

TAKING GENDER DIFFERENCES IN BARGAINING POWER SERIOUSLY:
EQUITY, LABOR STANDARDS, AND LIVING WAGES

Stephanie Seguino
University of Vermont
Department of Economics
Old Mill 237
Burlington, VT 05405

Email Stephanie.Seguino@uvm.edu

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Abstract

Gender inequality is linked to women's unequal bargaining power in the household. Greater equity can be achieved by expanding women's outside options. Paid work is a likely mechanism for improving women's household bargaining power. But the dual phenomenon of women's segregation in export industries in developing countries and increased firm mobility result in their unequal bargaining power vis a vis employers. This reduces the ability of women to bargain for higher wages, more secure jobs and better work conditions, in turn limiting the potential positive impact of outside income on household bargaining power. A major constraint is that if women do succeed in bargaining for higher compensation, employment losses will result, as firms relocate to lower wage sites. The World Bank takes seriously the limits on women's household bargaining power but not the gap in labor markets, and thus the Bank naively proposes that trade and market liberalization are unambiguously beneficial mechanisms to improve women's well being. Since outside income has been shown to improve gender equity, what can be done to raise women's relative wages and improve labor standards while avoiding the negative effects on output and employment? This paper seeks to answer that question, and considers the macro level policies and approaches that might be pursued in order to overcome structural impediments to gender wage equity.

JEL Codes: F4 Macroeconomic aspects of international trade
J3 Wages, compensation and labor costs
J8 Labor standards
O11 Macroeconomic analyses of development

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The relative wages of men and women...are...largely determined by the structure of markets...Firms operating in competitive environments discriminate less against women in hiring and pay practice than do firms with significant market power in protected environments...(World Bank, Engendering Development, p. 17).

Making trade conditional on such (labour) standards may benefit many of the workers in the north and a few in the south but it is also likely to further marginalize large sections of the world's poor, particularly in the south. A win-win solution in international trade may still be possible but it is unlikely to arise out of ad hoc, piecemeal and self-serving demand for universal labour standards, which take no account of differences in the capacity of different countries to observe them...We have to recognize that the interests represented in negotiations around labour standards have not only been largely northern, but also largely male (Naila Kabeer, Power to Choose, pp, 391, 400).

I. Introduction

A central theme of feminist research on gender inequality has been the link between unequal outcomes in well-being and women's and men's differential bargaining power—within the home and in the income-generating economic sphere. That linkage suggests that the goal of improving women's absolute and relative well-being requires that gender gaps in income be narrowed, and ultimately, eliminated. While women's access to income can be improved through redistributions by the state, as well as access to and control over property, this paper focuses policies that contribute to increases in female income generated in exchange for labor services.¹

The World Bank (2001) proposes that gender gaps in income can be narrowed by leveling the playing field in institutions and human capital investment, coupled with the promotion of economic growth based on principles of free markets and free trade. By closing the capabilities gap, women's relative access to labor markets is improved, it is

¹ Labor income can also be generated from self-employment activities (e.g., in the informal sector), or subsistence farm labor, as well, but this paper focuses primarily on wage income.

argued. The direct effect can be higher absolute female income, and over time, relative female wages, as women's productivity drives up their wages in the labor market.

Despite the Bank's optimism, there are several factors that can weaken the link between economic growth and women's relative wages. Women's segregation in "mobile industries"—that is, labor-intensive manufacturing or service export industries—limits their bargaining power vis-à-vis employers, making it difficult for them to bargain for higher wages, even as labor demand increases in the process of growth. This type of job segregation makes it particularly difficult to raise female wages without dampening female employment, given the growing mobility of firms.

One solution to gender wage inequality is to promote labor standards and a global living wage—a strategy that is likely to disproportionately benefit female workers, given the job segregation which results in their crowding in low-wage labor-intensive export industries. Labor standards and a global living wage have been proposed more generally as a response to growing global inequality, and are seen as a means to put a floor under worker compensation, overcoming capital's increased bargaining power vis-à-vis workers.

This is not an uncontroversial proposition. *A priori*, the Bank opposes any efforts to interfere with the wage outcomes and otherwise "competitive" markets, advocating instead for greater flexibility in labor market institutions. The Bank appears not to recognize or take seriously women's relative lack of bargaining power in the workplace, and so is silent on this subject. Moreover, some from the global South, while recognizing the constraints on women's bargaining power in the workplace, argue that labor standards and living wage measures that are linked to trade agreements are a disguised effort to

protect white northern male jobs. There is thus opposition to such policies on the grounds that if enacted, they will lead inevitably to job losses for poor women from the global south (Kabeer 2000, Singh and Zammit 2002).

