in more detail in the following section of this chapter where the findings are discussed in relation to the argument presented in this paper.

Model 8 tests the effects of variables from dependency/world-systems theory. This is the most complete model, with an adjusted R^2 of .931. Disarticulation continues to exert a strong, negative effect on the GDI. Debt dependency in 1994 also has a significant and negative effect on change in the GDI. Economic development continues to exerts a strong positive effect on change in the GDI, as does predominately Catholic countries, as compared to countries dominated by other religions (the omitted category).

In sum, the results presented here show contradictory processes influence the well-being of women in developing countries. Economic development is consistently and highly significant throughout all the models, with a positive effect on change in the GDI. Structural disarticulation is also consistently significant throughout all the models, albeit in a negative direction.

DISCUSSION

The results show that economic development has a consistent and positive relation to the well-being of women, but these positive effects are tempered by the negative effects of a disarticulated economy. Thus, the macrostructural processes structuring economic development

70

and that benefit women's well-being in developing countries may, in fact, disarticulate the domestic economy to the detriment of women's well-being. Furthermore, the effects of economic development and structural disarticulation are mediated by patriarchal attitudes – measured here as whether or not the country is predominately Catholic (as compared to developing countries that are predominately another religion). These results confirm the outcomes predicted by the concept of structural disarticulation and previous research as reviewed above: economic development benefits women's well-being, relative to men's in developing countries, but a disarticulated economy is detrimental to women's well-being.

Structural disarticulation explains how the mechanisms promoting economic development may negatively impact women's well-being. Socialist feminist theory provides insights into the gendered contradiction of economic development. As discussed above, socialist feminism views the forces of patriarchy and capitalism as coinciding and contradicting each other in exploiting and oppressing women. This tension is evident in these results. To aid in the explanation of this tension two competing scenarios are presented below. One scenario, Latin America, explains how capitalism and patriarchy may interact to promote the "bright side" of economic growth which benefits women's well-being. The contrasting scenario, Sub-Sahara Africa, explains how capitalism and patriarchy interact to promote the "dark side" of economic development – a disarticulated economy that is detrimental to women's well-being. Latin America and Sub-Sahara Africa are selected because descriptive statistics show that economic development and structural disarticulation have been experienced differently in these two regions. Figures 1 and 2 show Latin America has higher rates of economic development and has a lower disarticulation score than Sub-Sahara Africa which displays the opposite effects.

FIGURE 1: Mean Structural Disarticulation Scores in Sub-Saharan Africa and Latin America*
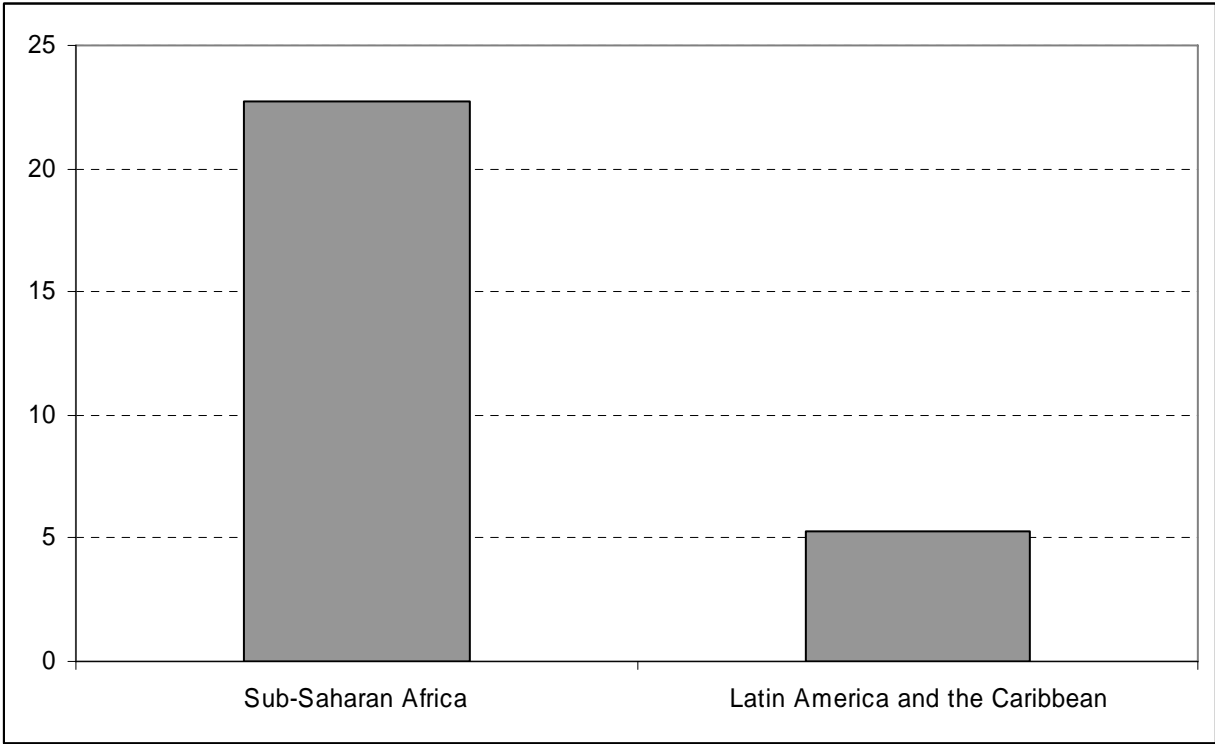
*Regions are delineated by the classification scheme of the World Bank

FIGURE 2: Mean 1994 GDP in Sub-Saharan Africa and Latin America*
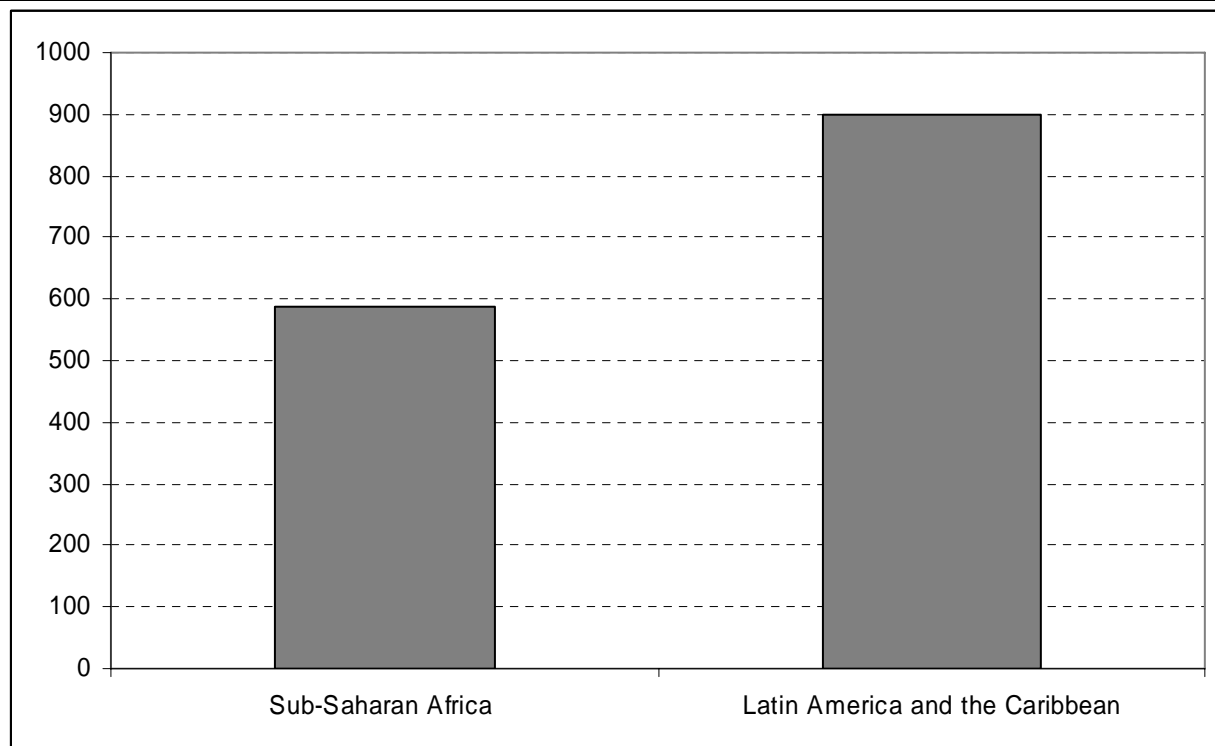
* Regions are delineated by the classification scheme of the World Bank

These two competing scenarios admittedly over-extend the findings presented here, but I argue that socialist feminist theory has potential in providing a gendered explanation of macro-level development processes occurring in developing countries. Future research – both macro-level and micro-level – should explore, discard and refine the scenarios presented here in order to come to a more nuanced understanding as to how these cross-cutting forces of economic globalization and patriarchy are impacting the well-being of women in developing countries.

The Bright Side of Economic Development: Women Gain in Latin America

The general framework of this scenario is as follows. The privileges of patriarchy erode for men even while patriarchy is used by global capital accumulation processes to both exploit and benefit women. As previously discussed, the focus upon export-oriented production coupled with the interlocking processes of capitalism and patriarchy, leads employers to prefer women

due to the pressures of global competition. Paradoxically, the patriarchal system that prefers women workers may result in decreasing employment opportunities for men. An increase in employment opportunities for women is likely to lead to an increase in wages compared to the wages earned while working in the informal economy or being unemployed. In turn, this may lead to increased empowerment within the household which may improve women's access to various opportunities including literacy programs, formal education, nutrition, and healthcare.

Research on Latin America supports this general framework. Female labor force participation and employment in Latin America have increased dramatically since the 1980's compared to their male counterparts (Hite et al. 2005; ILO 2007). Women in Mexico, Guatemala, and Ecuador have experienced increased economic and political empowerment in both the public and private spheres (Prebeisch et al. 2002; Carter 2005; Rudel et al. 2006). Unionized women throughout Latin America have advanced their labor rights (Frank 2005; Mendez 2005; Brickner 2006). In Nicaragua over the past several decades feminist social movements have been sufficiently active to contribute to the emergence of an anti-feminist counter-movement within the country (Kampwirth 2006). Since the 1970's women in Brazil have made substantial gains in explicitly addressing the rights and issues of women through constitutional changes (Pitanguy 2002; Lovell 2006). The education and health of women in Latin America, relative to men, appears to be improving. The gender gap in Ecuador in primary educational attainment no longer exists between females and males in the non-indigenous population, but persists within the indigenous population – indicating the intersection between ethnicity and gender (García-Aracil and Winter 2005). Similarly, the gender gap in educational attainment and health is steadily diminishing, although important ethnic divisions persist (Stromquist 2001; Fuentes and Montes 2004).

The Dark Side of Economic Development: Women in Sub-Sahara Africa Lose in a Disarticulated Economy

In this general framework, capitalism and patriarchy operate in concert to the detriment of women in the dimensions of labor, health, and education. Structural disarticulation amplifies this process. A disarticulated economy exerts a downward pressure on wages compounded by the effects of a large and growing labor pool due to continued population growth and displacement of agricultural workers off their lands (Amin 1976). Due to increased competition over jobs coupled with strong patriarchal attitudes that view men as "breadwinners" and women as secondary income providers, men are more likely to acquire the available wage labor jobs and women must seek employment elsewhere in the informal economy or stay at home working in the household. Because patriarchal attitudes in this regional context discourage women from seeking wage employment, they are also less likely to gain empowerment within the household and access opportunities to develop their human capital, such as obtaining literacy and an education. This may be compounded by scarce household resources that are allocated to furthering the educational opportunities of male but not female household members. The lack of government resources in addressing the health and educational needs of women exacerbates this situation, as does patriarchal attitudes which place women at higher risk of sexual disease and violence, and reduces their access to healthcare and medicine.

Research on Sub-Sahara Africa supports this general framework. Patriarchy continues to be a dominant force within this region. Women continue to face extreme oppression in this region, particularly through sexual violence and HIV/AIDS, which is indicative of patriarchal attitudes (Jewkes et al. 2005; Moffett 2006). Rape and sexual violence are epidemic, with South Africa having the highest rates of gender-based violence for a country not at war, with at least one in three women raped in her lifetime, and one in four beaten by her domestic partner in her

lifetime (Moffett 2006). Child rape constitutes a large dimension of this epidemic, where the high status of men with respect to girl children reduces girls' ability to refuse sexual advances, and generates expectations in men that they should control women and children (Jewkes et al. 2005).

The HIV/AIDS epidemic disproportionately affects women. The stark gender differences of HIV/AIDS are found in Zimbabwe which has one of the highest rates of HIV/AIDS. Ray and Madzimbamuto (2006) cite that in small towns, 27% of men and 48% of women are affected. Women's disempowerment under patriarchal attitudes is an underlying cause, which increases their risk of contracting HIV compared to men, and reduces their ability to take preventative measures, such as sexual abstinence or using a condom (WHO 2003; McIntosh and Thomas; 2004; Klomegah 2006; Mabala 2006; O'Sullivan et al. 2006; Ray and Madzimbamuto 2006). In Zimbabwe, doctors did not to promote condom use or disclose information about HIV risk factors due to patriarchal attitudes (Ray and Madzimbamuto 2006). Business leaders were also unconcerned about the loss of labor due to HIV because of the attitude that there were plenty more workers to replace those who became sick. This changed once management (predominately men) started becoming sick and it proved to be more expensive to replace managers (Ray and Madzimbamuto 2006).

Contrary to the general consensus in the literature that primary education leads to employment and wage returns, this is not the case in South Africa, particularly for black females (Fryer and Vencatachellum 2005). Efforts to provide education to women intersect with the high sexual violence epidemic. Schools are often not safe places for girls and women, as they are havens of sex abuse and sexual exploitation. It is likely that this is a deterrent to obtaining an education, due the girls' and/or their parents' concern over sexual harassment (Mabala 2006).

Research directly examining labor force issues in the Sub-Saharan African region is scarce. The research that does exist indicates patriarchy continues to strongly discourage women from entering the labor force. In the North West province of South Africa, survey researchers conclude that unless job creation initiatives have a strong female bias, gender inequalities in labor force participation will persist (Naudé 2001; Serumaga-Zake and Naudé 2003). Female garment laborers in Lesotho seeking to unionize have experienced severe military and patriarchal oppression (Gibbs 2005).

The Gendered Contradictions of Economic Development: Other Considerations

As previously discussed, a beneficial result of the interlocking mechanisms of capitalism and patriarchy is that overall, women are obtaining more employment opportunities. Yet there are numerous issues that are not automatically resolved by increased employment opportunities. These processes are likely exacerbated in a disarticulated economy. For example, improved access to formal wage labor opportunities is no guarantee of equal pay relative to men, safe working conditions including sexual harassment, and employment benefits such as improved access to healthcare and pension plans (Bertranou 2001; Bailey and Ricketts 2003; Tallontire et al. 2005; Gideon 2006).

The brief review of women's well-being in Latin America and Sub-Saharan Africa also suggests important racial and ethnic differences. Black women and women of various indigenous cultures appear to be at greater disadvantage in both Latin America (the "women gain" scenario) and the Sub-Saharan Africa example ("women lose" scenario) (e.g. Fryer and Venatachellum 2005; García-Aracil and Winter 2005; Lovell 2006). Socialist feminist theory is sensitive to the intersections of race and gender. Future research should examine how the intersection of gender and race impact the well-being of women in a disarticulated economy.

CONCLUSION

I argue the macro-level processes of global capital accumulation which drive economic development have a gendered contradiction. Structural disarticulation is a key concept in aiding our understanding of this contradiction, but it is incomplete in its conceptualization of how the global economy structures women's opportunities. I argue socialist feminist theory provides critical insights into the gendered processes of economic development and its darker side, structural disarticulation.

Results of this study and the supporting arguments have several implications for future theory and research. Findings show structural disarticulation has a negative effect on women's well-being. As such, structural disarticulation warrants further theoretical elaboration. I argue that a theoretical elaboration must start with the insights of socialist feminist theory, which addresses the gendered component of capital accumulation through the interlocking processes of capitalism and patriarchy. In some contexts capitalism and patriarchy may work in concert to oppress and exploit women as in the case of Sub-Saharan Africa. In other contexts capitalism and patriarchy may work in opposition to each other to improve women's well-being, as in the case of Latin America. These two scenarios open up numerous avenues for both quantitative and qualitative researchers to explore.

In sum, the role of women in the macro-level processes shaping global inequality must be better addressed both empirically and theoretically. Structural disarticulation, supplemented by socialist feminist theory, provides a framework for understanding how the gendered contradictions of global capital accumulation both empowers and disempowers women, and how women play a crucial, paradoxical role the processes promoting global inequality.

CHAPTER FOUR

EXPLORING PATRIARCHY'S RESPONSE TO GLOBAL CAPITAL THROUGH

SEX DIFFERENCES IN LABOR FORCE PARTICIPATION: A

QUANTITATIVE CROSS-NATIONAL ANALYSES

OF DEVELOPING COUNTRIES

A substantial body of research documents the growing feminization of the global

workforce (e.g Elson 1995; Howes and Singh 1995; Çağatay 2003; Pyle and Ward 2003; Wright

2006). Recent data show women's formal labor force participation and employment continue to

trend upward both on a worldwide level and in most developing regions of the world, while

men's labor force participation and employment rates continue to decline (ILO 2007). Two

forces influence women's and men's formal labor force participation: global capital and

patriarchy. The relation between global capital and patriarchy is characterized by tension and

competition, and this relation influences gender relations through the sex composition of the

formal labor force.

Global capital's preference for women workers builds upon patriarchal ideas of women.

Women workers are preferred for export-oriented jobs because they are seen as

"naturally"inclined to excel at low-skilled, low-paying jobs; as having more physical dexterity

than men; and being more docile and therefore less likely to unionize. Further, temporary,

flexible labor is justified given women's reproductive responsibilities and due to patriarchal

ideology which sees the male as being the breadwinner. These "natural" traits of women and the

associated justifications make business more competitive in the global marketplace.

Global capital's exploitation of patriarchal attitudes and subsequent preference for

women workers likely disempowers men who may have difficulty finding work and may drop

out of the labor force as a result. Recent data shows men in most developing countries continue to drop out of the labor force and have increasing unemployment rates, relative to women (ILO 2007). Patriarchal power may be further eroded in the household, for women's participation in the formal wage labor market and the concomitant increased contributions to household finances likely leads to women's increased empowerment in household decision making processes.

Identifying the nature of the relation between global capital and patriarchy, in terms of structuring the sex composition of the labor force, provides insights into the changing nature of gender relations under economic globalization. Sub-Saharan Africa exemplifies the reaction of patriarchy to its erosion of privilege. Sub-Sahara Africa has the highest rates of female labor force participation in the developing world and second globally only to the United States (ILO 2007). However, the patriarchal oppression of women continues to be strong and includes epidemic rates of sexual violence against women, strong patriarchal resistance to women's unionization efforts, and women's disempowerment in rural households as global capital restructures agricultural land (Dolan 2005; Gibbs 2005; Jewkes et al. 2005; Mabala 2006; Moffett 2006).