The concern over the potential negative employment effects of improving women's work conditions is related to a key empirical question that this paper explores: *Can* enactment of labor standards and living wages be successfully implemented in export-oriented developing economies without producing negative effects on output and employment? The findings suggest that negative employment effects of improve labor standards and wages can be avoided, or at the very least, attenuated. Further, under some conditions, higher wages may lead raise labor productivity, neutralizing the effect of higher wages on unit labor costs, and thus leading to the avoidance of job loss. The mechanisms necessary to ensure these happy outcomes are dependent on an important role for the state in shaping the development and growth process, in direct contradiction to the Bank's policy proposals.

I begin with a discussion of labor standards and living wages, and then move on to a discussion of the constraints on women's bargaining power in developing country formal labor markets. I then discuss the possible pitfalls of labor standards and living wages in yielding unintended outcomes, and finally address means to overcome those constraints.

II. Labor Standards and Living Wages: Some Background

Labor standards cover a variety of areas but for the purposes of this paper, I refer to process-oriented core labor standards that can improve wages: freedom of association, abolition of child labor, and elimination of discrimination in respect to employment and

occupation. Global living wages (an outcome-based standard) have also been advanced as a way to improve worker well-being, with living wages defined as a wage level sufficient for an adult to provide for the basic needs of self and dependents. While little has been said about viable policy mechanisms to enforce the payment of living wages, proponents argue such a policy can slow a “race to the bottom,” acting as a global minimum wage, with the added benefit of being able to reflect country-specific cost of living differences.

This paper focuses on the macroeconomic effects of both types of legislation, referring readers to a wide literature for consideration of the practical issues of implementation and enforcement.² Previous research on the macro effects of labor standards has not taken a gender perspective although some studies have attempted to include tests of the effects of reduced gender discrimination in employment. In empirical analyses, Kucera (2002) uses female share of industrial employment while Busse (2002) relies on female share of the labor force as a measure of gender discrimination. In both cases, a higher female share is assumed to be indicative of an improvement in labor standards. Measured in these ways, neither Kucera (2001) nor Busse find evidence of a negative effect of an improvement in labor standards on foreign direct investment (FDI) and comparative advantage, respectively.

While this might appear to be good news at first sight, the measures these authors use to capture improvement in gender equity are inadequate to reflect the way that investment, trade, gender, and labor standards interact. The problems that women face in improving their relative economic status is less a function of job access than of job segregation coupled with lack of bargaining power to raise their wages in the jobs they

² See, for example, Brenner (2002) on issues related to calculating global living wages, Heinz (2002), Polaski (2003), and Sengenberger and Campbell (1994) on implementation concerns

can get. Those issues are discussed in the next section as they relate to the current environment of globalized production processes.

V. Bargaining Power, Gender Inequality, and Capital Mobility

Efforts to promote gender equity via labor standards and living wages, to be successful, must take into account and overcome constraints imposed by the process of globalization. Of particular concern are the open-economy effects of higher labor costs (or the fear of higher labor costs) on investment and exports which influence output and employment. This section outlines some of these constraints and their relationship to gender-segregated labor markets.

Investment liberalization has resulted in an increased ability of firms to respond to higher costs and more regulation (or the threat of these) by shifting production to countries with less regulation, lower costs, and in general, higher potential profits. The effect of reduced regulations on investment can be measured as the share of total foreign direct investment in gross fixed capital formation, or what I term *physical capital mobility*. This can be measured as the sum of inward and outward FDI, which is a quantitative assessment of the ability of firms to relocate across borders, should they face local cost increases, and thus reflects changes in their bargaining power vis-à-vis workers. This, in other words, is a proxy measure for the size of the “threat effect” that firm relocation poses to workers in wage or other labor-management negotiations.