This study teases apart the relation between global capital accumulation processes and patriarchal structures and their impact upon the sex composition of the labor force in order to gain insights into how economic globalization is changing gender relations. This is an exploratory study which addresses the broad research question: How do patriarchy and global capital structure the sex composition of the labor force in developing countries? To answer this question I use socialist feminist theory to examine how patriarchal beliefs at the regional level interact with the macroeconomic mechanisms driving economic globalization – trade and finance

– to structure women's and men's labor force participation in developing countries. I use case study research to theoretically elaborate upon the empirical findings.

Consistent with socialist feminist theory, I assume gender relations are a primary mechanism of global inequality. This assumption has methodological implications. I argue for using regions to structure macro-comparative analyses. Using regions as a conceptual focus provides a more nuanced understanding of the gendered processes driving global capital accumulation by accounting for patriarchal beliefs, and more effectively captures the diverse, non-hierarchical ways nations are incorporated into the global system. This conceptualization differs from most macro-comparative research, which focuses upon the nation-state. Further, most macro-comparative analyses use the level of economic development or position in the world system to structure analyses, which assumes a hierarchy among nation states and their placement in the world system and cannot account for patriarchy. Certainly a tremendous amount of variation exists within regions; the regional conceptualization presented here cannot account for this variation. However, this study is aimed at macro-comparative studies that use a large number of cases ("large N" studies) to explain global inequality.

Results of OLS regression analyses show differences in female and male labor force participation rates cannot be attributed to solely macroeconomic structures or to regional factors. Given the paucity of previous research, I reason this difference is due to patriarchal factors. The results show regional variation across levels of global trade and finance account for a substantial decline in female labor force participation rates that is generally not experienced by men, given the type of trade and finance activity. These interactive effects between region and global trade and finance are particularly strong for Sub-Sahara Africa. I use case study research and draw

upon socialist feminist theory to theoretically elaborate upon these findings and to support my argument that a gendered contradiction exists within global capital accumulation processes.

This study proceeds in the following manner. The first section briefly reviews socialist feminist theory and the methodological implications of using gender relations as a primary mechanism driving global inequality. The second section discusses how global trade and finance trends are impacting women's and men's employment opportunities both globally and at regional and local levels. This section includes a discussion of patriarchy and its relation to global trade and finance. The third section discusses data, measures, and methods, and the fourth section presents the results of the analyses. I discuss the results, their relation to previous research, and elaborate upon their relation to socialist feminist theory in the next section. This paper concludes by discussing the theoretical and methodological implications of this study on global inequality research.

SOCIALIST FEMINIST THEORY

Socialist feminist theory arose in the mid 1970's in response to Marxist theory's inability to fully address the oppression and exploitation of women. Socialist feminists transformed Marxist thought by incorporating the role of patriarchy into the Marxist framework. Important differences in the location of the source of exploitation and oppression exist between socialist feminism and Marxism. Marxism locates the source of oppression and exploitation in economic class structures while socialist feminist theory locates women's oppression in their exploitation as a formal wage and salary laborers, but also from patriarchal relations that define women as mothers, domestic laborers, and consumers (Eisenstein 1981; Hartmann 1979; 1981; Young 1981).

Socialist feminism provides useful insights into how global capital interacts with patriarchy to structure the sex composition of the labor force. Global capital prefers women workers because they are cheaper than men, and they are understood to be more appropriate workers for unskilled work due to patriarchal attitudes about women being "naturally" docile, disposable, and nimble. Using these worker traits allow employers to better compete in the global marketplace because it helps keep labor costs minimal with low wages, optimal turnover, and by decreasing the likelihood of unionization (Howes and Singh 1995; Elson 1999; Standing 1999; Lim 2000; Aslanbeigui and Summerfield 2001; Meyer 2006; Wright 2006).

Global capital's preference for female workers may increase women's labor force participation while men's labor force participation may decrease. A consequence of this preference may include undermining male authority and keeping wages low for everyone in the working class (Hartmann 1981). Capital's preference for female labor may also have an emancipatory effect for women who may experience increased empowerment within the household due to a greater contribution towards the household income. The conflicting relation between the erosion of patriarchal power that is located, paradoxically, in global capital structures that build upon and reinforce patriarchal notions is a central concern of this study.

It is important to note that while women in developing countries are increasingly being incorporated in the formal labor force, the empowering effects are often limited. For example, improved access to formal wage labor opportunities is no guarantee of equal pay relative to men; safe working conditions including sexual harassment; and employment benefits such as improved access to healthcare and pension plans (Bertranou 2001; Bailey and Ricketts 2003; Tallontire et al. 2005; Gideon 2006).

Methodological Implications of Socialist Feminism for Macro-Level Research

Methodological implications for macro-level researchers arise from the recognition that capitalism and patriarchy are both exploitative and oppressive mechanisms. Rather than categorizing countries in the developing world based upon level of economic development commonly accomplished by using gross domestic product (GDP) per capita or by position in the world system, another measurement must be used to more effectively capture various patriarchal and capital accumulation relations This study argues for the utility of using region to structure quantitative, cross-national analyses informed by socialist feminist theory. This study categorizes countries into regions as delineated by the World Bank. Using region serves three primary purposes. First, region is a useful cross-national indicator of patriarchy. Second, a regional conceptualization of the world system provides a non-hierarchical and more nuanced understanding of global relationships that incorporates an accounting of patriarchy. Third, region controls for important differences in the sex composition in the labor force. Fourth, region allows for an empirical, macro-comparative examination into the nature of the relation between patriarchy and global capital through the use of interaction variables. I elaborate upon these four points below.

Region as a measure of patriarchy. Region is a useful, albeit crude, measure of patriarchy for macro-comparative research. Due to the lack of any concrete, cross-national measures of patriarchy coupled with high levels of missing data, researchers conducting quantitative, cross-national analyses typically rely upon proxy measures such as religion and region (Paxton 1997; Kenworthy and Malami 1999; Paxton and Kunovich 2003; Meyer 2006). While more accurate measures of patriarchy exist at the national level – for example, condom use or abortion rates – this data is not presently available for a substantial number of developing countries, particularly

those in Sub-Saharan Africa. Given these data limitations, religion is often used. Using religion rather than region is often constrained by high multicollinearity between region and a nation's gross domestic product (GDP), a standard measure of economic development. Religion is also closely correlated with region, although to a lesser extent so that multicollinearity between religion and a country's GDP is less problematic compared to the multicollinearity between region and GDP. Using religion as an indicator neglects regional differences that may be present. For example, it is likely Catholicism and its patriarchal notions are different in Eastern Europe compared to Latin America. Further, there is a substantial overlap between religion and region, with Catholicism dominating Latin America and Islam dominating the Middle East. Given these considerations, region captures diverse patriarchal forms more effectively than religion.

Given these difficulties in measuring patriarchy for cross-national, quantitative analyses, using region in the form of an interaction term is useful because it overcomes the multicollinearity issues with GDP and it more effectively captures cultural variations in patriarchy that exist within a regional context.

Region provides a more nuanced conceptualization of the global system. Using region as a category of analysis captures social variations in patriarchal cultures and other context-specific variations that are otherwise overlooked in macro-comparative, cross-national studies with a large number of cases that use the nation state as a central conceptual focus. This provides a more nuanced examination of the global system. Regions are integrated into the world system in different ways and conceptualizing the global system in a regional manner is fundamentally different than one which focuses upon a hierarchical system based upon ranking of GDP per capita (Amin 2001). Ranking by a hierarchical system assumes the marginalization of the lowest ranking countries. This is a false conceptualization "which hides the real question, which is not

to which degree the various regions are integrated but in which ways they are integrated" (Amin 2001, p 42). Using region is one way to achieve a more nuanced examination of how regions are integrated in the global system by allowing a measure that captures both patriarchy and capital accumulation processes, as demonstrated by this chapter.

Region controls for important variations in the sex composition of the labor force. To date, research on the sex composition of the labor force suggests regional differences due to both patriarchal and economic factors, described more fully in the following section. The purpose of this study is to more fully explore how patriarchy and the macroeconomy influence women's and men's labor force participation. Using region as a control captures regional variations in the relation between patriarchy and macroeconomic structures.

Regional interaction terms allow for an empirical, cross-national examination of the global capital/patriarchy relationship. I draw upon socialist feminist theory to argue that the sex composition of the labor force is structured by two forces: global capital and patriarchy. The nature of this relationship, whether it is defined by mutual accommodation or competition and conflict, is able to be quantifiably assessed through the use of creating interaction terms between region and various global capital indicators.

GLOBAL MACROECONOMIC TRENDS IN TRADE AND FINANCE

Economic globalization since the 1980's has been characterized by economic liberalization, which emphasizes market liberalization and favors privatization and deregulation (Aslanbeigui and Summerfield 2001; Elson 1995; Howes and Singh 1995; Çağatay 2003). Fundamental to economic liberalization is the belief that economic development can only occur through increased involvement with the global economic system. Following from the economic notion of Ricardo's comparative advantage, developing nations are encouraged to concentrate on

86

export-oriented activities, such as exporting raw materials and labor-intensive manufacturing, in order to engage more competitively in the world market (Gereffi and Fonda 1992; Aslanbeigui and Summerfield 2001; Çağatay 2003; World Bank 2006; 2007; IMF 2007).

This emphasis upon export-oriented economic development has fueled the feminization of the labor force, which has been widely documented in the literature (e.g. Elson 1995; Howes and Singh 1995; Çağatay 2003; Pyle and Ward 2003; Wright 2006; ILO 2007). It is important to note that much of this literature addresses the impacts of macroeconomic processes upon women and neglects men. This may be due to an over-correction by feminist researchers who, in seeking to demonstrate how macroeconomic processes have gendered consequences, focus upon women.

Trade: Exports and Imports

Trade policies have different consequences for female and male labor force participation because markets are social institutions. Markets embody social norms and practices, and reflect and reinforce gender inequality because men and women differ in their economic and social status and their access to private and public resources (Rios 1990; Elson 1995; 1999; Çağatay et al.1995; Durano 1999). In addition, free trade agreements do not always specifically address non-discrimination and equality, and some free trade agreements completely neglect any mention of these issues (ILO 2007).

The emphasis upon export-oriented trade and employer preference for women workers may lead to increases in women's labor force participation. For example, in Kenya, land restructuring and related reforms led to a situation where women now make up the majority of laborers in the export-oriented produce industry, doing such things as packing, labeling, and bar-coding produce (Dolan 2005). Due to economic restructuring Lesotho, in Sub-Sahara Africa, became the leading garment exporter to the United States which has contributed to the

87

feminization of Lesotho's labor force (Gibbs 2005). The central role of women in the Mexican maquilas by providing low wage, temporary labor has been widely documented (e.g. Tiano 1994; Salzinger 2002 ; Mendez 2005; Wright 2006). In Chile women are a valuable source of labor for fruit exports, because they are flexible (i.e. available for temporary and seasonal work) and cheap (Barrientos 1997). Despite the efforts of the Puerto Rican government to create employment opportunities for men by attracting export-oriented industries during the 1970's, the manufacturing industries preferred women workers because they were cheaper and considered more docile and, as a result, female employment opportunities dramatically increased (Rios 1990). In rural Guatemala, the transition to non-traditional agricultural crops, such as snow peas and broccoli have, depending upon the patriarchal norms of the community and the way women traditionally were involved in agricultural production, led to women's increased participation in agricultural production and food processing (Carter 2004). The low wages paid to women in export industries is promoting economic growth in Thailand, Malaysia, and Indonesia (Seguino 2000).

Women may benefit if there are employment opportunities readily available in factories producing export products. However, due to the availability of cheaper imports, women working in sectors other than export processing may be subject to greater difficulties finding and keeping work (Fontana and Wood 2000; Pyle and Ward 2003). Research shows that trade arrangements in Zimbabwe that allow the increased importation of maize and cereals are likely to disproportionately impact women workers (Ulmer 2004). Trade deals that provide preferential access to the European Union in Africa are likely to depress the cut-flower industry and sugar processing, both industries which employ many women (Ulmer 2004).

Foreign Direct Investment

An integral part of neoliberal trade policies is the deregulation of labor markets in order to increase foreign investment. Research on the gendered effects of foreign direct investment is scarce. Overall foreign investment has been shown to depress both women's share of the labor force, and women's labor force participation rates (Ward 1984). More recent research contradicts these findings by showing that foreign investment is positively related to the integration of women into the workforce, particularly in countries located in semi-periphery of the world system (Meyer 2003; 2006). Quantitative, cross-national analyses suggests that foreign direct investment promotes the commercialization of agriculture, which inhibits the employment of women in the production and export of agricultural products and thus favors men's labor over women's (Vanfossen and Rothstein 1997).

Research examining the regional and gendered consequences of foreign direct investment is extremely scarce. The extant research suggests that foreign direct investment encourages women's participation in the labor force by encouraging gender equity in business practices. In Sub-Sahara Africa national laws were altered to better harmonize with those of international 'best practice' laws in order to attract foreign direct investment. Legal reforms include the reform of labor laws to end gender discrimination in the formal sector (Naymu-Musembi 2006). In Chile, labor deregulation associated with foreign direct investment has increased the use of temporary, seasonal, part-time, hourly contracts. As a result, women's participation in the informal economy has expanded (Gideon 2006).

Foreign Debt

The indebtedness of developing countries can be traced to the 1970's, when low interest rates, high inflation, and other factors sparked massive investment in these countries by international banks. These debts became unsustainable when global interest rates rose

dramatically at the end of the 1970's (Babb 2005). These massive debts made economic

liberalization policy reform easier, as austerity measures favoring neoliberal policies were

attached as preconditions to loans. These austerity programs, commonly referred to as structural

adjustment programs[19] (SAPs), emphasize policies that save money, facilitate exports, and

promote private sector development. As a result of SAPs, macroeconomic trends in developing

countries include reducing the public sector through privatization; fewer trade and labor barriers,

including decreasing the protection of domestic industries from foreign industries; and increasing

the role of private investment (Çağatay and Özler 1995; Babb 2005).

Research directly examining the effects of SAPs upon women's and men's labor force

participation is extremely scarce and contradictory. Foreign debt and SAPs may increase

women's participation in the labor force in several ways. The export-oriented policies promoted

by SAPs have led to the increased employment of women and contributed to the unemployment

of men (Çağatay and Özler 1995; Howes et al. 1995; Ganguly-Scrase 2003; Kay 2006). Due to

the worsened economic conditions resulting from SAPs, women are often forced into finding

paid employment (Çağatay and Özler 1995; Hite and Viterna 2005).

Research also suggests foreign debt and SAPs may decrease women's labor force

participation. Cutbacks in the public sector due to SAPs disproportionately affect women, who

often find greater employment opportunities in the public sector. Outside the public sector,

employment opportunities may be scarce, and women may also be constrained by women's

limited geographical mobility relative to men (Çağatay 2003; Assaad and Arntz 2005). In Latin

America, women employed in the public sector – traditionally a sector where women were well-

represented – lost employment opportunities (Hite and Viterna 2005).

---

[19] As of the 1999 SAPs, as policy implemented by the IMF and the World Bank, no longer exist. They have been replaced by PRSPs (Poverty Reduction Strategy Papers). However, SAPS is used here in order to be consistent with the literature, which uses the term as a general description for neoliberal policies.

REGIONAL DIFFERENCES
IN THE SEX COMPOSITION OF THE LABOR FORCE

The feminization of the labor force in the developing world began in the 1950s. Since this time significant regional differences persist in three general ways: 1) the rates of feminization and the levels of equity between women and men's labor force participation rates; 2) the sectors in which women participate; and 3) changes in gender relations resulting from a restructuring of the sex composition of the labor force. Given the paucity of empirical data examining the effects of patriarchy and macroeconomic structures on the sex composition of the labor force, the following discussion remains at a general level and focuses primarily on women workers.

Regional differences in feminization rates

Sub-Sahara Africa continues to have the greatest rates of feminization compared to all other regions, with the exception of Eastern Europe (Çağatay and Özler 1995; ILO 2007). Eastern European countries are distinctive for the relative equity between female and male labor force participation rates; this is likely due to the effect of policies of the socialist communist regime that identified women's exclusion from factory work as key to their oppression (Pascall and Lewis 2004; Weiner 2005; ILO 2007). Today both women and men in Central and Eastern Europe are dropping out of the labor force to participate in the informal economy due to the overall lack of jobs (UNIFEM 2006). Conversely, the feminization of the labor force has not meaningfully occurred in most Mid-Eastern countries. This is likely due to the patriarchal culture of these countries that strongly discourage women from participating in the labor force (Assaad and Arntz 2003).

Regional differences in sectors

Distinctive regional differences exist in the sectors which are most feminized. Women continue to be drawn into the labor force to work in export-oriented factories in Southeast Asia and the Caribbean. This contrasts with most of Latin America, where women's labor force participation is concentrated in the service sector. The exception in Latin America is Mexico and Brazil, where women dominate export-oriented factories. In Sub-Sahara Africa women continue to dominate the labor force in agriculture and, increasingly the food-processing sector of agriculture which is focused upon exports (Elson 1995; Howes and Singh 1995; ILO 2007).

Regional differences in gender relations stemming from the restructuring of the labor force

Research at the regional and local levels provide insights into how patriarchy is being affected by, and responding to, global trade and its consequent reconfiguration of the sex composition of the labor force. It is through this restructuring of the sex composition of the labor force that insights can be obtained into gender relations.

In Sub-Sahara Africa land reform undertaken as part of the overall restructuring of the economy in support of economic liberalization policies has led both to the feminization of the labor force and to increased social marginalization and violence against women (Dolan 2001; 2005; Jacobs 2004; Walker 2005; Moffett 2006). Due to economic restructuring Lesotho has become the leading garment exporter to the United States which has contributed both to the feminization of Lesotho's labor force and to violence against women workers seeking to unionize (Gibbs 2005). I argue in Chapter 3 of this dissertation that this situation is due to the competing interests of capitalism and patriarchy.

While women in Sub-Sahara Africa appear to be experiencing violence and marginalization despite their advances in the labor force, the situation appears to be different in

Latin America where women are increasingly becoming empowered. I argue in Chapter 3 of this dissertation that is due to the interests of capitalism over-riding, and changing, the interests of patriarchy. A substantial body of research documents the central role of women in maquiladoras and other export-oriented work in Latin America (e.g. Rios 1990; Tiano 1994; Barrientos 1997; Wright 2006, Salzinger 2002). In countries such as Mexico, Nicaragua, Ecuador, and Brazil, economic restructuring has driven the feminization of the labor force which in turn has contributed to important advances for women's rights in areas such as participation in union activities, legal recognition of women's labor rights, and overall empowerment (Carter 2004; Hite and Viterna 2005; Stephen 2005; Mendez 2005.; Brickner 2006; Kay 2006). While it may be argued this evidence undermines the idea that Catholicism is a patriarchal religion, it is important to note that these studies do not examine religion. Further, while there is some overlap between religion and region, one cannot conflate the two as each encompasses very different processes in terms of gender relations.

In Asian countries, patriarchy and global capital appear to be mutually accommodating one another and consequently disadvantaging women. In countries such as Thailand, Malaysia, and Indonesia, the gender wage gap appears to be key in promoting economic growth (Truong 1999; Seguino 2000; Gills 2002). Contributing to this effect is women's socialization which leads them to accept their social and economic status, and making unionization unlikely (Seguino 2000; Cameron et al. 2001; Wright 2006).

In the Middle East, women continue to have the lowest rates of labor force participation relative to men (ILO 2007). This is due to a distinctive configuration of patriarchy ("neopatriarchy") in which the state suppresses women's access to the labor force because of high male unemployment coupled with Islamic conservative ideology (Haghighat 2005).

HYPOTHESIS

Previous research on the role both patriarchal and macroeconomic factors play in shaping differences in women's and men's labor force participation rates informs the following general hypothesis tested in this study:

> H_1: Women's and men's labor force participation rates will exhibit regional differences due to the combined effects of patriarchy and global trade and finance structures.

DATA, MEASURES, AND METHODS

This study uses OLS regression to examine a series of quantitative, cross-national analyses incorporating data from 106 low and middle-income countries, as defined by the World Bank in 2004, for which data is available. Table 1 displays the full list of the 106 countries used in the analysis.[20] Countries with populations below 1 million are excluded because of the extreme value they typically register on variables of interest, a widely used practice in cross-national research (e.g. Gallagher et al. 1996; Frey and Al-Roumi; 1999; Kenworthy and Malami 1999; Shen and Williamson 2001).

Measures

All variables in this study are measured in 2004 and are briefly reviewed below. See Appendix B for variable sources and coding details.

Dependent Variables. Analyses focus on two dependent variables: 1) women's formal labor force participation rate, and 2) men's formal labor force participation rate, both as a percentage of the total labor force. The total labor force includes all people who meet the ILO

---

[20] All high-income industrialized countries, with their already high levels of development and diversified economies are excluded from the analysis because the mechanisms shaping a gendered division of labor, as discussed above, are limited in their application to developing countries.

definition of economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and unemployed, including the armed forces and first-time job seekers (World Bank 2004).

Independent Variables. The economic variables of *exports*, *imports foreign direct investment*, and *total debt service* are all calculated as a percentage of a country's gross domestic product (GDP). S*tructural disarticulation* was constructed by taking the sum of the absolute difference between a sector's share of labor force and that sector's contribution to GDP across the three major sectors of the economy: agriculture, industry, and services (Stokes and Anderson 1990, Huang 1995; Gallagher et al. 1996; Frey and Field 2000).

Control Variables.[21] The analysis controls for the effects of the *level of economic development* with the widely used measure of GDP per capita, in purchasing power parity, US dollars. This variable is logarithmically transformed using the natural logarithm to correct for a highly skewed distribution. The analysis also includes the effects of *education* for both women and men. This is measured as the percentage of females/males enrolled in primary, secondary, and tertiary levels of education regardless of age, as a percentage of the population of official school age for the three levels.

To control for the *sex ratio of the labor force*, a measure was constructed by calculating the number of females between the ages of 15-64, which are the prime ages for participating in the labor force, divided by the total number of males and females between the ages of 15-64.

The analysis controls for *patriarchal cultures* by categorizing countries into five regions delineated by the World Bank. To increase the number of cases, the regions of South Asia and East Asia (as defined by the World Bank) are combined into a single region. The resulting five

---

[21] A common control variable that is not included in this analysis due to high multicollinearity with GDP is fertility rates.

regions examined here are the following: Sub-Saharan Africa; South and East Asia; Europe and Central Asia; Latin America and the Caribbean; and the Middle East and North Africa. The countries included in each regional category are listed in Table 1. Dummy variables were then constructed. The following four regions are coded "1": Asia and Pacific, Sub-Sahara Africa, Latin America and Caribbean, and Middle East and North Africa. The European and Central Asian category is coded "0." The European and Central Asian category is selected as the omitted category because in 2004 the average labor force participation rates of both women (45.4 percent) and men (54.6 percent) were the most equal, as compared to the other regions (also see Figures 4 and 5). This relative equality between female and male labor force participation provides a useful point of comparison. It can be argued that this relative equality may not translate in the type of work women and men do in Europe and Central Asia. That, however, is an issue that extends beyond the scope of this chapter.

Method

This study uses OLS regression with listwise deletion to examine a series of quantitative, cross-national analyses incorporating the 123 countries listed in Table C1 of Appendix C. To maximize the use of available data, the sample size varies from one model to another depending upon data availability, a common technique in macro-comparative research (e.g. Gallagher et al. 1996; Kenworthy and Malami 1999; Shen and Williamson 2001; Moore et al. 2006). Countries with missing cases for any of the variables were dropped from the sample for the regression analysis. Due to data availability constraints, most models range between 104-106 countries.

To test how the effects of the economic variables (exports, imports, FDI, and debt) vary across regions, product terms were created. The region dummy variables were multiplied by each of the economic variables, resulting in a series of new variables taking the form of either 0 or the

interval-level value. This allows for a comparison of the effect of an economic variable (exports, imports, FDI, or debt) on female or male labor force participation rates at one region with that of another region. To evaluate the strength of the interaction effect the difference in squared multiple correlations is computed for the "main-effect-only" model as compared with the interaction model. This is the most popular standard measure of effect size (Jaccard and Turrisi 2003)[22].

Descriptive statistics and Pearson correlation coefficients are displayed in Tables C2 and C3 of Appendix C. Regression diagnostics were used to detect outliers and influential cases. The plot of residuals against estimates showed little presence of heteroscedasticity in the data. To detect problems of multicollinearity under multivariate conditions Variance Inflation Factors (VIFs) are included in Tables 3 and 4. High levels of collinearity between a product term and its component parts are generally not problematic for interaction analysis (Jaccard and Turrisi 2003).[23]

RESULTS

Figure 1 displays the regional[24] variation in the share of the labor market in 2004 for both females and males (ILO 2007). Middle Eastern and North African countries had the highest rates of male labor force participation, with males comprising 73.6 percent of the total labor force. This region also had the lowest rates of female labor force participation, with females comprising

---

[22] Jaccard and Turrisi (2003) note that researchers sometimes calculate separate regression equations for each dummy group (e.g. region in this analysis) and test the significance of the slope of Y on X in each group separately. They state that this is "poor analytic practice" because it does not allow for a formal comparison of group differences in slopes. In contrast, an interaction variable allows for such a comparison. In addition, this separate group strategy ignores available information from all groups, and instead estimates the variance of residuals based on only a single group (p. 36).
[23] Jaccard and Turrisi (2003) note that it is only problematic when the "collinearity is so high that it disrupts the computer algorithm designed to isolate the relevant standard errors in a standard computer statistical package…as reflected by an error message in the computer output" (p. 28).
[24] The regional classifications used by the ILO, the basis for Figure 1, slightly differ from the World Bank's classification scheme which was used to construct the region variables tested in analyses.

26.9 percent of the labor force. Female labor force participation in the remaining regions ranges between 39.1 percent (Latin America and the Caribbean) and 45.4 percent (Europe and Central Asia). Male labor force participation in the remaining regions ranges between 54.6 percent (Europe and Central Asia) and 60.9 percent (Latin America and the Caribbean).

FIGURE 1. Regional Variations in Labor Force Participation, Female and Male, 2004
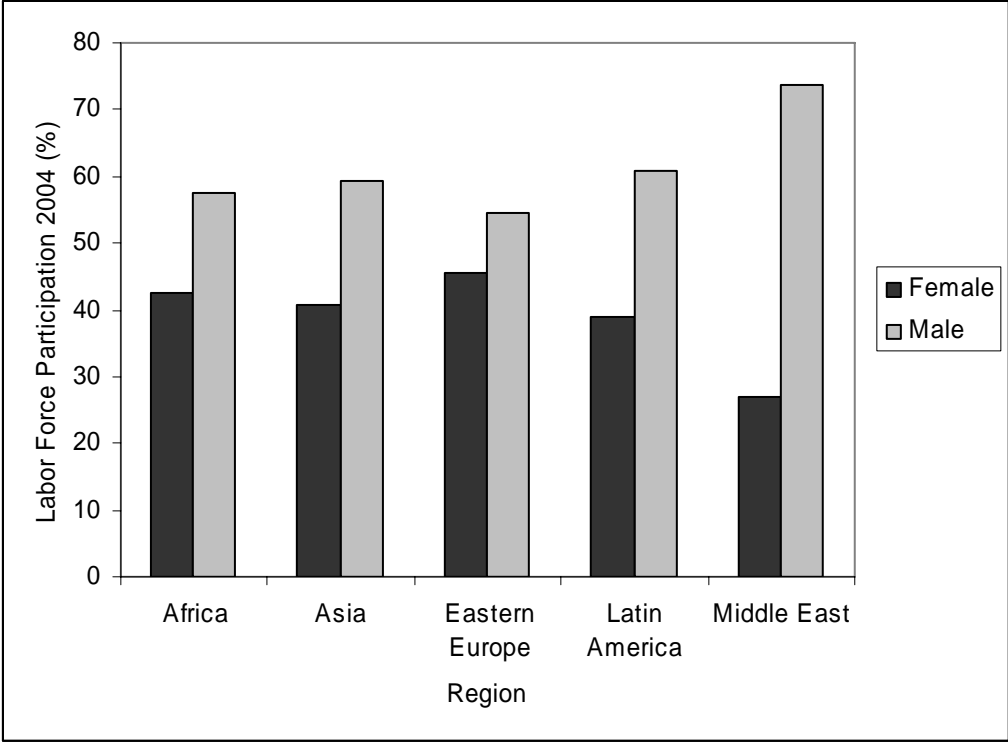
Tables 1 and 2 show the results of paired sample t-tests for female and male labor force participation rates for 1994 and 2004.

TABLE 1. Results of paired sample *t*-tests of female labor force participation, 1994-2004

	1994	2004	1994 - 2004	*t*
Africa	43.1	42.6	-.5	-3.8**
(*N* = 42)	(5.7)	(5.9)	(1.0)	
Asia	40.6	40.7	.2	.591
(*N* = 16)	(6.2)	(6.3)	(1.1)	
Europe/Central Asia	45.1	45.4	.5	1.1
(*N* = 26)	(4.5)	(4.7)	(2.0)	
Latin America	35.6	39.1	3.5	5.7**
(*N* = 22)	(5.1)	(4.3)	(2.9)	
Middle East	24.1	26.9	2.9	3.5**
(*N* = 13)	(7.9)	(7.6)	(3.1)	

*p≤ .05   **p≤ .01   (two-tailed tests)
Numbers in parentheses represent standard deviations

TABLE 2. Results of paired sample *t*-tests of male labor force participation, 1994-2004

	1994	2004	1994 - 2004	*t*
Africa	56.9	57.4	.55	3.8**
(*N* = 42)	(5.7)	(5.9)	(1.0)	
Asia	59.4	59.3	-.16	-.6
(*N* = 16)	(6.2)	(6.3)	(1.1)	
Europe/Central Asia	55.0	54.6	-.45	-1.1
(*N* = 26)	(4.5)	(4.7)	(2.0)	
Latin America	64.4	61.0	-3.4	-5.7**
(*N* = 22)	(5.1)	(4.3)	(2.9)	
Middle East	76.0	73.6	-.2.4	-3.4**
(*N* = 13)	(8.2)	(7.7)	(2.5)	

*p≤ .05   **p≤ .01   (two-tailed tests)
Numbers in parentheses represent standard deviations.

These paired t-tests were conducted on the means of female (or male) labor force

participation rates in the five different regions: Asia and Pacific; Sub-Saharan Africa; Europe

and Central Asia; Latin America and the Caribbean; and the Middle East and North Africa. The findings indicate that in the regions of Sub-Saharan Africa, Latin America and the Caribbean, and the Middle East and North Africa, labor force participation changed significantly over the decade for both females and males. For females, labor force participation decreased significantly in Sub-Saharan Africa while it significantly increased in both Latin America and the Caribbean, and the Middle East and North Africa. For males, the results are reversed. In Sub-Saharan Africa male labor force participation significantly increased, while it significantly decreased in both Latin America and the Caribbean, and the Middle East and North African regions. It is possible that this increase in male labor force participation may be related to employment in the mining sector in many southern countries of this region; however, research has yet to address this specific issue and specific reasons for this increase remain unclear.

TABLE 3: Panel OLS Regression Estimates of Predictors on Female Labor Force Participation 2004

	Model 1	Model 2	Model 3	Model 4 Region * exports	Model 5 Region * imports	Model 6 Region * FDI	Model 7 Region * Debt
Female Ed.	.063 [.084] (1.03) 2.476	.071 [.095] (.106) 2.607	.118 [.158] (.104) 3.222	.071 [.095] (.096) 3.353	.084 [.113] (.105) 3.460	.125 [.167] (.100) 3.285	.090 [.121] (.107) 3.370
Sex Ratio	2.984*** [.300] (.893) 1.086	3.163*** [.325] (.913) 1.129	1.344 [.138] (.880) 1.346	1.475* [.152] (.863) 1.592	.953 [.098] (.883) 1.445	.715 [.074] (.868) 1.437	1.223 [.126] (.903) 1.410
GDP PC (log)	-6.251*** [-.397] (2.160) 2.536	-6.898*** [-.440] (2.375) 2.944	-.4673** [-.298] (2.182) 3.191	-4.628** [-.295] (1.981) 3.231	-3.758* [-.240] (2.149) 3.302	-4.664** [-.298] (2.109) 3.273	-4.607** [-.294] (2.238) 3.338
Exports		.165 [.226] (.107) 2.761	.075 [.102] (.100) 3.046	.506*** [.691] (.170) 10.885	-.020 [-.028] (.106) 3.716	.009 [.012] (.101) 3.429	.085 [.115] (.102) 3.187
Imports		-.148 [-.204] (.102) 2.565	-.156* [-.215] (.093) 2.739	-.236*** [-.325] (.086) 2.851	.133 [.183] (.163) 8.869	-.164* [-.227] (.090) 2.785	-.140 [-.194] (.095) 2.806
FDI (log)		.891 [.053] (1.750) 1.397	1.598 [.095] (1.623) 1.544	1.659 [.099] (1.472) 1.560	1.213 [.072] (1.589) 1.578	6.718* [.401] (3.671) 8.671	1.248 [.074] (1.678) 1.641
Debt (log)		-.390 [-.023] (1.760) 1.324	.670 [.039] (1.602) 1.409	.339 [.020] (1.450) 1.417	1.032 [.060] (1.579) 1.460	1.077 [.062] (1.580) 1.504	.791 [.046] (3.396) 6.295
Africa			4.108 [.135] (4.390) 3.418	31.042*** [1.019] (8.536) 15.869	25.029** [.821] (10.326) 20.164	30.098** [.988] (13.658) 36.311	3.747 [.123] (7.702) 10.457
Asia			.880 [.021] (4.478) 1.807	9.731 [.228] (9.465) 9.916	1.729 [.040] (11.475) 12.657	-10.029 [-.235] (15.748) 24.537	4.478 [.105] (8.454) 6.403

TABLE 3, continued

	Model 1	Model 2	Model 3	Model 4 Region * exports	Model 5 Region * imports	Model 6 Region * FDI	Model 7 Region * Debt
Latin America			-5.809 [-.154] (3.978) *1.827*	8.229 [.218] (10.388) *15.310*	11.240 [.298] (10.986) *14.871*	17.736 [.470] (20.781) *54.767*	-20.475* [-.542] (12.077) *16.748*
Middle East			-21.565 [-.455] (4.831) *1.708*	-20.109 [-.424] (12.138) *13.241*	-15.115 [-.319] (12.782) *12.750*	-4.776 [-.101] (16.347) *21.466*	-22.666** [-.478] (8.454) *8.302*
Africa Interaction (see Model)				-.700*** [-.946] (.175) *11.314*	-.426** [-.683] (.174) *13.704*	-8.337** [-.858] (4.079) *31.833*	-.211 [-.010] (4.293) *6.131*
Asia Interaction (see Model)				-.214 [-.296] (.178) *12.143*	.006** [.009] (.195) *12.516*	4.532 [.327] (4.901) *22.649*	-3.582 [-.128] (4.761) *4.757*
Latin America Interaction (see Model)				-.214* [-.296] (.178) *12.143*	-.351 [-.375] (.226) *10.233*	-7.339 [-.686] (5.952) *55.961*	8.628 [.416] (6.468) *15.934*
Middle East Interaction (see Model)				.039* [.034] (.288) *12.300*	-.102 [-.098] (.252) *10.356*	-5.608 [-.379] (4.817) *19.162*	.448 [.017] (5.370) *7.008*
F-value				7.932***	5.440***	5.922***	4.322***
R^2	.243	.251	.441	.565	.499	.513	.462
Adjusted R^2	.221	.196	.374	.491	.413	.430	.371
N	106	104	104	104	103	104	104

Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, the number in parentheses is the standard error, and the VIF is in italics. The F-test was used to test for differences with Model 2.

*p≤ .10   **p≤ .05   ***p≤ .01   (two-tailed tests)

Female Labor Force Participation Rates: 2004

Table 3 shows the OLS regression results for female labor force participation rates. Model 1 shows the effects of the baseline variables: economic development, measured by GDP per capita, and the sex ratio of the labor force. Results show both variables are strong predictors of female labor force participation albeit in different directions, with economic development negatively related and sex ratio of the labor force positively related to the dependent variable. It is interesting economic development has a negative relationship to female labor force participation – a relationship that persists throughout all the models in the table, although the strength of this relationship lessens slightly with the inclusion of the patriarchy and other variables tested in this study. It may be due to laborers being discouraged by low wages and dropping out of the formal labor force as a result. Future research should examine this matter.

Model 2 adds the macroeconomic variables of trade (exports and imports) and finance (FDI and debt). With an adjusted R^2 of .196, this model explains little variance in female labor force participation rates. None of the macroeconomic variables are significant, although the signification relationships of the baseline variables of sex composition and economic development persist from Model 1. Overall, this model supports the argument advanced here that a hierarchical conceptualization of the world-system has little explanatory value due to its obfuscation of the divergent ways countries in the world are incorporated into the global system under economic globalization.

Model 3 adds the regional dummy variables to the analysis and tests the main effects of the global trade and finance variables on female labor force participation. This "main-effects" model estimates general relationships averaging across the levels of the other predictor variables. Results show the effects of region and the macroeconomic variables account for greater variation

in female labor force participation rates, with an adjusted R^2 of .374, as compared to Models 1 and 2. This supports the argument that a regional conceptualization of the global system provides greater explanatory power by accounting for the different ways countries are integrated into the global macroeconomy.

Models 4 through 7 include the interaction variables between region and the various trade and finance indicators. For brevity in presentation, the specific interactive term is noted on each column heading rather than by the row heading. The coefficients in Models 4 through 7 estimate the effects of patriarchy as indicated by region on female labor force participation across varying levels of trade and finance. Including all the interaction terms in a model, rather than running separate models across region allows for a formal comparison of group differences in slopes (Jaccard and Turrisi 2003). It is important to note when constructing an interaction variable from a qualitative predictor and a continuous predictor, the interpretation of the interaction effect centers on slope differences (Jaccard and Turrisi 2003). Thus, the regression coefficients for the interaction variables reflect differences in slopes between the groups scored one (Sub-Sahara Africa, Latin America, Asia, and the Middle East) and the reference group, Eastern Europe.