The data in Table 1 indicate that physical capital mobility has been increasing in much of the developing world and indeed, the share of total FDI in gross fixed capital formation has more than doubled in the period 1987-1997. Of particular note is the rise in

outward FDI, indicating that FDI is a more unstable capital inflow than it had been previously understood to be.³

Table 1. Trends in FDI in Developing Countries

Region	1987	2000	Change from 1987 to 2000
<i>Latin America and Caribbean</i>			
Inward	5.4%	20.7%	15.3%
Outward	0.7	2.4	1.7
Total	6.1%	18.6%	+17.0%
<i>Sub-Saharan Africa</i>			
Inward	7.1	10.5	3.4
Outward	6.9	1.2	-4.7
Total	14.0%	12.8%	1.3%
<i>Asia</i>			
Inward	3.3	11.6	8.3
Outward	1.6	7.4	5.8
Total	4.9%	19.0%	+ 14.1%
<i>Developing Economies</i>			
Inward	3.9	13.4	9.5
Outward	1.4	5.8	4.4
Total	5.3%	19.2%	+ 13.9%

Source: United Nations (1999, 2002), World Investment Report.

Note: Numbers in bold type are the sum of inward and outward FDI, thus representing the degree of physical capital mobility, and by inference, the size of the “threat effect” posed to workers bargaining for improvements in compensation and work conditions.

The effects of physical capital mobility have implications for labor demand. As firms become more mobile across borders, they gain access to “substitutes” for domestic

³ This is consistent with results presented in Rand and Tarp (2002), whose empirical analysis of business cycle data for a set of developing countries reveals that FDI inflows are very volatile, much more so than aid flows. Further, private investment is found to be more volatile than public investment.

labor, and as a result, their demand for labor becomes more elastic. Except perhaps at high skill levels, labor has not become equally as mobile. Thus labor's options have not expanded and, abstractly speaking, labor supply schedules have not become steeper to compensate as labor demand schedules have flattened. The result of this asymmetry is an increase in capital's bargaining power vis-à-vis workers, both on the front of wages as well as other components of work conditions.⁴

This asymmetry suggests that investment now responds more strongly to shifts in labor costs than in the past. Further, capital's increased bargaining power has differential effects by gender. This can be traced to the practice of job segregation, with women in semi-industrialized economies typically concentrated in "mobile" industries and men in "immobile" or non-tradable industries. "Mobile" industries can be described as those for which sunk costs, including training costs, are limited and there is easy firm entrance and exit. Mobile industries tend to be labor-intensive manufacturing firms as well as services, (such as informatics, data processing, and possibly tourism).⁵ These industries are more likely to engage in vertical FDI, which is driven by firm efforts to locate labor-intensive segments of production in least-cost labor sites and capital-intensive production in countries where capital is relatively cheaper. Such goods tend to be produced for export rather than sale to the domestic economy.

⁴ See Zhao (1998) for a demonstration of the negative effect of physical capital mobility on wages within a Nash bargaining framework. Epstein (2000) explores these issues in further detail, exploring the effect of mobility on public finances as well as wages.

⁵ This phenomenon may not hold in countries of differing economic structures. For example, in the U.S., in more recent years, men have held the largest share of jobs in durable goods manufacturing industries, where job losses have been high, as firms have relocated to lower wage sites. We do see evidence of this pattern in service export-oriented economies, however, such as in the Caribbean where women are concentrated in "export" data processing jobs and in India, call centers.

In contrast, horizontal FDI occurs in “immobile” industries, that is where firms locate production in a country to facilitate sales to that economy, due perhaps to import barriers. In the latter case, labor costs have a smaller effect on investment decisions. Women tend to be the preferred labor force in such industries due to their lower wages and purportedly more limited resistance to poor working conditions, which enhance firm profits.⁶ Thus, facilitated by trade and investment liberalization, the demand for female labor in mobile industries has risen. I refer here to the “global” phenomenon, since in some countries, the demand for female labor in labor-intensive industries has fallen, either due to technological upgrading that excludes female workers, or because firms have relocated to lower wage sites. This process can be observed in the U.S. and Europe, as well as some of the East Asian economies, such as Taiwan and Hong Kong (Kucera and Milberg 2000; Berik 2000). Guy Standing (1989) calls this process “global feminization,” arguing that the trends of globalization have made the “cost cutting strategy” to profit maximization paramount.

Men, on the other hand, tend to be concentrated in non-tradable industries and capital-intensive industries, even if these latter produce for export.⁷ Men are also more concentrated in industries for which horizontal FDI is relatively high—such as, for example, automobile manufacturing in China or Indonesia. In general these tend to be

⁶ For data on women’s concentration in export production, see, for example, Standing (1989, 1999), UNDP (1999), and, for a set of semi-industrialized economies, Seguino (2000b). On services see, for example, Freeman (2000).