The variables in Model 4 account for 49 percent of variance in female labor force participation rates (adjusted R^2 equals .491), providing the most complete fit among Models 1 through 4. The strength of the effect of region across levels of exports, as tested in Model 4, can be assessed in a standardized fashion by calculating the difference in the R^2 for the "main-effect-only" model (Model 3) as compared to the interaction model (Model 4) (Jaccard and Turrisi 2003). The interaction effect of region and exports accounts for 12 percent of the variance in female labor force participation. Results from an F-test comparing the fits of Model 2, the

hierarchical model, and Model 4, the model with regional interaction terms, show that Model 4 has the better fit, with F equaling 7.931 and being highly significant with $p \leq .001$.

The effects of exports on female labor force participation are highly significant in the positive direction, as are the effects of Sub-Sahara Africa. These coefficients increase dramatically compared to Model 3, an outcome which is not unusual when a product term(s) is included in the analyses. This is because the component coefficients in the two equations (Model 3 and Model 4) estimate different concepts (Jaccard and Turrisi 2003). In Model 4, the component (non-product) coefficients of exports and Sub-Sahara Africa do not represent main effects as they do in Model 3. Rather, these coefficients represent simple effects focused on a specific value of the other predictor in the product. For example, the coefficient for exports in Model 4 (.506) estimates the effect of exports on female labor force participation when Sub-Sahara Africa corresponds to a value of zero. Specifically, for every additional unit of exports, female labor force participation is predicted to increase .506 units. This interpretation of simple effects, as required by Model 4, is thus very different from the interpretation of these same variables in Model 3, the "main effects" model, in which the coefficients estimate general relationships averaging across the levels of the other predictor variable. In Model 4, the component (non-product) coefficients estimate conditional relationships focused upon a specific value of the other predictor in the product term (Jaccard and Turrisi 2003).

Results of Model 4 highlight the impact exports have on female labor force participation rates and how this varies as a function of region. Most notable in Model 4 is the highly significant regression coefficient of the Sub-Sahara Africa interaction variable, which shows the effects of Sub-Sahara Africa (relative to Eastern Europe) on female labor force participation rates vary across levels of exports. Analyses of the simple effects in this model show that for

every additional unit of exports, female labor force participation rates are predicted to increase .506 units when Sub-Sahara Africa is scored "0." When Sub-Sahara Africa is scored "1" female labor force participation rates are predicted to decrease -.194. The difference between these two slopes is indicated by the coefficient for the interaction variable (exports * Sub-Sahara Africa) which is -.700. Thus, the effect of Sub-Sahara Africa (relative to Eastern Europe) on female labor force participation rates is negative across levels of exports.

Model 5 tests the effect of region on female labor force participation rates across varying levels of imports. The variables in Model 5 account for 41 percent of the variance in female labor force participation rates (adjusted R^2 equals .413). The strength of the effect of region across levels of imports as tested in Model 5, as compared to the main effect model (Model 3), accounts for 6 percent of the variance in female labor force participation. The regression coefficients of both the interaction variables of Sub-Sahara Africa and Asia indicate the slope differences between these regions and the reference category, Eastern Europe, are moderately significant. The Sub-Sahara Africa interaction variable, with a regression coefficient of -.426, indicates a larger and negative difference in slopes between Sub-Sahara Africa and Eastern Europe in terms of imports than does the Asia interaction term which has a regression coefficient of .006. Results from the F-test comparing Model 2 with Model 5 are highly significant with F equaling 5.439.

Model 6 tests the interactive effect of region on female labor force participation across varying levels of FDI. The adjusted R^2 is .430. The interaction effects in this model as compared to the main effects model (Model 3) account for 7 percent of the variance in female labor force participation. The only significant variable in Model 6 is the Sub-Sahara Africa variable, which is moderately significant in the negative direction. The difference in slopes between Sub-Sahara Africa and the reference category is -8.337. Results from an F-test comparing Model 2 with

106

Model 6 are highly significant with F equaling 5.921. Model 7 tests the interactive effect of region and debt. None of the interaction variables are significant.

Overall, results in Models 4 through 7 support the argument that greater explanatory power is obtained through a regional conceptualization of the global system. F-tests comparing Models 4 through 7 with Model 2, which uses GDP to structure the analyses, were highly significant and confirm that a regional conceptualization provides a better fit. In addition, this hierarchical conceptualization obscures the effect that global trade and finance have on female labor force participation rates and how this varies as a function of region.

TABLE 4: Panel OLS Regression Estimates of Predictors on Male Labor Force Participation 2004

	Model 1	Model 2	Model 3	Model 4 Region * exports	Model 5 Region * imports	Model 6 Region * FDI	Model 7 Region * Debt
Male Ed	-.074	-.091*	-.043	-.031	-.021	-.036	-.037
	[-.159]	[-.200]	[-.094]	[-.068]	[-.046]	[-.079]	[-.082]
	(.052)	(.049)	(.046)	(.046)	(.048)	(.046)	(.047)
	2.108	*2.150*	*2.635*	*2.730*	*2.842*	*2.678*	*2.696*
Sex Ratio	.933***	.817*	.623*	.880***	.790**	.804**	.553
	[.202]	[.184]	[.140]	[.198]	[.178]	[.181]	[.125]
	(.363)	(.348)	(.325)	(.345)	(.336)	(.335)	(.337)
	1.065	*1.119*	*1.358*	*1.590*	*1.464*	*1.462*	*1.435*
GDP PC (log)	-3.770***	-3.473***	-2.886***	-2.792***	-2.705***	-3.111***	-2.636***
	[-.513]	[-.482]	[-.401]	[-.388]	[-.375]	[-.432]	[-.366]
	(.824)	(.855)	(.776)	(.769)	(.782)	(.786)	(.816)
	2.162	*2.575*	*2.952*	*3.011*	*3.023*	*3.055*	*3.202*
Exports		.016	-.004	.097	-.036	-.001	-.006
		[.047]	[-.012]	[.291]	[-.107]	[-.004]	[-.017]
		(.041)	(.037)	(.068)	(.040)	(.039)	(.038)
		2.738	*3.045*	*1.434*	*3.737*	*3.437*	*3.198*
Imports		-.103***	-.051	-.058*	.023	-.059*	-.056
		[-.309]	[-.153]	[-.175]	[.070]	[-.177]	[-.169]
		(.039)	(.034)	(.034)	(.062)	(.034)	(.035)
		2.534	*2.699*	*2.822*	*8.902*	*2.748*	*2.762*
FDI (log)		.505	.005	.104	.077	1.706	.066
		[.066]	[.001]	[.014]	[.010]	[.223]	[.009]
		(.670)	(.598)	(.589)	(.602)	(1.412)	(.622)
		1.400	*1.549*	*1.565*	*1.584*	*8.739*	*1.646*
Debt (log)		.657	1.185**	1.153**	1.417**	1.072*	.995
		[.083]	[.150]	[.146]	[.179]	[.135]	[.126]
		(.669)	(.587)	(.577)	(.596)	(.604)	(1.257)
		1.307	*1.398*	*1.409*	*1.454*	*1.498*	*6.299*
Africa			7.247***	14.207***	12.897***	14.636***	6.326**
			[.519]	[1.018]	[.924]	[1.049]	[.453]
			(1.669)	(3.467)	(3.972)	(5.300)	(2.886)
			3.636	*16.327*	*20.768*	*37.061*	*10.677*
Asia			6.996***	9.663***	7.892*	9.147	7.956***
			[.358]	[.495]	[.404]	[.468]	[.407]
			(1.682)	(3.793)	(4.332)	(6.046)	(3.156)
			1.885	*9.975*	*12.606*	*24.611*	*6.516*

TABLE 4, continued

	Model 1	Model 2	Model 3	Model 4 Region * exports	Model 5 Region * imports	Model 6 Region * FDI	Model 7 Region * Debt
Latin America			8.334*** [.483] (1.471) 1.845	13.128*** [.760] (4.157) 15.346	10.448*** [.605] (4.162) 14.908	21.320*** [1.235] (7.984) 54.972	11.122** [.644] (4.474) 16.769
Middle East			3.757** [.173] (1.775) 1.703	12.961*** [.598] (4.810) 13.029	11.238** [.518] (4.795) 12.545	5.699 [.263] (6.254) 21.387	4.215 [.194] (3.944) 8.265
Africa Interaction (see Model)				-.155** [-.458] (.070) 11.260	-.096 [-.338] (.066) 13.838	-2.388 [-.537] (1.566) 31.866	1.220 [.120] (1.586) 6.100
Asia Interaction (see Model)				-.058 [-.174] (.071) 12.156	-.002 [-.006] (.074) 12.559	-.588 [-.093] (1.877) 22.620	-.664 [-.052] (1.765) 4.774
Latin America Interaction (see Model)				-.107 [-.231] (.099) 12.046	-.031 [-.071] (.086) 10.364	-3.851* [-.788] (2.285) 56.134	-1.645 [-.173] (2.388) 15.850
Middle East Interaction (see Model)				-.229** [-.430] (.114) 12.161	-.163* [-.343] (.095) 10.351	-.608 [-.090] (1.845) 19.141	-.206 [-.017] (1.984) 6.991
F-value				6.308***	5.777***	5.814***	5.338***
R^2	.413	.481	.642	.671	.661	.662	.652
Adjusted R^2	.396	.442	.599	.615	.602	.603	.592
N	104	102	102	102	102	102	102

Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, the number in parentheses is the standard error, and the VIF is in italics. The F-test was used to test for differences with Model 2.

*p≤ .10   **p≤ .05   ***p≤ .01   (two-tailed tests)

Male Labor Force Participation Rates: 2004

Table 4 shows the OLS panel regression results for male labor force participation in 2004. Model 1 tests the baseline variables: economic development, as measured by a country's GDP per capita, and the sex ratio of the labor force. Both variables are strongly significant, albeit in different directions. The sex ratio of the labor force, a control variable, is positively related to male labor force participation rates, while economic development is strongly significant in a negative direction. As in Table 3, the strong, negative relationship between economic development and male labor force participation rates that persists throughout all the models is puzzling. This model accounts for 40 percent of the variance in male labor force participation rates, with an adjusted R^2 of .396.

Model 2 adds the macroeconomic variables to the equation. The results are generally identical to Model 1, and the adjusted R^2 of this model increases to .442. The economic development variable continues to exert a strong negative effect on the male labor force participation rates while the effect of sex ratio lessens slightly. Imports, measured as a percentage of GDP, have a strong negative effect.

Model 3 includes the region dummy variables and tests their main effects on male labor force participation. The variables in this model account for 60 percent of the variance in male labor force participation, a substantial increase compared to the variance explained in Model 2, which is consistent with a class-based analyses. Economic development continues to have a strong negative influence. Debt has a moderately positive effect on male labor force participation, and imports have a slight negative effect. The regional dummy variables of Sub-Sahara Africa, Asia, and Latin America have a strong, positive effect on male labor force participation rates, compared to the omitted category of Eastern Europe, and net of the other

110

economic variables. The Middle East dummy variable has a moderate positive effect compared to Eastern Europe.

Model 4 adds the interaction variable of region and exports to the equation. With an adjusted R^2 of .615, this model accounts for 62 percent of the variation in male labor force participation rates. The interaction variables in this model account for 2 percent of the variance in male labor force participation as compared to the main effects model, Model 3. Results show the two interaction variables of Sub-Sahara Africa and the Middle East are both moderately significant in the negative direction. The effect of exports on male labor force participation rates differs in Sub-Saharan Africa and the Middle East; in both regions, the effect of exports is more negative. An F-test comparing this model to Model 2 shows that Model 4 provides the better fit with F equaling 6.308, a highly significant result.

Model 5 tests the effects of region across varying levels of FDI on male labor force participation rates. The adjusted R^2 is .602. The effect of the Middle East on male labor force participation across varying levels of imports is mildly significant in the negative direction, as compared to the omitted category of Eastern Europe. None of the other interaction variables are significant. Models 6 and 7 test the effects of region across varying levels of FDI and debt, respectively, on male labor force participation rates. Only the interaction term between Latin America and FDI is significant, with a slight negative effect on male labor force participation rates, as shown in Model 6.

Overall, the regression estimates reported for male labor force participation rates show very few significant predictors, as compared to the findings for female labor force participation rates, reported in Table 7. The findings for female and male labor participation rates support the argument that macroeconomic processes combine with regional differences to have different

111

effects for female and male labor force participation rates. The hypothesis tested in this study is therefore accepted.

DISCUSSION

The findings show that global trade and finance structures do not operate in isolation to influence the sex composition of the labor force. Rather, these macroeconomic structures interact within regional contexts to impact the labor force participation rates of women and men differently. Specific results show the effects of region interact with trade and foreign direct investment to negatively impact female labor force participation rates, while these effects generally are not shared by males. I reason these differences are due to regional variations in patriarchy.

The finding that the interactions between Sub-Sahara Africa with exports, imports and foreign direct investment negatively effect female labor force participation rates without a similar effect for males is interesting because Sub-Sahara Africa had the highest level of female labor force participation in the developing world in 2004 at 73.0 percent. In 2004 Sub-Sahara Africa also had the highest female employment rates among developing countries at 60.6 percent, which is second worldwide only to North America (ILO 2007). While both female and male employment rates declined in Sub-Sahara Africa between 1995 and 2004, male rates have experienced a greater decline, from 83.6 percent in 1995 to 81.6 percent in 2004 (ILO 2007). Taken in sum, these numbers suggest that for at least a decade, there has been some preference for women workers in this region. Yet this study indicates that patriarchy – as indicated by region – was operating with global trade and foreign direct investment in 2004 in such a manner to significantly discourage women from entering and/or dropping out of the labor force without a similar effect for men. This begs the question, why?

I draw from socialist feminist theory to argue this is likely due to the reaction of patriarchy to its erosion in the labor market. Elsewhere I argue that patriarchy and global capital have competing interests rather than mutually accommodating interests. Here I elaborate upon this argument by drawing upon case study research to outline how global trade and foreign direct investment operate within the broad patriarchal context of Sub-Sahara Africa to discourage women from participating in the labor force. The focus here is upon the response of patriarchy to the erosion of male advantage in the labor market. The following discussion admittedly over-extends the findings of this study. Future research should refine and modify my argument.

The general narrative is as follows. The processes of global capital accumulation draw upon and reinforce patriarchy by preferring and exploiting women workers because of their cheap, docile labor relative to men. As a consequence of this preference, men are likely to lose employment opportunities. In reaction to loss of privilege and advantage in the economic sphere and amidst dramatic social change occurring in developing countries over the last few decades, patriarchy continues to oppress women often in violent ways, for violence indicates a decline in the majority's control (Jackman 1994). Violence also serves psychological purposes for men who fear emasculation and "sameness" resulting from seemingly homogenizing globalizing forces (Eisenstein 1996). The dual processes of exploitation by global trade and finance structures and the often severe patriarchal oppression women experience in Sub-Sahara Africa appear to be fueling their retreat from the labor force. Global capital thus both competes against, and reinforces patriarchy.

Following is a brief discussion drawing upon case study research to describe how the processes described in the narrative above are occurring in Sub-Sahara Africa. Case-study research also provides valuable, concrete context to the otherwise abstract findings of this study.

Global capital dominates patriarchal interests

Global capital seeks to acquire low-cost, flexible labor that will not challenge the system. These are traits that patriarchy has attributed to women. The result is that capital accumulation, while exploiting patriarchal structures, does so to the detriment of male workers. The feminization of the labor force in developing countries has been widely documented at both the macro and micro levels (e.g. Tiano 1994; Çağatay and Özler 1995; Vanfossen and Rothstein 1997; Elson 1999; Standing 1999; Salzinger 2002; Wright 2006; ILO 2007). This is due in part to processes of deindustrialization that lead to a preference for women workers who provide temporary and cheaper labor than men, and who are understood to be more "appropriate" workers for unskilled work due to patriarchal attitudes (Howes et al. 1995; Elson 1999; Standing 1999; Wright 2006). This preference for female labor also allows employers to better compete in the global marketplace (Howes and Singh 1995; Lim 2000; Aslanbeigui and Summerfield 2001; Meyer 2006; Wright 2006).

Patriarchy's reaction to the erosion of power

Global capital substitution of female labor for male labor throughout the developing world upsets the patriarchal order. Women's incorporation into the formal labor force – albeit under exploitative conditions – may lead to some increased empowerment both within the household, the workplace, and within society as a whole. This preference for female workers may cause male workers to drop out of the formal labor force. In addition, it is likely that men not only lose power in the workplace, but also within the household and society as a whole as women become more empowered due to their increased wage earnings. I argue the reaction of the patriarchy to the apparent erosion of its privilege – in the context of Sub-Sahara Africa – may

contribute to the sexual violence and HIV/AIDS epidemics. Both epidemics are indicative of patriarchal attitudes (Jewkes et al. 2005; Moffett 2006).

Rape and sexual violence are epidemic in this region with South Africa having the highest rates of gender-based violence for a country not at war, with at least one in three women raped in her lifetime, and one in four beaten by her domestic partner in her lifetime (Moffett 2006). Child rape constitutes a large dimension of this epidemic, where the high status of men with respect to girl children leads to vulnerability of the girls by reducing their ability to refuse sexual advances, and by generating expectations in men that they should control women and children (Jewkes et al. 2005). Efforts to provide education to women intersect with the high sexual violence epidemic. Schools are often not safe places for girls and women, as they are havens of sex abuse and sexual exploitation (Mabala 2006). Despite efforts to increase educational opportunities for females, little attempt has been made to make educational facilities safe for females (Mabala 2006).

The HIV/AIDS epidemic disproportionately affects women. The stark gender differences of HIV/AIDS are found in Zimbabwe, which has one of the highest rates of HIV/AIDS. Ray and Madzimbamuto (2006) cite that in small towns, 27% of men and 48% of women are affected. Whether or not this is due to the influences of mining is unclear. Women's disempowerment under patriarchal attitudes is an underlying cause, which increases their risk of contracting HIV compared to men, and reduces their ability to take preventative measures, such as sexual abstinence or using a condom (WHO 2003; McIntosh and Thomas; 2004; Klomegah 2006; Mabala 2006; O'Sullivan et al. 2006; Ray and Madzimbamuto 2006). In Zimbabwe, doctors did not promote condom use or disclose information about HIV risk factors due to patriarchal attitudes (Ray and Madzimbamuto 2006). In addition, business leaders were unconcerned about

the loss of labor due to HIV because of the attitude that there were plenty more workers to replace those who became sick. This changed once management started becoming sick and it proved to be more expensive to replace managers[25] (Ray and Madzimbamuto 2006).

Global capital reinforces patriarchy

It is in the interest of global capital to seek out low-cost, docile, flexible labor. This interest is fueling the global feminization of the labor force. Yet in Sub-Sahara Africa, results of this study suggest the patriarchal pressures are strong enough to have women leaving the labor force in numbers disproportionate to men. Global trade and foreign direct investment policies that do not address the needs of women may exacerbate this process. As a consequence, global capitalism reinforces patriarchy.

Case-study research examining the relation between global trade and foreign direct investment policies in Sub-Sahara Africa is scarce. The extant literature indicates that these policies to not address the needs of women, which supports a recent observation made by the ILO (2007).