⁷ A digression on gender and economic structure in Sub-Saharan Africa (SSA) is in order. In the agricultural sector of many of those economies, women are concentrated in subsistence food production, arguably a non-tradable industry, due to lack of internal transportation networks, and the perishability and types of food crops grown. Men are more likely to be involved in “cash” crop food production. Thus, the dichotomization of women as employed in tradables and men in non-tradables breaks down in the SSA. Nevertheless, cash crop production is often labor constrained, with men depending on wives to provide labor. Rural African’ women’s labor thus plays a role in generating foreign exchange, although in a different manner than in semi-industrialized economies or the manufacturing sector of African economies.

“immobile industries,” in part due to the limited role that labor costs play in affecting profitability and sales. In the case of non-tradables, the price elasticity of demand for such goods tends to be low, and higher wage costs can be passed on to consumers. Further, in more capital-intensive industries, higher wages for men may reduce turnover, protecting the firm’s investment in training. Industry structure and the price inelasticity of product demand, thus, ratify relatively higher male wages.

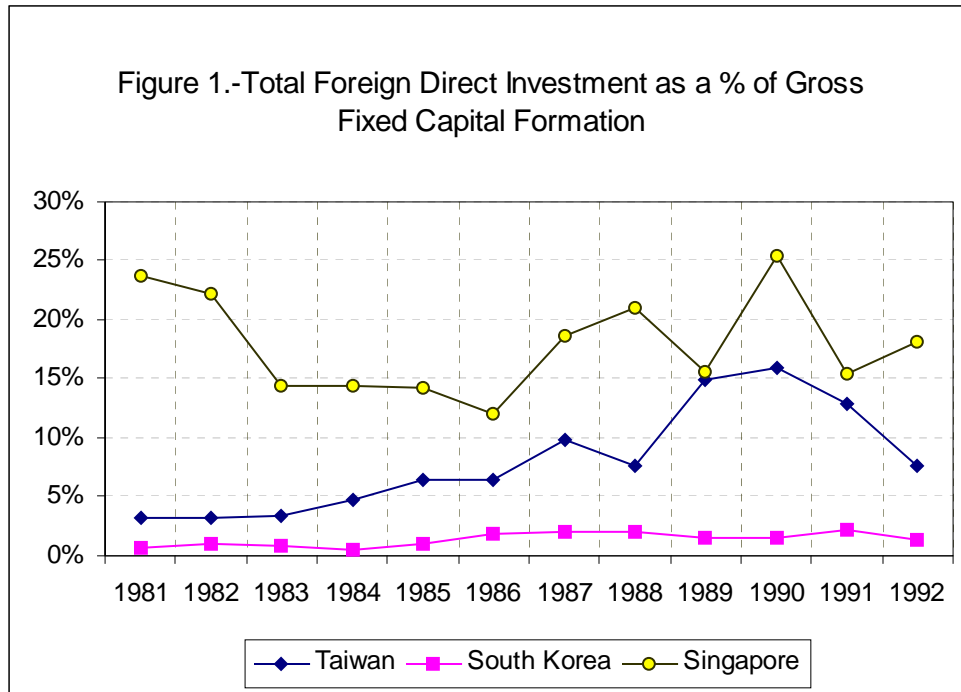
These stylized facts help to explain the persistence of gender wage inequality in a global economic environment that otherwise might promote a closure of the gender wage gap, as the demand for female labor rises relatively faster than for male labor. Because women are located in “mobile” industries in which the threat effect of firm relocation to lower wage sites is credible, women’s bargaining power relative to that of capital does not rise, even as labor demand increases. Bhattacharya and Rahman (1999) have provided implicit evidence of this in the case of Bangladesh’s female-dominated garment industry. The demand for female labor has increased sharply in recent years. Despite that, female wages in that sector have not kept pace with rising productivity, so that the wage share of income has fallen—women workers are worse off relative to capitalists. The “mobility” of garment firms is a likely explanation for the power differential that has led to this outcome, in addition to other social and economic constraints on women’s bargaining power.

In contrast, workers in immobile industries have more bargaining power to demand higher wages and better working conditions. Downward pressure on the wages of workers in mobile industries (in this case, women) can spill over into other sectors of the economy, insofar as jobs are gendered and men and women are not perceived to be

substitutes. Thus low wages for women in mobile manufacturing firms serve to hold down female wages in non-tradable industries, such as retail sales, as well as social and community services. Men's wages are not similarly constrained.

One possible outcome of this process is growing wage inequality. Indeed, the polarization of wages in recent years is a well-documented phenomenon, although the role of gender in this process has received less attention. With regard to gender, assuming these stylized facts hold, we can hypothesize that as capital mobility increases, gender wage inequality worsens, even as trade expands and growth continues. There is some evidence of this in the case of Taiwan as compared to South Korea (Seguino 2000a). During the period 1981-92, Taiwan liberalized rules on inward and outward foreign direct investment while, by comparison, South Korea, did not substantially alter rules on FDI during this time. Figure 1 attempts to capture these trends, using the sum of inward and outward foreign direct investment, or total FDI, as a share of gross fixed capital formation. That figure also includes data on Singapore for comparative purposes.

Interestingly, over the period 1981-1992, gender wage differentials in South Korea narrowed, while in Taiwan, they widened. One of the factors that explain this divergent outcome is the increase in physical capital mobility in Taiwan, as compared to South Korea. The interpretation of these results is that women's bargaining power vis-à-vis capital decreased in Taiwan as female-dominated firms became more mobile, contributing to a widening gender wage gap. In fact, female wages fell from roughly 68% of average male wages in 1981 to 62% in 1992. In contrast, gender wage differentials improved slightly in South Korea over this period.



The inverse relationship between capital mobility and wages, coupled with gendered job segregation, suggests that higher female wages in semi-industrialized economies might result in reduced output and growth, and thus declining employment, particularly for women. There is thus potentially an inverse relationship between gender equity, measured as higher relative female wages, on the one hand, and growth of output on the other. Empirical analyses are consistent with this, and one study (Seguino 2000b) indicates that, among a set of semi-industrialized economies, those with the greatest gender inequality (measured as gender wage gaps) grew the most rapidly during the period 1975-95.

Higher relative female wages, then, appear to slow growth, at least for this set of countries, for two important reasons: 1) investment responds negatively to increases in

female wages, and 2) exports fall as export prices rise, reducing the ability of an economy to import capital goods, thereby slowing productivity growth.

These results suggest that the enactment of labor standards that lead to wage increases might lead to outward FDI as well as a decline in exports of labor-intensive goods. A likely result would be employment losses for women, at least partially negating the beneficial effects of higher minimum wages. That is, the women who do not lose their jobs have higher wages, but the share of the wage bill going to women decreases as female employment falls. Naila Kabeer (2000) argues that this is the likely outcome if Northern-inspired labor standards that drive up wages in developing economies are linked to trade with developed economies. In particular, she argues that job losses in the global South will result, with the women in developing economies worse off, not better off. She further suggests that the motivation for the imposition of labor standards, including living wages, is motivated by protectionist desires of Northern workers.

V. The Potential for Living Wages to Reduce Gender Wage Inequality

The stylized facts described in the previous section underscore the difficulties individual governments would face in trying to close gender wage gaps by imposing labor standards or a wage floor, calculated as a living wage, even if they were willing to do so. While there are constraints on efforts to improve the living standards of low-wage workers by raising wages, there is also some evidence of room to maneuver in achieving this policy goal. This maneuverability is not obvious in neoclassical analyses, which

assume genderless labor markets, perfect competition in goods and labor markets, and infinitely price elastic export demand.⁸

The remainder of this paper focuses on other possible outcomes resulting from wage increases. To consider these issues, it is useful to specify the relationship between female wages and macroeconomic outcomes in an open economy. The analytics of this problem are addressed in the appendix within the framework of a simple neo-Kaleckian model of an open development macro economy.

These equations can be used to demonstrate the constraints on raising women's relative wages in an open economy. Comparative static effects of raising the female wage operate through two major channels: 1) a relative price effect—the export price relative to the price of the “home” good rises, and there is a real appreciation of the exchange rate; and 2) a class redistribution effect—the price-cost margin is squeezed by higher wages in the export sector, reducing the profit share from that sector, seen above in the equation for the price of the export good.