Free trade agreements are structured in such a way as to potentially disadvantage food processing industries – important employers of women. Ulmer (2004) examined the potential impacts of Economic Partnership Agreements (EPAs) upon Zimbabwe. She argued that unless the EPAs specifically address the needs of women, this free trade agreement with the European Union will adversely impact the economic and social well-being of women by taking away employment opportunities in food processing industries which predominately employ women such as sugar and beef. Trade agreements in Kenya have led to the restructuring of the agricultural sector. This has had important consequences for gender relations within the Kenyan

---

[25] It is important to note that worldwide, unskilled workers are predominately women, and management positions are predominately men. The authors of this study do not make this distinction, but it is likely these gender dynamics played a role in the actions of business leaders in Zimbabwe.

family where, due largely to cultural traditions, women are disempowered due to increased dependence upon men for income derived from the crops (Dolan 2001; 2005).

Little research directly examines labor force issues in the Sub-Saharan African region. Survey research in the North West province of South Africa indicates patriarchy continues to strongly discourage women from entering the labor force and economic policies do little, if any, to address these issues (Naudé 2001; Serumaga-Zake and Naudé 2003). The neglect of economic and governmental policies to support women is echoed in research on Lesotho, where female garment laborers seeking to unionize have experienced extreme military and patriarchal oppression (Gibbs 2005).

CONCLUSION

Global economic structures are not gender-neutral. Rather, macroeconomic structures are embedded within social relations that are gendered. This study empirically and theoretically examines how patriarchy operates within regional contexts to influence how global trade and finance shape the sex composition of the labor force. This in turn provides insights into how global capital is influencing gender relations.

Theoretically, I build upon socialist feminist theory by elaborating upon the relation between global capital and patriarchy within the context of Sub-Sahara Africa. I argue the relation between global capital and patriarchy is one of conflict and competition, rather than mutual accommodation. The erosion of patriarchy's privilege within the economic sphere may lead to increased, often violent, patriarchal oppression of women which may be "successful" at discouraging women from participating in the labor force. Global capital processes exacerbate this process by exploiting women and neglecting to adequately protect against gender discrimination through arenas such as trade agreements.

The theoretical contributions of this article extend to the methodology. Disaggregating the macroeconomic mechanisms that influence labor force participation by region provides a more nuanced understanding of the localized gender relations that shape global economic structures by allowing a direct assessment of relations between patriarchy and capital. This is in contrast to most macro-comparative research which ranks countries by level of economic development and/or placement in the world-system. As a consequence of obscuring localized social processes, these hierarchical approaches fail to fully provide an account of historical materialist processes.

Despite the methodological contributions of this study, investigating gender processes at the macro-level is often deemed problematic, given that cross-national analyses obscure important differences such as nationality, class, and race. However, examining how economic globalization is shaping female and male labor force participation from a macro-level perspective allows researchers to trace general patterns that cannot be achieved through a micro-level unit of analyses. Women and men of different races and classes do share a commonality in their participation within the structures of capitalism. Macro-level research creates a broader narrative which locates the numerous micro-level findings in contemporary history where global restructuring is dramatically changing many aspects of the world.

This study presents a bleak outlook for efforts to achieve equality between women and men in developing countries. The preference for women workers builds upon and exploits patriarchal attitudes toward women. Increased labor force participation by women may lead to greater empowerment for women, but this may at a cost to men, whose economic and patriarchal privileges erode as a result. Because of this gendered contradiction within global capitalism,

global capital in its current form cannot promote equality between women and men. Rather, the

processes of global capital accumulation seek out and promote inequality based on gender.

CHAPTER FIVE

CONCLUSION

This dissertation has two primary purposes: to empirically demonstrate that the macro-level processes of economic globalization have gendered impacts, and to argue socialist feminist theory is useful for understanding these processes and impacts. I detail below how this dissertation achieves these two purposes.

Objective 1: Demonstrate that macro-level processes of economic globalization have gendered impacts.

The first chapter of this dissertation, *Are Macroeconomic Structures Gendered? A Cross-National, Quantitative Study on "Human" Well-Being in Developing Countries* demonstrates the macroeconomy is a gendered structure by empirically showing the primary macrostructural processes, which previous research has identified as important predictors of the Human Development Indicator (HDI), disproportionately disadvantage women. As a consequence, much of the research using the HDI as a dependent variable has produced misleading conclusions about the effects of macroeconomic processes on the well-being of people in developing countries. I also discuss the theoretical implications of my findings for the dominant theories of global inequality which assume macroeconomic structures are gender neutral.

The second chapter, *The Dark Side of Economic Development: A Cross-National Quantitative Study of Structural Disarticulation and Women's Well-Being in Developing Countries* builds upon the above study by identifying the mechanisms driving the gendered impacts of economic globalization. This chapter identifies the contradictory effects of economic growth on women's well-being in developing countries by testing the predictive power of "structural disarticulation," a conceptual device that explains how global capital structures the

economies of developing countries. The results show that economic development benefits women's well-being, yet these very processes may create a disarticulated economy which is detrimental to women's well-being. Because the concept of structural disarticulation does not adequately explain how a disarticulated economy may disproportionately disadvantage women, relative to men, I argue for the utility of socialist feminist theory. Taken together, structural disarticulation and socialist feminism provide the building blocks for a more theoretically sophisticated understanding of the impact of economic globalization upon women.

The third chapter, *Exploring Patriarchy's Response to Global Capital through Sex Differences in Labor Force Participation: A Quantitative, Cross-National Study Of Developing Countries,* examines how the macroeconomic processes of global trade and finance interact with regional levels of patriarchy to structure women's and men's labor force participation rates differently. I place gender relations as my central focus. This has methodological implications which require conceptualizing the world as regions. I argue this conceptualization captures divergent, non-hierarchical processes that structure global relations between nations, and it captures patriarchal variations that influence gender relations. This conceptualization differs from most macro-comparative research which views the world hierarchically by level of economic development or world-system position and structures the analyses as such. The results of this study show that global trade and finance interact at the regional level to create differences in the labor force participation rates of women and men in developing countries.

Objective 2: Socialist feminism theory provides insights into how gender relations are a primary mechanism of global inequality.

The first chapter, *Are Macroeconomic Structures Gendered? A Cross-National, Quantitative Study on "Human" Well-Being in Developing Countries* sets the stage for a more

direct discussion of socialist feminism addressed in the other two chapters of this dissertation. I argue that feminist research on global inequality has been marginalized by mainstream macro-comparative research on global inequality. I identify four primary reasons for this marginalization: 1) a masculinist bias; 2) epistemological and methodological differences; 3) economic explanations; and 4) the ghettoization of women's issues into the area of gender studies. I empirically show how neglecting gender leads to misleading conclusions. I argue a dialogue between the mainstream global inequality theories and socialist feminism is necessary in order to obtain a more nuanced understanding of the processes driving global inequality.

The second article, *The Dark Side of Economic Development: A Cross-National Quantitative Study of Structural Disarticulation and Women's Well-Being in Developing Countries*, builds upon the previous study by showing how socialist feminism provides important insights into the gender-neutral concept of "structural disarticulation." By itself, structural disarticulation is unable to provide an adequate account for why, in some contexts, economic development may benefit women's well-being relative to men, while in other contexts economic development may be detrimental to women's well-being, relative to men. Socialist feminism provides useful insights into this gendered contradiction of global capital by explaining how the effects of economic development and structural disarticulation are mediated by patriarchal attitudes. As a consequence, a deeper explanation is provided into why economic development benefits women's well-being, relative to men's in developing countries, but a disarticulated economy may increase gender inequality.

The third article, *Exploring Patriarchy's Response to Global Capital through Sex Differences in Labor Force Participation: A Quantitative, Cross-National Study Of Developing Countries,* builds upon the previous two studies by examining the methodological implications

of a socialist feminist perspective on global inequality, in relation to women's and men's labor force participation rates. Consistent with socialist feminism, gender relations are the focus of this study and as a consequence I argue macro-comparative research should conceptualize the world as regions to better capture variations in patriarchy. This focus contrasts with the hierarchical focus of most macro-comparative research on global inequality, which conceptualizes the world in terms of level of economic development or position in the world-system. The findings support a theoretical argument first made in the second study of this dissertation ("The Dark Side…"): that capitalism and patriarchy are independent and contradictory processes. I elaborate upon this theoretical argument by arguing that placing gender relations as the central focus is necessary to better identify how global capital interacts with patriarchy in a given social context that may, or may not, increase women's equality relative to men.

IMPLICATIONS OF THIS DISSERTATION FOR FUTURE RESEARCH

This dissertation has both theoretical and methodological implications. The primary theoretical implication arises from my argument that socialist feminist theory has the potential to make important contributions to macro-level research on global inequality. As a consequence, methodological implications arise due to placing gender relations as the central analytical focus. I show how a regional conceptualization of the world provides a more nuanced understanding into global inequality processes.

Theoretical Contributions of Socialist Feminism to Global Inequality Research

This dissertation shows some of the important contributions socialist feminism can make to macro-comparative global inequality research. Little macro-level, quantitative research using socialist feminism has been done, largely because feminist studies tends to marginalize socialist

123

feminism because of its macro-level orientation which is at odds with the micro-level orientation favored by many feminist researchers. These researchers are often deeply critical of macro-level theory because it tends to obscure critical differences that exist along the intersections of gender, social class, race, and nationality, and other differences. I argue the macro-level orientation of socialist feminism should not be so readily dismissed for several reasons.

First, a macro-level orientation is necessary in order to understand the structures shaping the opportunities available to women in the local contexts in which women live their daily lives. Dismissing macro-level research due to its totalizing tendency is misguided because macro-level research enables researchers to understand why certain opportunities may, or may not, present themselves to women living in developing countries. This understanding is also necessary for creating more effective resistance strategies aimed at improving women's daily lives in the developing world.

Second, the critique that macro-level theory and research obscures racial, ethnic, and other types of diversity is valid. However, women of different races and classes do share a commonality in their participation within the structures of capitalism, as noted by others researchers promoting socialist feminism (e.g. Mohanty 2003; Smith 2004; Hartsock 2004). Macro-level research creates a broad narrative which locates the numerous micro-level findings in contemporary history where global restructuring is dramatically changing many aspects of the world. Locating women within the structures of global capitalism provides insights as to the links and potential for solidarity between women workers across the borders of nation-states (Mohanty 2003).

Third, socialist feminism is not exclusively a macro-level in its orientation. A strand of socialist feminism, standpoint theory, is micro-level. Standpoint theory offers a decentered and

intersectional theoretical framework to understand how different epistemologies and ontologies provide insights into sources of oppression and exploitation. Researchers should build upon standpoint theory by using it to inform macro-level research, such as employing various methodological strategies (discussed in more detail below) in order to better understand how women's lives in a particular context provides a particular and privileged vantage point that can ground a critique of global capital and patriarchal structures.

Fourth, socialist feminism provides a theoretical framework of political strategy for liberation movements. In order to create resistant subjects that subvert exploitative structures, it is first necessary to identify the nature of these structures. According to socialist feminism, these structures are capitalism and patriarchy. Postmodernism clearly provides an important critique of socialist feminism, but postmodernism feminism cannot inform a strategy of political action that provides answers and solutions to women's development issues. Postmodernism's focus upon difference is fundamentally at odds with creating a unifying narrative of exploitation and oppression necessary to solve women's development issues in the developing world (Marchand and Parpart 1995). Appealing to universal themes is important in engaging repressive governmental regimes, lending legitimacy to a particular political struggle, and provide a foundation for creating and strengthening ties with similar groups abroad (Marchand and Parpart 1995; Nzomo 1995).

Socialist feminism must address certain weaknesses. Researchers must make a conscious effort to recognize and accept diverse epistemologies and ontologies. Researchers must consciously promote an empathetic understanding based on situated knowledge of women's everyday lives and to create open dialogue that empowers women to articulate their own needs

and agendas without seeing women in developing countries as disempowered victims in need of salvation by Western experts.

Methodological Contributions of Socialist Feminism to Global Inequality Research

Methodological implications arise from theory. Because socialist feminism is generally a macro-level theory, it must acknowledge the critiques of postmodernism and address these critiques when possible. Two critiques are noteworthy. First, macro-level research obscures the variations of women's lives based on intersections of difference such as race, ethnicity, social class, and nationality. Second, this obfuscation contributes to the vision of women in developing countries as being victims who are unable and/or unwilling to enter the modern world and fit into Western and neo-colonial gender stereotypes (Parpart and Marchand 1995).

Methodologically, socialist feminism may address these critiques in the following manner. One approach is to conceptualize the developing world by region. The third chapter of this dissertation demonstrates how region may be used to create an interaction term with the explanatory variables in order to gain a more nuanced understanding of macro-level processes. Researchers may also use meso-level units of analyses, such as examining countries within a particular region rather than examining the entire developing world. The availability of quality data continues to present a challenge to both macro- and meso-level quantitative research. However, for some regions and countries it may be possible to compare segments of the population, categorized by race and ethnicity, social class, and other differences in order to gain a more nuanced understanding as to how the processes of global capital accumulation and patriarchy are impacting women along the various intersections of difference within a region or country.

Another approach is to use case study research to contextualize macro-level findings. The second and third chapters of this dissertation demonstrate this approach. Macro-level research occurs at a very high level of abstraction and, as discussed above, obscures important variations. Case-study research provides concrete examples of how otherwise abstract social structures influence and organize everyday life; how these structures influence the lives of women differently based upon their race, ethnicity, social class, nationality, and other categories of difference; and the actions women are taking to subvert the exploitative and oppressive structures of global capital and patriarchy.

Considerations for measuring patriarchy in cross-national research

The three substantive chapters of this dissertation demonstrate and grapple with problems arising from measuring patriarchy in cross-national research. As discussed within these chapters, using more precise measures of patriarchy such as condom use or abortion rates is unfeasible due to high levels of missing data, particularly for countries in Sub-Sahara Africa. As a consequence, researchers typically use measures of religion or region for patriarchy for cross-national research.

Until more data becomes available on more precise, national-level indicators of patriarchy, identifying an appropriate measure of patriarchy will continue to challenge macro-comparative researchers examining gender issues. I believe that, given data limitations, the structure of the analyses will ultimately dictate which measure to use. This belief influenced measurement decisions used in Chapters 2 and 3, which use religion as a measure of patriarchy. This decision is primarily due to multicollinearity issues arising from the structure of the analyses, both which test the predictive ability of various independent variables identified by previous research.

Chapter 4 deviates from Chapters 2 and 3 in that it uses region to construct interaction terms in an attempt to address the dilemmas of measuring patriarchy in cross-national research. As in Chapters 2 and 3, however, this decision was influenced by the exploratory nature of the analyses in Chapter 4, which allows for a degree of methodological innovation. One contribution of Chapter 4 is that future research can continue to assess the utility of measuring patriarchy as articulated in this chapter.

CONCLUSION

Sociology is a multi-paradigmatic discipline. The use of multiple paradigms arises out of necessity given the complexity of the social world. The multi-paradigmatic nature of sociology serves as reminder that all theoretical perspectives have weaknesses and strengths. However, some theoretical perspectives provide particularly powerful explanations of social phenomenon. This dissertation empirically shows and theoretically argues that socialist feminism provides important, alternative insights to mainstream macro-comparative theory and research on global inequality.

BIBLIOGRAPHY

Amin, Samir. 1974. *Accumulation on a World Scale: A Critique of the Theory of Underdevelopment.* Vol. 1. Translated by B. Pearce. New York: Monthly Review Press.

——. 1976. *Unequal Exchange: An Essay on the Social Formations of Peripheral Capitalism.* Translated by Brian Pearce. New York: Monthly Review Press.

——. 1982. "The Disarticulation of Economy within Developing Societies." Pp. 205-209 in *Introduction to the Sociology of "Developing Societies,"* edited by H. Alavi and T. Shanin. New York: Monthly Review Press.

——. 2001. "Africa: Living on the Fringe" *Monthly Review* 53(10):41-50.

Arrow, Kenneth J. 1997. "The Benefits of Education and the Formation of Preferences." Pp. 11-16 in *The Social Benefits of Education*, edited by J.R. Behrman and N. Stacy. Ann Arbor, MI: University of Michigan Press.

Aslanbeigui, Nahid and Gale Summerfield. 2001. "Risk, Gender, and Development in the 21st Century." *International Journal of Politics, Culture and Society* 15(1):7-26.

Assaad, Ragui and Melanie Arntz. 2005. "Constrained Geographical Mobility and Gendered Labor Market Outcomes Under Structural Adjustment: Evidence From Egypt." *World Development* 33(3):431-454.

Babb, Sarah. 2005. "The Social Consequences of Structural Adjustment: Recent Evidence and Current Debates." *Annual Review of Sociology* 31:199-222.

Bailey, Barbara and Heather Ricketts. 2003. "Gender Vulnerabilities in Caribbean Labour Markets and Decent Work Provisions." *Social and Economic Studies* 52(4):49-81.

Bardhan, Kalpana and Stephan Klasen. 2000. "On UNDP's Revisions to the Gender-Related Development Index." *Journal of Human Development* 1(2):191-195.

Barrientos, Stephanie. 1997. "The Hidden Ingredient: Female Labour in Chilean Fruit Exports." *Bulletin of Latin American Research* 16(1):71-81.

Benería, Lourdes. 1995. "Toward a Greater Integration of Gender in Economics." *World Development* 23(11):1839-1850.

Bertranou, Fabio M. 2001. "Pension Reform and Gender Gaps in Latin America: What are the Policy Options?" *World Development* 29(5):911-923.

Bornschier, Volker and Christopher Chase-Dunn. 1985. *Transnational Corporations and Underdevelopment.* New York: Praeger.

Bornschier, Volker, Mark Herkenrath and Claudia Konig. 2005. "The Double Dividend of Expanding Education for Development." *International Sociology* 20:506-529.

Bradshaw, York W. and Jie Huang. 1991. "Intensifying Global Dependency: Foreign Debt, Structural Adjustment, and Third World Underdevelopment." *The Sociological Quarterly*. 32(3):321-342.

Bradshaw, York W. and Ana-Maria Wahl. 1991. "Foreign Debt Expansion, the International Monetary Fund, and Regional Variation in Third World Poverty." *International Studies Quarterly* 35:251-272.

Breedlove, William L. and J. Michael Armer 1997. "Dependency, Techno-Economic Heritage, Disarticulation, and Social Development in Less Developed Nations." *Sociological Perspectives* 40(4):661-680.

Brickner, Rachel K. 2006. "Mexican Union Women and the Social Construction of Women's Labor Rights." *Latin American Perspectives* 33:55-74.

Buchmann, Claudia and Emily Hannum. 2001. "Education and Stratification in Developing Countries: A Review of Theories and Research." *Annual Review of Sociology* 27:77-102.

Çağatay, Nilüfer, and Şule Özler. 1995. "Feminization of the Labor Force: The Effects of Long-Term Development and Structural Adjustment." *World Development* 23(11):1883-1894.

Çağatay, Nilüfer. 2003. "Gender Budgets and Beyond: Feminist Fiscal Policy in the Context of Globalization." *Gender and Development* 11(1):15-24.

Cameron, Lisa A., J. Malcolm Dowling, and Christopher Worswick. 2001. "Education and Labor Market Participation of Women in Asia: Evidence from Five Countries." *Economic Development and Cultural Change* 49(3):459-477.