The first implies that, if women are segregated in export industries that produce a homogenous labor-intensive product, higher female wages will cause export prices to rise, and export demand to fall (equations 2 and 3). Profits may also be squeezed, resulting in a decline in aggregate investment (equation 4). Given rigid imports, this combined negative demand-side effect is larger the more price elastic exports (the larger is ψ). It is possible, of course, that a redistribution to women workers will induce an

⁸ See, for example, Brown (2001) whose analysis implies an export price equation such as $P_X = wa_X + rk$ where P_X is the export product price, w is the wage rate, a_X is the labor coefficient, r is the profit rate, and k is the capital coefficient (ignoring intermediate goods for simplicity). Higher wages immediately result in higher prices, and given infinitely elastic demand for exports, demand falls and along with it, employment in the export sector.

increase in consumption spending (if female workers' propensity to consume is higher than that of capitalists).⁹ This effect would have to be quite large to overcome the negative effects on exports and investment, which are deflationary. This can be seen from the balance equation in an open economy (with the simplifying assumption that the government budget deficit is 0):

$$I_{W_F} + X_{W_F} < S + M$$

(–) (–) (?)

The sizes of the effects that operate through these channels depend on the value of various parameters in the model. In particular, the price elasticity of export demand will influence the size of the effect of higher female wages on export demand; the “footlooseness” of capital will determine the extent to which higher female wages that squeeze profits also depress investment demand (as a result of physical capital flight or outward FDI); the difference in the propensity of consume out of wage and profit income will influence the effect of higher female wages on demand for both the export good and the “home” good.

Higher female wages that lead to a decline in output and female employment—the pessimistic case—is likely to occur if capital is footloose, if the price elasticity of exports is high, and if the spending propensities of workers and capitalists are similar. The first two conditions are likely to obtain in countries in the early stages of industrialization, and in that regard, the fears of Naila Kabeer and others appear well founded.¹⁰

⁹ Thus there is a third potential effect—a consumption effect. There is, however, little empirical evidence on which to base such assumption about spending propensities, other than Seguino and Floro (2003), which considers only gender differences in saving propensities among workers.

¹⁰ Gibson and van Seventer (2000) point out, based on dynamic CGE simulations of the South African economy, that the effects of real wage increases on employment also depend on the macro policy environment. When there is monetary “policy dominance,” efforts to raise wages can be frustrated by

The more optimistic scenario—in which higher female wages result in little loss of export demand, little if any reduction in investment, and a boost to consumer demand, as income is shifted from those with a high propensity to save (capitalists) to those with a low propensity to save (female workers)—is likely to be possible only in those cases where capital is immobile (i.e., FDI faces restrictions), where export goods are price inelastic (because they are skill-intensive, or because they are goods for which quality matters), or where export goods form a non-trivial share of wage goods.¹¹ One can think of relatively few countries that fall into this category, but an important and instructive example is South Korea, a case that is discussed in greater detail below. Nevertheless, under some, albeit restrictive, conditions, higher female wages are consistent with increases in employment and output.

An important feature of the analysis thus far is the assumption that there is no link between wages and productivity (the inverse of a_X in equation 2). There may, however, be a link between wages and productivity growth, and if strong enough, higher wages could not only improve the well-being of workers, but also stimulate the growth of output and employment. The next section discusses this possibility in more detail, with particular reference to the case of South Korea.

A second important feature of the model is the assumption that while female wages rise in country A, they are constant in competitor countries so that the real exchange rate appreciates in country A. The application of global labor standards and living wage rules, however, implies the possibility of a simultaneous increase in female

monetary authorities that respond to inflation (induced by higher wages) by raising interest rates, and thus engineering a contraction and a decline in employment. This is a point worth considering further in trying to anticipate the effects of enactment of labor standards and living wages.

¹¹ Such an economy is said to be “articulated” because export goods are also domestically consumed.

wages that may leave relative export prices among competitor countries unchanged, e.g., the relative price of garments produced in Bangladesh, say, and Thailand, remains unchanged. The effects of this policy shift would then be quite different than if wage increases occur only in country A. I know of no research that examines the effects of a simultaneous wage increase among countries that are export competitors, but I will sketch what I think to be some important implications of such a strategy.

First, insofar as wages rise in alternative production sites, there is little profit incentive for “footloose” capital to shift investment abroad (since, in effect, unit labor costs in competitor countries rise in tandem). Thus the “profitability” effect of investment, and thus negative employment effects, induced by higher wages on domestic economies, may be small.

Second, because the price of “substitute” export goods rises also, then the negative demand-side effect on exports will be smaller, although presumably this will still be negative. Together, these two possibilities suggest that, if enacted simultaneously amongst competitor countries, living wage effects (or labor standards) on employment may not be negative or only mildly so.