Card, David. 1999. "The Causal Effects on Education on Earnings." Pp. 1802-1859 in *Handbook of Labor Economics* Vol. 3, edited by O. Ashenfelter and D. Card, 1802-1859. Amsterdam: Elsevier Science.

Carter, Marion W. 2004. "Gender and Community Context: An Analysis of Husbands' Household Authority in Rural Guatemala." *Sociological Forum* 19(4):633-652.

Central Intelligence Agency (CIA). 2004. *World Factbook.* Retrieved June 3, 2007 (http://www.cia.gov/library/publications/the-world-factbook/index.html).

Chase-Dunn, Christopher. 1975. "The Effects of International Economic Dependence on Development and Inequality: A Cross-National Study." *American Sociological Review* (40)720-738.

Chibber, Vivek. 2002. "Bureaucratic Rationality and the Developmental State." *American Journal of Sociology* 4:951-989.

Clisby, Suzanne. 2005. "Gender Mainstreaming or just more Male-Streaming? Experiences of Popular Participation in Bolivia." *Gender and Development* 13(2):23-35.

Daly, Mary. 2005. "Gender Mainstreaming in Theory and Practice." *Social Politics* 12(3):433-450.

Davies, Antony and Gary Quinlivan. 2006. "A Panel Data Analysis of the Impact of Trade on Human Development." *The Journal of Socio-Economics* 35:868-876.

DeJanvry, Alain. 1981. *The Agrarian Question and Reformism in Latin America*. Baltimore, MD: Johns Hopkins University Press.

De Janvry, Alain, and Elisabeth Sadoulet. 1982. "Social Articulation as a Condition for Equitable Growth." *Journal of Development Economics*. Volume 13.

Delacroix, Jacques and Charles C. Ragin. 1981. "Structural Blockage: A Cross-National Study of Economic Dependency, State Efficacy, and Underdevelopment." *American Journal of Sociology* 86(6):1311-1347.

Desai, Vandana. 2005. "NGOs, Gender Mainstreaming, and Urban Poor Communities in Mumbai." *Gender and Development* 13(2):90-98.

Dijkstra, A. Geske. 2002. "Revisiting UNDP's GDI and GEM: Toward an Alternative." *Social Indicators Research* 57(3):301-338.

Dolan, Catherine S, 2001. "The 'Good Wife': Struggles over Resources in the Kenyan Horticultural Sector." *The Journal of Development Studies* 37(3):39-70.

Dolan, Catherine S. 2005. "Benevolent Intent? The Development Encounter in Kenya's Horticulture Industry." *Journal of Asian and African Studies* 40:411-437.

Durano, Marina Fe B. 1999. *Gender Issues in International Trade*. Retrieved June 3, 2007 (http://www.igtn.org/page/190).

Eisenstein, Zillah. 1979. "Developing a Theory of Capitalist Patriarchy and Socialist Feminism." Pp. 5-40 in *Capitalist Patriarchy and the Case for Socialist Feminism*, edited by Z.R. Eisenstein. New York: Monthly Review Press.

Eisenstein, Zillah. 1981. "Reform and/or Revolution: Towards a Unified Women's Movement." Pp. 339-362 in *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism*, edited by L. Sargent. Boston, MA: South End Press.

Eisenstein, Zillah. 1996. *Hatreds: Racialized and Sexualized Conflicts in the 21st Century.* New York: Routeledge.

Elson, Diane. 1995. "Gender Awareness in Modeling Structural Adjustment." *World Development.* 23(11):1851-1868.

––––. 1999. "Labor Markets as Gendered Institutions: Equality, Efficiency and Empowerment Issues." *World Development* 27(3):611-627.

Epstein, Cynthia Fuchs. 2007. "Great Divides: The Cultural, Cognitive, and Social Bases of the Global Subordination of Women." *American Sociological Review* 72:1-22.

Eschle, Catherine. 2004. "Feminist Studies of Globalisation: Beyond Gender, Beyond Economism?" *Global Society* 18(2):97-125.

Evans, Peter. 1995. *Embedded Autonomy: States and Industrial Transformation.* Princeton, NJ: Princeton University Press.

Evans, Peter and James E. Rauch. 1999. "Bureaucracy and Growth: A Cross-National Analysis of the Effects of 'Weberian' State Structures on Economic Growth." *American Sociological Review* 64(5):748-765.

Fernandez Kelly, Patricia. 1997. "Gender and the Paradoxes of Development." *International Journal of Sociology and Social Policy* 17(11/12):162-173.

Fernandez Kelly, Patricia and Diane Wolf. 2001. "A Dialogue on Globalization." *Signs* 26(4):1243-1314.

Finkel, Steven E. 1995. *Causal Analysis with Panel Data.* Thousand Oaks, CA: Sage.

Fish, Jennifer. 2006. "Engendering Democracy: Domestic Labour and Coalition-Building in South Africa." *Journal of South African Studies* 32(1):107-127.

Floro, Maria Sagrario. 1995. "Economic Restructuring, Gender and the Allocation of Time." *World Development* 23(11):1913-1929.

Fontana, Marzia and Adrian Wood. 2000. "Modeling the Effects of Trade on Women, at Work and at Home." *World Development* 28(7):1173-1190.

Frank, Dana. 2005. "Women's Power is Union Power: Banana Worker Unions in Latin America." *New Labor Forum* 14(2):85-94.

Freedom House.2004. *Freedom in the World 2004.* Retrieved Jun 3, 2007 (http://www.freedomhouse.org).

Frey, R. Scott and Ali Al-Roumi. 1999. "Political Democracy and the Physical Quality of Life: The Cross-National Evidence." *Social Indicators Research* 47:73-97.

Frey, R. Scott and Carolyn Field. 2000. "The Determinants of Infant Mortality in the Less Developed Countries: A Cross-National Test of Five Theories." *Social Indicators Research* 52(3):215-234.

Fryer, David and Désiré Vencatachellum. 2005. "Returns to Education in South Africa: Evidence from the Machibisa Township." *African Development Review* 17(3):513-535.

Fuentes, Ricardo and Andres Montes. 2004. "Mexico and the Millennium Development Goals at the Subnational Level." *Journal of Human Development* 5(1):97-120.

Fuller, Bruce. 1991. *Growing Up Modern: The Western State Builds Third World Schools.* New York: Routledge.

Gallagher, Sally K., Randall G. Stokes, and Andy B. Anderson. 1996. "Economic Disarticulation and Fertility in Less Developed Nations." *The Sociological Quarterly*. 37(2):227-244.

Ganguly-Scrase, Ruchira. 2003. "Paradoxes of Globalization, Liberalization, and Gender Equality: The Worldview of the Lower Middle Class in West Bengal, India." *Gender and Society* 17(4):544-566.

García-Aracil, Adela and Carolyn Winter. 2005. "Gender and Ethnicity Differentials in School Attainment and Labor Market Earnings In Ecuador." *World Development* 34(2):289-307.

Gawaya, Rose and Rosemary Semafumu Mukasa. 2005. "The African Women's Protocol: A New Dimension for Women's Rights in Africa." *Gender and Development* 13(3):42-50.

Gereffi, Gary and Stephanie Fonda. 1992. "Regional Paths of Development." *Annual Review of Sociology*. 18:419-448.

Gibbs, Tim. 2005. "'Union Boys in Caps Leading Factory Girls Astray?'The Politics of Labour Reform in Lesotho's 'Feminised' Garment Industry." *Journal of South African Studies* 31(1):95-115.

Gideon, Jasmine. 2006. "Accessing Economic and Social Rights under Neoliberalism: Gender and Rights in Chile." *Third World Quarterly* 27(7):1269-1283.

Gills, Dong-Sook S. 2002. "Globalization of Production and Women in Asia." *The ANNALS of the American Academy of Political and Social Science* 581:106-120.

Glasberg, Davita Silfen and Kathryn B. Ward. 1993. "Foreign Debt and Economic Growth in the World System." Social Science Quarterly 74(4):703-720.

Gray, Mark M., Miki Caul Kittilson and Wayne Sandholtz. 2006. "Women and Globalization: A Study of 180 Countries, 1975-2000. *International Organization*. 60:293-333.

Haghighat, Elhum. 2005. "Neopatriarchy, Islam, and Female Labour Force Participation: A Reconsideration." *The International Journal of Sociology and Social Policy* 25(10/11):84-105.

Halder, Shantana R. and Paul Mosley. 2004. "Working with the Ultra-Poor: Learning From BRAC Experiences." *Journal of International Development* 16:387-406.

Hames, Mary. 2006. "Rights and Realities: Limits to Women's Rights and Citizenship After 10 Years of Democracy in South Africa." *Third World Quarterly* 27(7):1313-1327.

Hartmann, Heidi. 1979. "Capitalism, Patriarchy, and Job Segregation by Sex." Pp. 206-247 in *Capitalist Patriarchy and the Case for Socialist Feminism*, edited by Z.R. Eisenstein. New York: Monthly Review Press.

Hartmann, Heidi. 1981. "The Unhappy Marriage of Marxism and Feminism: Towards a More Progressive Union." Pp. 1-42 in *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism*, edited by L. Sargent. Boston, MA: South End Press.

Hassim, Shireen. 2005. "Turning Gender Rights into Entitlements: Women and Welfare Provision in Postapartheid South Africa." *Social Research*. 72(3):621-646.

Hite, Amy Bellone and Jocelyn S. Viterna. 2005. "Gender Class in Latin America: How Women Effect and Experience Change in the Class Structure." *Latin American Research Review* 40(2):50-82.

Howes, Candace and Ajit Singh 1995. "Long-Term Trends in the World Economy: The Gender Dimension." *World Development* 23(11):1895-1911.

Huang, Jie. 1995. "Structural Disarticulation and Third World Human Development." *International Journal of Comparative Sociology* 3/4:164-183.

International Labour Office(ILO). 2007. *Equality at Work: Tackling the Challenges*. Geneva: International Labour Office.

International Monetary Fund (IMF). 2007. *World Economic Outlook April 2007: Spillover and Cycles in the Global Economy*. Washington DC.: International Monetary Fund.

Iyigun, Murat F. and Ann L. Owen. 1999. "Entrepreneurs, Professionals and Growth." *Journal of Economic Growth* 4:213-232.

Jacobs, Susie. 2004. "Livelihoods, Security and Needs: Gender Relations and Land Reform in South Africa." *Journal of International Women's Studies* 6(1):34-40.

Jaccard, James and Robert Turrisi. 2003. *Interaction Effects in Multiple Regression*. Second Edition. Series: Quantitative Applications in the Social Sciences. Thousand Oaks, CA: Sage Publications.

Jackman, Mary R. 1994. *The Velvet Glove: Paternalism and Conflict in Gender, Class, and Race Relations.* Berkeley, CA: University of California Press.

Jaffee, David and Randall Stokes. 1985. "Foreign Investment and Trade Dependence." *The Sociological Quarterly* 27(4):533-546.

Jaggar, Alison M. 1983. *Feminist Politics and Human Nature*. Totown, New Jersey: Rowman and Allanheld.

Jewkes, Rachel, Loveday Penn- Kekana, and Hetty Rose-Junius. 2005. "'If They Rape Me, I Can't Blame Them': Reflections on Gender in the Social Context of Child Rape in South Africa and Namibia." *Social Science and Medicine* 61:1809-1820.

Kampwirth, Karen. 2006. "Resisting the Feminist Threat: Antifeminist Politics in Post-Sandinista Nicaragua." *NWSA Journal* 18(2):73-100.

Kay, Cristóbal. 2006. "Rural Poverty and Development Strategies in Latin America." *Journal of Agrarian Change* 6(4):455-508.

Kenworthy, Lane and Melissa Malami. 1999. "Gender Inequality in Political Representation: A Worldwide Comparative Analysis." *Social Forces* 78:235-268.

Klomegah, Roger. 2006. "Spousal Communication, Power, and Contraceptive Use in Burkina Faso, West Africa." *Marriage and Family Review* 40(2-3):89-105.

Lai, Dejian. 2003. "Principal Component Analysis on Human Development Indicators of China." *Social Indicators Research* 61:319-330.

Lim, Joseph Y. 2000. "The Effects of the East Asian Crisis on the Employment of Women and Men: The Phillipine Case." *World Development* 28(7):1285-1306.

Lind, Niels. 2004. "Values Reflected in the Human Development Index. *Social Indicators Index* 66:283-293.

London, Bruce and Bruce A. Williams. 1988. "Multinational Corporate Penetration, Protest, and Basic Needs Provision in Non-Core Nations: A Cross-National Analysis." *Social Forces* 66(3):747-733.

——. 1990. "National Politics, International Dependency, and Basic Needs Provision: A Cross-National Analysis." *Social Forces* 69(2):565-584.

Lovell, Peggy A. 2006. "Race, Gender, and Work in São Paolo, Brazil, 1960-2000." *Latin America Research Review* 41(3):63-87.

Mabala, Richard. 2006. "From HIV Prevention to HIV Protection: Addressing the Vulnerability of Girls and Young Women in Urban Areas." *Environment and Urbanization* 18(2):407-432.

Marchand, Marianne H. And Jane L. Parpart. 1995. "The Relevance of Postmodern Feminism for Gender and Development." Pp. 127-130 in *Feminism/Postmodern Development*, edited by M.H. Marchand and J.L. Parpart. New York: Routledge.

Massey, Douglas S., Magaly R. Sanchez and Jere R. Behrman. 2006. "Of Myths and Markets." *The Annals of the American Academy of Political and Social Science.* 606:8-31.

McIntosh, William Alex and John K. Thomas. 2004. "Economic and Other Societal Determinants of the Prevalence of HIV: A Test of Competing Hypotheses." *Sociological Quarterly* 45(2):303-324.

Meer, Shamim. 2005." Freedom for Women: Mainstreaming Gender in the South African Liberation Struggle and Beyond." *Gender and Development* 13(2):36-45.

Mendez, Jennifer Bickham. 2005. *From the Revolution to the Maquiladoras: Gender, Labor, and Globalization in Nicaragua.* Durham, NC: Duke University Press.

Meyer, Lisa B. 2003. "Economic Globalizaiton and Women's Status in the Labor Market: A Cross-National Investigation of Occupational Sex Segregation and Inequality." *Sociological Quarterly.* 44(3): 351-383.

——. 2006. "Trade Liberalization and Women's Integration into National Labor Markets: A Cross-Country Analysis." *Social Indicators Research.* 75:83-121.

Misra, Joya. 2000. "Gender and the World-System: Engaging the Feminist Literature on Development." Pp. 105-127 in *A World-Systems Reader: New Perspectives on Gender, Urbanism, Cultures, Indigenous Peoples, and Ecology*, edited by T.D. Hall. New York: Rowman and Littlefield.

Moffett, Helen. 2996. "These Women, They Force Us to Rape Them': Rape as a Narrative of Social Control in Post-Apartheid South Africa." *Journal of South African Studies* 32(1):129-144.

Mogford, Liz. 2004. "Structural Determinants of Child Mortality in Sub-Saharan Africa: A Cross-National Study of Economic and Social Influences from 1970 to 1997. *Social Biology* 51(3/4):94-120.

Moghadam, Valentine M. 2005. "Women's Economic Participation in the Middle East: What Difference has the Neoliberal Policy Turn Made?" *Journal of Middle East Women's Studies* 1(1):110-146.

Mohanty, Chandra Talpade. 2003. *Feminism Without Borders: Decolonizing Theory, Practicing Solidarity*. Durham NC: Duke University Press.

Moon, Bruce E. and William J. Dixon 1985. "Politics, the State, and Basic Human Needs: A Cross-National Study." *American Journal of Political Science* 29:661-694.

Moore, Spencer, Ana C. Teixeira, and Alan Shiell. 2006. "The health of nations in a global context: Trade, global stratification, and infant mortality rates." *Social Science and Medicine* 63:165-178.

Naudé, Willem and Philip Seramaga-Zake. 2001. "An Analysis of the Determinants of Labour Force Participation and Unemployment in South Africa's North-West Province." *Development Southern Africa* 18(3):505-514.

Nussbaum, Martha C. 2004. "Women's Education: A Global Challenge." *Signs* 29(2):325-355.

Nyamu-Musembi, Celestine. 2007. "Ruling out Gender Equality? The Post-Cold War Rule of Law Agenda in Sub-Saharan Africa." *Third World Quarterly* 27(7):1193-1207.

Nzomo, Maria. 1995. "Women and Democratization Struggles in Africa: What relevance to postmodern discourse?" Pp. 131-141 in *Feminism/Postmodern Development*, edited by M.H. Marchand and J.L. Parpart. New York: Routledge.

O'Sullivan, Lucia F., Abigail Harrison, Robert Morrell, Aliza Monroe-Wise and Muriel Kubeka. 2006. "Gender Dynamics in the Primary Sexual Relationships of Young Rural South African Women and Men." *Culture, Health and Sexuality* 8(2):99-113.

Onah, Hyacinth Eze, Lawrence C. Ikeako and Gabriel C. Iloabachie. 2006. "Factors Associated with the Used of Maternity Services in Enugu, Southeastern Nigeria." *Social Science and Medicine* 63:1870-1878.

Parpart, Jane L. and Marianne H. Marchand. 1995. "Exploding the Canon: An Introduction/ Conclusion." Pp. 1-22 in *Feminism/Postmodern Development*, edited by M.H. Marchand and J.L. Parpart. New York: Routledge.

Pascall, Gillian and Jane Lewis. 2004. "Emerging Gender Regimes and Policies for Gender Equality in a Wider Europe." *Journal of Social Policy* 33(3):373-394.

Paxton, Pamela. 1997. "Women in National Legislatures: A Cross-National Analysis." *Social Science Research* 26:442-464.

Paxton, Pamela and Sheri Kunovich. 2003. "Women's Political Representation: The Importance of Ideology." *Social Forces*. 82:1.

Paxton, Pamela and Melanie M. Hughes. 2007. *Women, Politics, and Power: A Global Perpsective*. Thousand Oaks, CA: Pine Forge Press.

Pillai, Vijayan K. and Rashmi Gupta. 2006. "Cross-national Analysis of a Model of Reproductive Health in Developing Countries." *Social Science Research* 35:210-227.

Pitanguy, Jacqueline. 2002. "Bridging the Local and the Global: Feminism in Brazil and the International Human Rights Agenda." *Social Research Review* 69(3):805-820.

Plaza, Orlando and Nelly P. Stromquist. 2006. "Consequences of Structural Adjustment on Economic and Social Domains: Two Decades in the Life of Peru." *The Annals of the American Academy of Political and Social Science.* 606:95-115.

Preibisch, Kerry L., Glady Rivera Herrejon and Steve L. Wiggins. "Defending Food Security in a Free-Market Economy: The Gendered Dimensions of Restructuring in Rural Mexico." *Human Organization* 61(1):68-76.

Pyle, Jean L. and Kathryn B. Ward. 2003. "Recasting our Understanding of Gender and Work During Global Restructuring." *International Sociology*. 18:461-489.

Ramirez-Valles, Jesus. 2003. "Translocal and Gender Dimensions of Frame Alignment: Community Mobilization and Recruitment Processes Among Women Community Health Workers in Mexico." *Critical Public Health* 13(3):207-230.

Ragin, Charles C. and York W. Bradshaw. 1992. "International Economic Dependence and Human Misery, 1938-1980: A Global Perspective." *Sociological Perspectives* 35(2):217-247.