This is consistent with findings of a number of studies in the employment effects of labor standards, including Kucera (2000), and Heintz (2002). In the latter study of a set of 49 countries from 1981-96, Heintz finds that the elasticity of employment growth with respect to changes in the real wage for is -0.61 . That implies that a 10% increase in real wages will lead to a 6% decline in employment, other factors remaining constant. Other factors may adjust when wages rise, however, including productivity, prices and consumer demand. The effect of higher wages on productivity is taken up in the section

below, but before that, it is useful to consider the effects of higher wages on prices and consumer demand.

Anti-sweatshop campaigns advertising the harsh working conditions faced by export workers in clothing industries for example reveal a disdain for such work conditions in the global north. Consumers indicate they would be willing to pay more for goods produced under more human conditions (Pollin, Burns, and Heintz 2001). It is thus conceivable that firms advertising the payment of living wages could experience little decline in demand, if prices were raised. Many goods of this kind are marketed and produced along a commodity chain, with multinationals subcontracting to smaller firms to produce small batches of goods. The subcontracting firm, often located in a developing country, is under great pressure to reduce costs. Labor standards and living wages that raise wages would force subcontractors globally to raise prices. The effect on multinationals that market and distribute these goods would be to squeeze their mark-ups, which have been shown to be high in the case of goods in which brand name recognition is high. The result in both cases is a redistribution from the north (consumers or firms or both) to the south, in this case, southern female workers.

Assuming that women are the primary beneficiaries of such a policy, this implies an increase in the female wage bill, defined as the average female wage multiplied by female employment. Thus, total female income rises, and depending on the effect of living wages on male income, the female share of the wage bill may also rise.

Enactment of living wages and labor standards would also require coordinated exchange rate adjustments between competitor countries that have experienced wage increases, so that real exchange rates remain unchanged. That is, a sufficiently

coordinated monetary policy would be required so that no country's exchange rate movements could offset the effects of a wage increase any more than in competitor countries. That is a big assumption, and suggests that any effort to implement living wages would also have to consider coordination of exchange rate policies among countries as well.

VI. Wage-led Productivity Effects, Gender Equity, and Growth: What are the Chances?

One possibility that many studies do not consider is that higher wages for workers in labor-intensive manufacturing industries could stimulate productivity growth, thereby neutralizing the effects of wage increases on unit labor costs and prices. Empirical research on the potential for wage-led productivity effects in labor-intensive manufacturing industries is scarce. This may be because we don't often see firms in these industries using higher wages as a way to promote increased productivity or quality improvements. In part, this may be because the firms do not have to use wages as a tool to stimulate labor effort. Monitoring is easy; rapid turnover is not costly because of low levels of investment in training and worker skills; and the target labor force is relatively powerless—women have few job alternatives. Thus, firm strategy often involves a stick, rather than a carrot.

Further, if firms can rely on low wages to achieve a cost advantage, they feel less pressure to raise productivity. Indeed, this might be described as a “low wage-low productivity” trap where wages that are too low, slow improvements in productivity,

output, and thus living conditions (Seguino 2003).¹² In contrast, externally-induced wage increases (via government policy or labor organizing) might, under the right conditions, spur firms to become more productive, to innovate, to adopt more sophisticated technology—all of which serve to attenuate the negative effect of higher wages on product price and therefore demand. Further, higher wages might induce improvements in product quality, again offsetting negative effects of wage increases on demand.

If higher wages, due to productivity effects, are cost neutral and possibly even profitable, why do employers fail to increase them? The wage-led productivity effect described here suggests multiple equilibria, as shown in Figure 3 below. If unit labor costs are defined as

$$C = w/b$$

where C is unit labor costs, w is the nominal wage, and b is labor productivity, then the rate of change of unit labor costs can be written

$$\hat{C} = \hat{w} - \hat{b}$$

where the hat signifies rate of change. The ray from the origin in Figure 3 signifies constant unit labor costs. Over a range, productivity growth is a positive function of the rate of change of the nominal wage or