Ray, Sunanda and Farai Madzimbamuto. 2006. "The HIV Epidemic in Zimbabwe – The Penalty of Silence." *The Round Table* 95(384):219-238.

Rios, Palmiro N. 1990. "Export-oriented Industrialization and the Demand for Female Labor: Puerto Rican Women in the Manufacturing Sector, 1952-1980." *Gender and Society* 4(3):321-337.

Roberts, Wade T. 2005. "The Uneven Globalization of Civil Society Organizations and the Consequences of Cross-National Disparities in Human Development." *International Journal for Cross-National Disparities in Human Development*. 25:118-144.

Rudel, Thomas, Diane Bates and Susan Golbeck. 2006. "How Do Poor, Remote Rural Places Get child Care Centers? Patriarchy, Out-migration, and Political Opportunities in the Ecuadorian Amazon." *Human Organization* 65(1):1-7.

Saktanber, Ayse. 2006. "Women and the Iconography of Fear: Islamization in Post-Islamist Turkey." *Signs* 32(1):21-31.

Salzinger, Leslie. 2002. "Making Fantasies Real: Producing Women and Men on the Maquila Shop Floor." Pp. 197-206 in *The Socialist Feminist Project: A Contemporary Reader in Theory and Politics*, edited by N. Holmstrom. New York: Monthly Review Press.

Sato, Chizu. 2004. "Rethinking Adult Literacy Training: An Analysis Through a Third World Feminist Perspective." *Women Studies Quarterly* 32 (1/2):73-89.

Sekhon, Joti. 2006. "Engendering Grassroots Democracy: Research, Training, and Networking for Women in Local Self-Governance in India." *NWSA Journal*: 18(2):101-122.

Seguino, Stephanie. 1997. "Export-Led Growth and the Persistence of Gender Inequality in the Newly Industrialized Countries." Pp. 11-33 in *Economic Dimensions of Gender Inequality: A Global Perspective*, edited by J.M. Rives and M. Yousefi. Westport, CT: Praeger.

Serumaga-Zake, Philip and Willem A. Naudé. 2003. "Determinants of Labour Force Participation in the North West Province of South Africa." *Development of Southern Africa* 20(4): 505-514.

Sharma, Basu and Gani, Azmat. (2004) 'The Effects of Foreign Direct Investment on Human Development', *Global Economy Journal* 4(2):9-25.

Shen, Ce, and John B. Williamson 1997. "Child Mortality, Women's Status, Economic Dependency, and State Strength: A Cross-National Study of Less Developed Countries." *Social Forces* 76(2):667-700.

——. 1999. "Maternal Mortality, Women's Status, and Economic Dependency in Less Developed Countries: A Cross-National Analysis." *Social Science and Medicine* 49:197-214.

——. 2001. "Accounting for Cross-National Differences in Infant Mortality Decline (1965-1991) Among Less Developed Countries: Effects of Women's Status, Economic Dependency, and State Strength." *Social Indicators Research* 53(3):257-288.

Standing, Guy. 1999. "Global Feminization Through Flexible Labor: A Theme Revisited." *World Development* 27(3):583-602.

Stephen, Lynn. 2005. "Women's Weaving Cooperatives in Oaxaca: An Indigenous Response to Neoliberalism." *Critique of Anthropology* 25:253-278.

Stokes, Randall G. and Andy B. Anderson. 1990. "Disarticulation and Human Welfare in Less Developed Countries." *American Sociological Review* 55:63-74.

Stromquist: Nelly P. 2001. "What Poverty Does to Girls' Education: The Intersection of Class, Gender, and Policy in Latin America." *Journal of Comparative Education* 31(1):39-56.

Tallontire, Anne, Catherine Dolan, Sally Smith, and Stephanie Barrientos. 2005. "Reaching the Marginalized? Gender Value Chains and Ethical Trade in African Horticulture." *Development in Practice* 15(3/4):559-571.

Teubal, Miguel. 2001. "Structural Adjustment and Social Disarticulation: The Case of Argentina." *Science and Society* 64(4):460-488.

Tiano, Susan. 1994. *Patriarchy on the Line: Labor, Gender, and Ideology in the Mexican Maquila Industry.* Philadelphia: Temple University Press.

Tisdell, Clem, Kartik Roy and Ananda Ghose. 2001."A Critical Note on UNDP's Gender Inequality Indices." *Journal of Contemporary Asia* 31(3):385-399.

Truong, Thanh-Dam. 1999. "The Underbelly of the Tiger: Gender and the Demystification of the Asian Miracle." *Review of International Political Economy* 6(2):133-165.

Tsai, Ming-Chang. 1999. "State Power, State Embeddedness, and National Development in Less Developed Countries: A Cross-National Analysis." *Studies in Comparative International Development* 33(4):66-88.

Tsai, Ming-Chang. 2006. "Does Political Democracy Enhance Human Development in Developing Countries?" *American Journal of Economics and Sociology* 65(2).

Ulmer, Karin. 2004. "Are Trade Agreements With the EU Beneficial to Women in Africa, The Caribbean, and the Pacific." *Gender and Development* 12(2):53-37.

United Nations(UN). 2007. Convention on the Elimination of All Forms of Discrimination Against Women. Retrieved June 3, 2007 (http://www.un.org/womenwatch/daw/cedaw/states.htm).

United Nations Conference on Trade and Development (UNCTAD). 2006. *World Investment Report 2006 online edition.* New York: United Nations.

United Nations Development Fund for Women (UNIFEM). 2006. *The Story Behind the Numbers: Women and Employment in Central and Eastern Europe and the Western Commonwealth of Independent States.* Slovak Republic: UNIFEM.

United Nations Development Programme (UNDP) 1990. *Human Development Report 1990: Concept and Measurement of Human Development.* New York: United Nations.

––––. 1995. *Human Development Report 1995: Gender and Human Development.* New York: United Nations.

–––. 2006a. *Human Development Report 2006. Beyond Scarcity: Power, Poverty, and the Global Water Crisis*. New York: United Nations.

–––. 2006b. *The Millennium Development Goals Report 2006.* New York: United Nations.

–––. 2006c. *Taking Gender Equality Seriously: Making Progress, Meeting New Challenges.* New York: United Nations.

United Nations Educational Scientific and Cultural Organization (UNESCO). 2002. "Literacy Yes? But When?" *Education Today*. No. 2 (July – September), Retrieved January 4, 2008 (http://portal.unesco.org/education/en/ev.php-URL_ID=3343&URL_DO=DO_TOPIC&URL_SECTION=201.html).

–––. 2003.*Gender and Education for All: The Leap To Equality*. Paris: UNESCO.

–––. 2006. *Synergies Between Formal and Non-formal Education: An Overview of Good Practices*. Paris: UNESCO.

Vanfossen, Beth and Frances Rothstein. 1997. "The Impact of Development, the Commercialization of Agriculture, and Economic Dependency on Women's Participation in Agricultural Production." *International Journal of Sociology and Social Policy* 17(11/12):116-161.

Veenhoven, Ruut. 2005. "Apparent Quality-of-Life in Nations: How Long and Happy People Live." *Social Indicators Research* 71:61-86.

Walker, Cherryl. 2005. "Women, Gender Policy and Land Reform in South Africa." *Politikon* 32(2):297-315.

Ward, Kathryn B. 1984. *Women in the World-System: Its Impact on Status and Fertility*. New York: Praeger.

Waylen, Georgina. 2007. "Women's Mobilization and Gender Outcomes in Transitions to Democracy: The Case of South Africa." *Comparative Political Studies* 40(5):521-546.

Weeks, Kathi. 1998. *Constituting Feminist Subjects*. Ithaca: Cornell University Press.

Weiner, Elaine S. "No (Wo)Man's Land: The Post-Socialist Purgatory of Czech Female Factory Workers." *Social Problems* 52(4):572-592.

Wickrama, K.A.S. and Charles L. Mulford. 1996. "Political Democracy, Economic Development, Disarticulation, and Social Well-Being in Developing Countries." *The Sociological Quarterly* 3:375-390.

Wickrama, K.A.S. and Frederick O. Lorenz. 2002. "Women's Status, Fertility Decline, and Women's Health in Developing Countries: Direct and Indirect Influences of Social Status on Health. *Rural Sociology* 67(2):255-277.

Williamson, John B. and Ulrike Boehmer. 1997. "Female Life Expectancy, Gender Stratification, Health Status and Level of Economic Development: A Cross-National Study of Less Developed Countries." *Social Science and Medicine* 45(2):305-317.

World Bank. 1994. *Enhancing Women's Participation in Economic Development*. New York: World Bank.

——. 2001. *Engendering Development: Through Gender Equality in Rights, Resources, and Voice.* New York: World Bank.

——. 2004. *World Development Indicators* (CD-Rom version). Washington DC: World Bank.

——. 2006. *World Development Report 2006: Equity and Development.* Washington DC: World Bank.

——. 2007. *Global Monitoring Report 2007: Millennium Development Goals: Confronting the Challenges of Gender Equity and Fragile States.* Washington DC: World Bank.

World Health Organization (WHO). 2003. *Engendering' the Millennium Development Goals (MDGs) on Health*. Switzerland: World Health Organization.

Wright, Melissa, W. 2006. *Disposable Women and Other Myths of Global Capitalism*. New York: Taylor and Francis Group.

Wylie, Alison. 2004. "Why Standpoint Matters." Pp. 339-351 in *The Feminist Standpoint Theory Reader: Intellectual and Political Controversies*, edited by S. Harding. New York:Routledge.

Young, Iris. 1981. "Beyond the Unhappy Marriage: A Critique of the Dual Systems Theory." Pp. 43-70 in *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism*, edited by L. Sargent. Boston MA: South End Press.

Young, Frank W. 2001. "Structural Pluralism and Life Expectancy in Less-Developed Countries: The Role of Women's Status." *Social Indicators Research* 55:223-240.

APPENDIX A

TABLES FOR CHAPTER 2

TABLE A1: Names and Regions of 116 Developing Nations used in the analyses: 2004

East Asia & Pacific	Turkey	Oman	Namibia
Cambodia	Turkmenistan	Syrian Arab	Niger
China	Ukraine	Republic	Nigeria
Indonesia	Uzbekistan	Tunisia	Rwanda
Lao PDR		West Bank	Senegal
Malaysia	**Latin America and**	and Gaza	Sierra Leone
Mongolia	**Caribbean**	Yemen	South Africa
Myanmar	Argentina		Sudan
Papua New	Bolivia	**South Asia**	Swaziland
Guinea	Brazil	Bangladesh	Tanzania
Philippines	Chile	India	Togo
Thailand	Colombia	Nepal	Uganda
Vietnam	Costa Rica	Pakistan	Zambia
	Cuba	Sri Lanka	Zimbabwe
	Dominican		
Europe and	Republic	**Sub-Saharan**	
Central Asia	Ecuador	**Africa**	
Albania	El Salvador	Angola	
Armenia	Grenada	Benin	
Azerbaijan	Guatemala	Botswana	
Belarus	Haiti	Burkina Faso	
Bosnia and	Honduras	Burundi	
Herzegovina	Jamaica	Cameroon	
Bulgaria	Mexico	Central	
Croatia	Nicaragua	African	
Czech	Panama	Republic	
Republic	Paraguay	Chad	
Estonia	Peru	Congo, Rep	
Georgia	Trinidad and	Congo, Dem	
Hungary	Tobago	Côte d'Ivoire	
Kazakhstan	Uruguay	Eritrea	
Kyrgyzstan	Venezuela	Ethiopia	
Latvia		Gabon	
Lithuania	**Middle East and**	Gambia, The	
Macedonia,	**North Africa**	Ghana	
TFYR	Algeria	Guinea-Bissau	
Moldova, Rep.	Egypt, Arab	Kenya	
of	Rep	Lesotho	
Poland	Iran, Islamic	Madagascar	
Romania	Rep.	Malawi	
Russian	Jordan	Mali	
Federation	Lebanon		
Slovakia		Mauritania	
	Libya	Mauritius	
Tajikistan	Morocco	Mozambique	

TABLE A2: Variable Descriptions and Data Sources

DEPENDENT VARIABLES

Literacy rates, male/female
Percentage of males/females ages 15 and older who can both read and write a simple statement concerning their everyday life. Data for years 1994 and 2004. Source: UNDP (1995; 2006a).

NEOCLASSICAL ECONOMICS

Level of development

Gross domestic product per capita, in purchasing power parity, US dollars. (GDP per capita PPP). Year 1994. Source: UNDP (1995).

Level of exports

Exports as a percent of gross domestic product (GDP). Measures the extent of a country's openness, or integration, into the global economy.Year 1994. Source: World Bank (2004).

Level of imports

Imports as a percent of gross domestic product (GDP). Measures the extent of a country's openness, or integration, into the global economy.Year 1994. Source: World Bank (2004).

CEDAW (Convention on the Elimination of all forms of Discrimination Against Women)

Often described as an international bill of rights for women, adopted by the UN General Assembly in 1979. It defines what constitutes discrimination against women and sets up an agenda for national action to end the discrimination. Dummy variables: 1 for countries that signed CEDAW and 0 for countries that had not by Dec 31, 1994. Source: United Nations (2007).

DEVELOPMENTAL STATE

Democracy

Degree of political rights and freedoms, scored on a scale from 1 (low) to 7 (high). Year: 2004. Source: Freedom House (2004).

State Strength

Central government revenue, as a percent of GDP. Year: 1994. Source: World Bank (2004).

DEPENDENCY/WORLD-SYSTEMS THEORY

Export commodity concentration

Indicates the degree to which a nation's exports are concentrated in a few goods. Total of the monetary values of the largest export as a percentage of all exports. Average between the years 1990-1995. Source: World Bank (2004).

Foreign Direct Investment

Indicates dependence on multinational corporate investment. Measured by inward FDI stock as a percentage of GDP, by host region and economy. Year:1994. Source: United Nations Conference on Trade and Development (2006).

Debt Dependence

Percentage of total debt service toGDP. Year: 1994. Source: World Bank (2004).

Structural Disarticulation

Constructed by taking the sum of the absolute difference between a sector's share of labor force and that sector's contribution to GDP across the three major sectors of the economy: agriculture, industry, and services (Stokes and Anderson 1990, Huang 1995; Gallagher et al. 1996). A higher number indicates greater disarticulation. Data are from a single year within 1990-1995. Source: World Bank (2004).

SOCIALIST FEMINIST THEORY

Religion

Measure of patriarchy. Dummy variable. Coded 1 if 50 percent or more of population is either Muslim or Catholic. Coded 0 if 50 percent or more of the population is any other religion, including protestant, Jewish, Hindu, Buddhist, and indigenous. Year: 2004. Source: CIA (2004).

TABLE A3: **Descriptive Statistics for all Variables**

Variable	N	Mean	SD	Range
Female Literacy (%) 2004	105	73.1	25.2	11.9-99.8
Female Literacy (%) 1994	92	67.4	28.7	5.6-99.0
Male Literacy (%) 2004	105	82.7	17.3	26.7-99.8
Male Literacy (%) 1994	92	79.2	19.4	20.5-99.0
GDP PC PPP 1994 (Log)	111	7.7	.8	6.14-9.34
CEDAW 1994	116	--	--	0,1
Exports 1994	113	32.1	18.0	1.5-89.2
Imports 1994	113	41.6	22.0	1.9-113.2
Democracy 2004	116	4.4	1.7	1-7
State Strength 1993-1995	111	27.1	10.1	8.5-57.4
Export Concentration 1990-1995	109	2.9	.8	.10-4.5
FDI 1994 (Log)	116	2.3	.9	-.05-4.2
Debt Dependence 1994	109	2.3	1.2	-3.0-4.3
Disarticulation 1990-1995	105	48.7	31.1	3.8-126.8
Catholic 2004 (Dummy Variable)	116	--	--	0,1
Muslim 2004 (Dummy Variable)	116	--	--	0,1

TABLE A4: Pearson Correlation Coefficients for All Variables in the Analysis: 116 Developing Countries

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Female Lit 2004	1.0	---	---	---	---	---	---	---	---	---	---
(2) Female Lit 1994	.950**	1.0	---	---	---	---	---	---	---	---	---
(3) Male Lit 2004	.950**	.901**	1.0	---	---	---	---	---	---	---	---
(4) Male Lit 1994	.927**	.954**	.930**	1.0	---	---	---	---	---	---	---
(5) GDP PC (Log)	.677**	.701**	.642**	.655**	1.0	---	---	---	---	---	---
(6) CEDAW	-.034	-.080	-.075	-.120	-.023	1.0	---	---	---	---	---
(7) Exports	.286**	.354**	.270*	.355**	.325**	-.227*	1.0	---	---	---	---
(8) Imports	.263*	.233*	.184	.231*	-.008	-.259**	.662**	1.0	---	---	---
(9) Democracy	-.233*	-.349**	-.138	-.247*	-.464**	-.134	-.109	.032	1.0	---	---
(10) State Strength	.217*	.234*	.205	.264**	.132	-.251**	.354**	.400**	-.051	1.0	---
(11) Export Con. (Log)	-.349**	-.389**	-.333**	-.355**	-.418**	-.031	-.057	-.038	.174	-.010	1.0
(12) FDI (Log)	-.050	-.017	-.071	.002	.064	.088	.292**	.161	-.141	.084	.138
(13) Debt (Log)	-.323**	-.344**	-.331**	-.306**	-.028	.311**	-.334**	-.398**	-.085	-.028	.104
(14) Disarticulation	-.576**	-.580**	-.564**	-.546**	-.565**	.081	-.103	-.069	.281**	-.218*	.257**
(15) Catholic	.347**	.362**	-.280**	.294**	.348**	.303**	-.048	-.145	-.313**	.041	-.137
(16) Muslim	-.157	-.167	-.084	-.092	-.057	-.224*	-.127	-.087	.349**	-.013	.015

*p<.05   **p<.01   (two-tailed tests)

Variables		(12)	(13)	(14)	(15)	(16)
(1)	Female Lit 2004	---	---	---	---	---
(2)	Female Lit 1994	---	---	---	---	---
(3)	Male Lit 2004	---	---	---	---	---
(4)	Male Lit 1994	---	---	---	---	---
(5)	GDP PC (Log)	---	---	---	---	---
(6)	CEDAW	---	---	---	---	---
(7)	Exports	---	---	---	---	---
(8)	Imports	---	---	---	---	---
(9)	Democracy	---	---	---	---	---
(10)	State Strength	---	---	---	---	---
(11)	Export Con. (Log)	---	---	---	---	---
(12)	FDI (Log)	1.0	---	---	---	---
(13)	Debt (Log)	.184	1.0	---	---	---
(14)	Disarticulation	.228*	.187	1.0	---	---
(15)	Catholic	-.022	.125	-.243*	1.0	---
(16)	Muslim	-.182*	.019	.062	-.270**	1.0

*p<.05   **p<.01   (two-tailed tests)

TABLE A5: Panel OLS Regression Estimates of Predictors on Female Education Enrollment Rates, 2004

	Model 1	Model 2	Model 3
Female Education Enrollment 1994	.881***	.836***	.808***
	[.892]	[.842]	[.807]
	(.077)	(.077)	(.102)
GDP 1994 (log)	.155	.332	-.838
	[.013]	[.028]	[-.070]
	(.838)	(.814)	(.958)
Trade Integration 1994	-.036	-.003	-.027
	[-.062]	[-.006]	[-.045]
	(.042)	(.042)	(.045)
CEDAW	.133	.284	1.689
	[.003]	[.007]	[.040]
	(2.610)	(2.531)	(2.643)
Democracy 2004		-2.022**	
		[-.162]	
		(.763)	
State Strength		-.108	
		[-.049]	
		(.127)	
Foreign Direct Investment 1994 (log)			-2.349
			[-.098]
			(1.379)
Export Dependency 1994 (log)			-2.827
			[-.117]
			(1.558)
Debt Dependency1994 (log)			-2.453
			[-.095]
			(1.574)
Disarticulation 1994			-.070
			[-.108]
			(.050)

Muslim 2004	.387	2.285	.865
	[.007]	[.042]	[.016]
	(3.317)	(3.198)	(3.267)
Catholic 2004	.294	-1.454	-.245
	[.006]	[-.030]	[-.005]
	(3.131)	(3.028)	(3.054)
R^2	.886	.817	.824
Adjusted R^2	.767	.796	.796
N	79	78	74

Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, and the number in parentheses is the standard error.
*p<.10   **p<.05   ***p<.01   (two-tailed tests)

TABLE A6: Panel OLS Regression Estimates of Predictors on Male Education Enrollment Rates, 2004

	Model 1	Model 2	Model 3
Male Education Enrollment 1994	.723*** [.736] (.077)	.695*** [.728] (.087)	.744*** [.769] (.112)
GDP 1994 (log)	1.103 [.127] (.701)	1.181 [.136] (.743)	.316 [.036] (1.020)
Trade Integration 1994	.049 [.120] (.031)	.054 [.132] (.032)	.022 [.055] (.038)
Democracy 2004		-.929 [-.095] (.689)	
State Strength		-.025 [-.016] (.111)	
Foreign Direct Investment 1994 (log)			.558 [.027] (1.492)
Export Dependency 1994 (log)			-2.065 [-.117] (1.681)
Debt Dependency1994 (log)			-1.301 [-.082] (1.520)
Disarticulation 1994			.011 [.021] (.049)
R^2	.861	.753	.767
Adjusted R^2	.742	.733	.737
N	69	68	62

Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, and the number in parentheses is the standard error.
*p<.10   **p<.05   ***p<.01   (two-tailed tests)

TABLE A7: Panel OLS Regression Estimates of Predictors on Female Life Expectancy, 2004

	Model 1	Model 2	Model 3
Female Life Expectancy 1994	1.141***	1.120***	1.016***
	[.945]	[.928]	[.839]
	(.075)	(.084)	(.104)
GDP 1994 (log)	.137	.210	.413
	[.018]	[.027]	[.053]
	(.436)	(.460)	(.530)
Trade Integration 1994	-.009	-.004	-.015
	[-.022]	[-.011]	[-.040]
	(.021)	(.023)	(.023)
CEDAW	.943	.893	1.885
	[.035]	[.033]	[.070]
	(1.304)	(1.337)	(1.358)
Democracy 2004		-.215	
		[-.028]	
		(.414)	
State Strength		-.026	
		[-.019]	
		(.065)	
Foreign Direct Investment 1994 (log)			-.167
			[-.011]
			(.700)
Export Dependency 1994 (log)			.118
			[.008]
			(.785)
Debt Dependency1994 (log)			-2.143**
			[-.130]
			(.843)
Disarticulation 1994			-.031
			[-.076]
			(.026)
Muslim 2004	.047*	.049**	4.708**
	[.118]	[.123]	[.134]
	(.019)	(.019)	(1.660)

Catholic 2004	.001	.001	.813
	[.004]	[.002]	[.027]
	(.019)	(.020)	(1.600)
R^2	.876	.877	.889
Adjusted R^2	.866	.863	.871
N	77	77	73

Notes: The first number is the unstandardized regression coefficient, the number in brackets is the standardized regression coefficient, and the number in parentheses is the standard error.
*p<.10   **p<.05   ***p<.01   (two-tailed tests)

TABLE A8: Panel OLS Regression Estimates of Predictors on Male Life Expectancy, 2004

	Model 1	Model 2	Model 3
Male Life Expectancy 1994	1.026***	1.022***	1.031***
	[.947]	[.942]	[.935]
	(.051)	(.056)	(.067)
GDP 1994 (log)	.074	.098	.242
	[.012]	[.016]	[.038]
	(.300)	(.310)	(.370)
Trade Integration 1994	-.013	-.017	-.016
	[-.044]	[-.056]	[-.053]
	(.013)	(.041)	(.015)
Democracy 2004		-.012	
		[-.002]	
		(.254)	
State Strength		.049	
		[.045]	
		(.041)	
Foreign Direct Investment 1994 (log)			-.600
			[-.050]
			(.471)
Export Dependency 1994 (log)			.432
			[.037]
			(.531)
Debt Dependency1994 (log)			.122
			[.011]
			(.471)
Disarticulation 1994			-.015
			[-.044]
			(.016)
R^2	.888	.890	.907
Adjusted R^2	.885	.883	.899
N	93	92	82

Notes: The first number is the unstandardized regression coefficient, the second number in brackets is the standardized regression coefficient, and the number in parentheses is the standard error.
*p<.10   **p<.05   ***p<.01   (two-tailed tests)

APPENDIX B

TABLES FOR CHAPTER 3

Table B1. Names of 77 Countries Included in the Analysis

East Asia & Pacific
    China
    Indonesia
    Lao PDR
    Malaysia
    Mongolia
    Papua New Guinea
    Philippines
    Thailand
    Vietnam

Europe and Central Asia
    Czech Republic
    Estonia
    Georgia
    Hungary
    Latvia
    Lithuania
    Poland
    Russian Federation
    Slovakia
    Turkey

Latin America and Caribbean
    Argentina
    Bolivia
    Brazil
    Chile
    Colombia
    Costa Rica
    Dominican Republic
    El Salvador
    Guatemala
    Honduras
    Jamaica
    Mexico
    Nicaragua

Panama
Peru
Trinidad and Tobago
Uruguay
Venezuela

Middle East and North Africa
    Algeria
    Iran, Islamic Rep.
    Morocco
    Syrian Arab Republic
    Tunisia
    Yemen

South Asia
    Bangladesh
    India
    Nepal
    Pakistan
    Sri Lanka

Sub-Saharan Africa
    Angola
    Benin
    Botswana
    Burkina Faso
    Burundi
    Cameroon
    Central African Republic
    Chad
    Côte d'Ivoire
    Ghana
    Guinea
    Kenya
    Lesotho
    Madagascar
    Malawi

Mali
Mauritania
Mauritius
Mozambique
Niger
Nigeria
Senegal
Sierra Leone
Sudan
Swaziland
Tanzania
Togo
Uganda
Zambia
Zimbabwe

TABLE B2: Variable Descriptions and Data Sources

DEPENDENT VARIABLE

Gender Development Index (GDI)

Measures overall achievement and development by life expectancy, educational attainment, and adjusted real income. The GDI is the Human Development Indicator (HDI) adjusted for gender inequality). Year: 2004 (lagged year 1994). Source: UNDP (1995; 2006a).

INDEPENDENT VARIABLES

Structural Disarticulation

Constructed by taking the sum of the absolute difference between a sector's share of labor force and that sector's contribution to GDP across the three major sectors of the economy: agriculture, industry, and services (Stokes and Anderson 1990, Huang 1995; Gallagher et al. 1996). A higher number indicates greater disarticulation. Data are from a single year within 1990-1995. Source: World Bank (2004).

NEOCLASSICAL ECONOMICS/MODERNIZATION THEORY

Level of development

Gross domestic product, in purchasing power parity, US dollars. (GDP PPP). Year1994. Source: World Bank (2004).

Trade Integration

Trade as a percent of gross domestic product (GDP). Measures the extent of a country's openness, or integration, into the global economy.Year 1994. Source: World Bank (2004).

CEDAW (Convention on the Elimination of all forms of Discrimination Against Women)

Often described as an international bill of rights for women, adopted by the UN General Assembly in 1979. It defines what constitutes discrimination against women and sets up an agenda for national action to end the discrimination. Dummy variables: 1 for countries that signed CEDAW and 0 for countries that had not by Dec 31, 2004. Source: United Nations (2007).

DEVELOPMENTAL STATE

Democracy

Degree of political rights and freedoms, scored on a scale from 1 (low) to 7 (high). Year: 2004. Source: Freedom House (2004).

State Strength

Central government revenue, as a percent of GDP. Year: 1994. Source: World Bank (2004).

Women in Parliament

Percent of total seats in parliament held by women in a lower or single house or senate. Year: 2004. Source: UNDP (2006a).

SOCIALIST FEMINIST THEORY

Religion

Measure of patriarchy. Dummy variable. Coded "1" if 50 percent or more of the population is either Muslim or Catholic. Coded "0" if 50 percent or more of the population is another religion: protestant, Jewish, Hindu, Buddhist, and indigenous. Year: 2004. Source: CIA (2004).

DEPENDENCY/WORLD-SYSTEMS THEORY

Export commodity concentration

Indicates the degree to which a nation's exports are concentrated in a few goods. Total of the monetary values of the largest export as a percentage of all exports. Average between the years 1990-1995. Source: World Bank (2004).

Foreign Direct Investment

Indicates dependence on multinational corporate investment. Measured by inward FDI stock as a percentage of GDP, by host region and economy. Year:1994. Source:United Nations Conference on Trade and Development (2006).

Debt Dependence

Percentage of total debt service to GDP. Year: 1994. Source: World Bank (2004).

TABLE B3: Descriptive Statistics for all Variables

Variable	N	Mean	SD	Range
GDI 2004	77	.621	.177	.29-.88
GDI 1994	77	.532	.201	.20-.86
GDP 1994 (log)	77	24.155	1.693	21.71-28.66
Disarticulation 1990-1995	75	51.019	31.663	5.70-126.80
Trade Integration 1994	75	70.164	36.124	18.15-179.91
CEDAW 2004 (Dummy Variable)	75	.613	.490	0,1
State Strength 1993-1995	76	25.934	9.417	9.30-57.40
Democracy 2004	77	4.130	1.712	1.0-7.0
Catholic 2004 (Dummy Variable)	77	.247	.434	0,1
Muslim 2004 (Dummy Variable)	77	.169	.381	0,1
Women in Parliament 2004	74	13.093	7.542	.30-35.1
FDI 1994 (Log)	76	2.473	.863	-.05-4.23
Export Concentration 1990-1995	74	2.975	.865	.10-4.53
Debt Dependence 1994	77	2.633	.906	-.56-4.30

TABLE B4: Pearson Correlation Coefficients for All Variables in the Analysis: 116 Developing Countries

	Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	GDI 2004	---	---	---	---	---	---	---
(2)	GDI 1994	.938**	---	---	---	---	---	---
(3)	GDP 1994 (log)	.503**	.477**	---	---	---	---	---
(4)	Trade Integration 1994	.166	.234*	-.365**	---	---	---	---
(5)	CEDAW 2004 (Dummy Variable)	.048	-.034	.150	-.272**	---	---	---
(6)	State Strength 1993-1995	.164	.135	-.142	.416**	-.251**	---	---
(7)	Democracy 2004	-.403**	-.493**	-.025	-.037	-.134	-.051	---
(8)	Catholic 2004 (Dummy Variable)	.394**	.406**	.147	-.114	.303**	.041	-.313**
(9)	Muslim 2004 (Dummy Variable)	-.062	-.193	.121	-.107	-.224*	-.013	.349**
(10)	Women in Parliament 2004	.131	.202	-.057	.044	.155	.051	-.034
(11)	FDI 1994 (Log)	-.060	.133	-.216*	.236*	.088	.084	-.141
(12)	Export Concentration 1990-1995	-.452**	-.422**	-.485**	-.054	-.031	-.010	.174
(13)	Debt Dependence 1994	-.154	-.158	.148	-.402**	.311**	-.028	-.085
(14)	Disarticulation 1990-1995	-.641**	-.592**	-.229	-.096	.081	-.218	.281**

*p≤ .05   **p≤ .01   (two-tailed tests)

161

	Variables	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1)	GDI 2004	---	---	---	---	---	---	---
(2)	GDI 1994	---	---	---	---	---	---	---
(3)	GDP 1994 (log)	---	---	---	---	---	---	---
(4)	Trade Integration 1994	---	---	---	---	---	---	---
(5)	CEDAW 2004 (Dummy Variable)	---	---	---	---	---	---	---
(6)	State Strength 1993-1995	---	---	---	---	---	---	---
(7)	Democracy 2004	---	---	---	---	---	---	---
(8)	Catholic 2004 (Dummy Variable)	---	---	---	---	---	---	---
(9)	Muslim 2004 (Dummy Variable)	-.270**	---	---	---	---	---	---
(10)	Women in Parliament 2004	.284**	-.154	---	---	---	---	---
(11)	FDI 1994 (Log)	-.022	-.182	.083	---	---	---	---
(12)	Export Concentration 1990-1995	-.137	.015	-.112	.138	---	---	---
(13)	Debt Dependence 1994	.125	.019	.088	.184	.104	---	---
(14)	Disarticulation 1990-1995	-.243	.062	-.010	.228*	.257**	.187	---

*p≤ .05   **p≤ .01   (two-tailed tests)

APPENDIX C

TABLES FOR CHAPTER 4

Table C1. Names of 106 Countries Included in the Analysis

Asia & Pacific
    Bangladesh
    Cambodia
    China
    India
    Indonesia
    Lao PDR
    Malaysia
    Mongolia
    Nepal
    Pakistan
    Papua New Guinea
    Philippines
    Sri Lanka
    Thailand
    Vietnam

Europe and Central Asia
    Albania
    Armenia
    Azerbaijan
    Belarus
    Bulgaria
    Croatia
    Czech Republic
    Estonia
    Georgia
    Hungary
    Kazakhstan
    Kyrgyzstan
    Lithuania
    Macedonia
    Moldova
    Poland
    Romania
    Russian Federation
    Slovakia
    Tajikistan
    Turkey
    Ukraine
    Uzbekistan

Latin America and
Caribbean

Argentina
Bolivia
Brazil
Chile
Colombia
Costa Rica
Dominican Republic
El Salvador
Guatemala
Honduras
Jamaica
Mexico
Nicaragua
Panama
Paraguay
Peru
Trinidad and Tobago
Uruguay
Venezuela

Middle East and North
Africa
    Algeria
    Iran
    Jordan
    Lebanon
    Morocco
    Oman
    Syrian Arab Republic
    Tunisia
    Yemen

Sub-Saharan Africa
    Angola
    Benin
    Botswana
    Burkina Faso
    Burundi
    Cameroon
    Central African
    Republic
    Chad
    Congo, Rep
    Congo, Dem

Côte d'Ivoire
Eritrea
Ethiopia
Gabon
Gambia, The
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Rwanda
Senegal
Sierra Leone
South Africa
Swaziland
Tanzania
Togo
Uganda
Zambia
Zimbabwe

DEPENDENT VARIABLES

Female/Male Labor Force Participation

The female/male share of the total labor force. The total labor force comprises of people who meet the ILO definition of economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and unemployed, including the armed forces and first-time job seekers. Year: 2004. Source: World Bank (2004).

INDEPENDENT VARIABLES

Level of development

Gross domestic product per capita, in purchasing power parity, US dollars. (GDP PC PPP). Year 2004. Source: United Nations (2006).

Educational enrollment rate, female/male

Percentage of females/males enrolled in primary, secondary, and tertiary levels of education, regardless of age, as a percentage of the population of official school age for the three levels. Year: 2004. Source: United Nations (2006).

Sex ratio of the labor force

Constructed by taking the number of females between the ages of 15-64, which are the prime ages for participating in the labor force, divided by the total number of males and females between the ages of 15-64. Year: 2004. Source: United Nations (2006).

Exports of goods and services

Exports of goods and services as a percent of GDP. Represents the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude labor and property income (formerly called factor services) as well as transfer payments. Year: 2004: Source: World Bank (2004).

Imports of goods and services

Imports of goods and services as a percent of GDP. Represents the value of all goods and other market services received from the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude labor and property income (formerly called factor services) as well as transfer payments. Year: 2004: Source: World Bank (2004).

Foreign Direct Investment

Indicates dependence on multinational corporate investment. Measured by inward FDI stock as a percentage of GDP, by host region and economy. Year:2004. United Nations Conference on Trade and Development (2006).

Total Debt

Percentage of total debt service toGDP. Total debt service is the sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the IMF. Data are in current U.S. dollars.Year: 2004. Source: World Bank (2004).

Region

Countries are categorized into five regions based upon the World Bank classificatory scheme. Dummy variables are constructed for these five regions. Countries are coded "1" if they are in the following regions: Asia and Pacific, Sub-Saharan Africa, Latin America and Caribbean, and Middle East and North Africa. The Europe and Central Asia category is coded "0."

*Region * exports*

An interaction variable constructed by multiplying the exports of goods and services variable with the regional dummy variables.

*Region * imports*

An interaction variable constructed by multiplying the imports of goods and services variable with the regional dummy variables.

*Region * foreign direct investment*

An interaction variable constructed by multiplying the foreign direct investment variable with the regional dummy variables.

*Region * debt*

An interaction variable constructed by multiplying the total debt variable with the regional dummy variables.

TABLE C3: Descriptive Statistics for all Variables

Variable	N	Mean	SD	Range
Female Labor Force	106	57.6	14.9	22.7-92.8
Male Labor Force	105	82.1	6.9	63.0-95.5
Female Education	106	64.1	19.6	18.0-98.0
Male Education	106	65.8	14.8	25.0-89.0
Sex Ratio (Female/Male)	106	50.2	1.5	40.2-53.4
Sex Ratio (Male/Female)	106	49.7	1.5	46.6-59.8
GDP (log)	106	8.2	.9	6.33-9.87
Exports	106	39.5	19.9	9.0-121.0
Imports	106	45.7	20.1	13.0-105.0
FDI (log)	105	3.1	.9	.09-4.99
Debt (log)	105	1.4	.9	-.69-3.1
Africa (Dummy)	106	.4	.5	0,1
Asia (Dummy	106	.1	.3	0,1
Latin America (Dummy)	106	.2	.4	0,1
Middle East (Dummy)	106	.1	.3	0,1
Africa * exports	106	12.2	19.9	0-84.0
Asia * exports	106	6.6	20.0	0-121.0
Latin America * exports	106	6.1	14.3	0-63.0
Middle East * exports	106	3.9	12.5	0-64.0
Africa * imports	106	15.5	23.5	0-105.0
Asia * imports	106	6.9	19.9	0-100.0
Latin America * imports	106	6.6	15.5	0-65.0

Middle East * imports	106	4.3	14.0	0-80.0
Africa * FDI	105	1.1	1.5	0-4.4
Asia * FDI	106	.4	1.1	0-4.2
Latin America * FDI	106	.6	1.4	0-4.5
Middle East * FDI	106	.3	1.0	0-4.2
Africa * debt	105	.4	.7	-.7-2.8
Asia * debt	106	.2	.5	-5-2.6
Latin America * debt	106	.3	.7	0-2.5
Middle East * debt	106	.2	.6	0-3.0