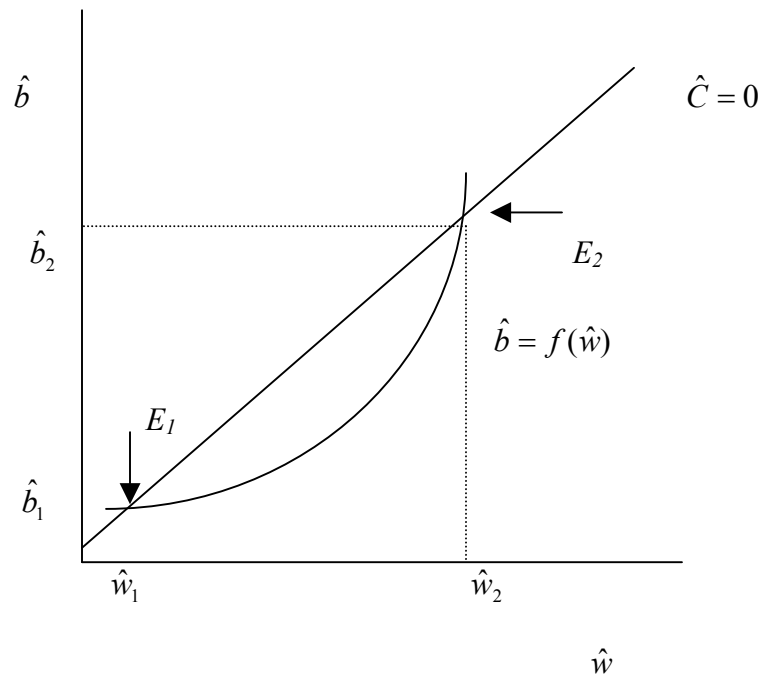
$$\hat{b} = f(\hat{w}).$$

We can imagine a situation in which the economy is at E_I , representing a low wage and low level of productivity. An increase in the nominal wage stimulates labor productivity.

¹² This argument is not new. Powers (1999) describes the use of the parasitic-industries argument as a motivating argument behind the push for a living wage for women in the early twentieth century US. Based on Beatrice and Sydney Webb's analyses, activists argued that industries paying less than a living wage were parasitic on society, which had to provide for the additional costs of supporting women, via the family or through the net drain on her health and well-being. Demands for a living wage in sweatshops addressed those concerns.

If the wage rises to \hat{w}_2 , the wage-induced increase in productivity is sufficient to compensate for the higher wage, such that unit labor costs remain constant, prices are unchanged, and thus so is employment.

Figure 3. Wage induced Productivity Growth



What are conditions under which externally-induced wage increases could induce productivity growth and quality improvements? While there may be several important conditions, of primary interest is the extent to which firms are “footloose,” that is, the degree of physical capital mobility. If firms have few alternatives to domestic labor as wages rise, that is, if they are not easily able to relocate to lower wage sites, then they are disciplined by the higher wages. The effects of this discipline might take the form of

increased corporate initiative to innovate and to improve productivity. They may take the form of more energetic efforts to market goods, or to reorient the product to niche markets where quality matters more and price less. Or simply, firms that are immobile may observe improvements in productivity and quality as labor effort increases in response to the wage incentive. The limitations on capital mobility force firms to stay around long enough to observe the productivity increases that would otherwise not have become apparent, had the firm relocated to lower wage sites.

The case of South Korea is instructive. During the period, 1975 to 1990, a time of limited inward and outward FDI, real wages more than quintupled in the manufacturing sector. There is evidence that real wage increases led rather than lagged growth, spurring labor productivity and firm efforts to innovate (Seguino 1999-2000). This period then appears to have been one of wage-led growth, with rising wages stimulating firms to invest in order to overcome the potentially negative effect of higher wages on export demand. In a sense, firms were squeezed by higher wages. To regain prior profit levels, firms were pushed to invest as a way to raise productivity.

An interesting feature of this period is that wages and productivity rose rapidly in female- as well as male-dominated industries. This is surprising, since it is often argued that wages are unlikely to produce significant increases in productivity in labor-intensive industries as compared to capital-intensive industries. The reasons advanced are that these industries simply do not lend themselves to greater mechanization, and most productivity gains resulting from process innovation have probably already occurred. The data from South Korea, however, suggest that wage increases stimulated productivity growth, even in labor-intensive female-dominated industries. The data in Table 2 are

indices of labor productivity in selected female- and male-dominated manufacturing industries during the period 1976-1990. Note that productivity gains in female industries are similar to or exceed those in male industries.

Table 2.- Indices of Labor Productivity in Selected South Korean Manufacturing Industries, 1976 to 1990

Industries	1976	1990
Female-Dominated		
Wearing apparel	100	481
Footwear	100	562
Electronics	100	808
Male-Dominated		
Iron and Steel	100	483
Machinery	100	592
Transport	100	317

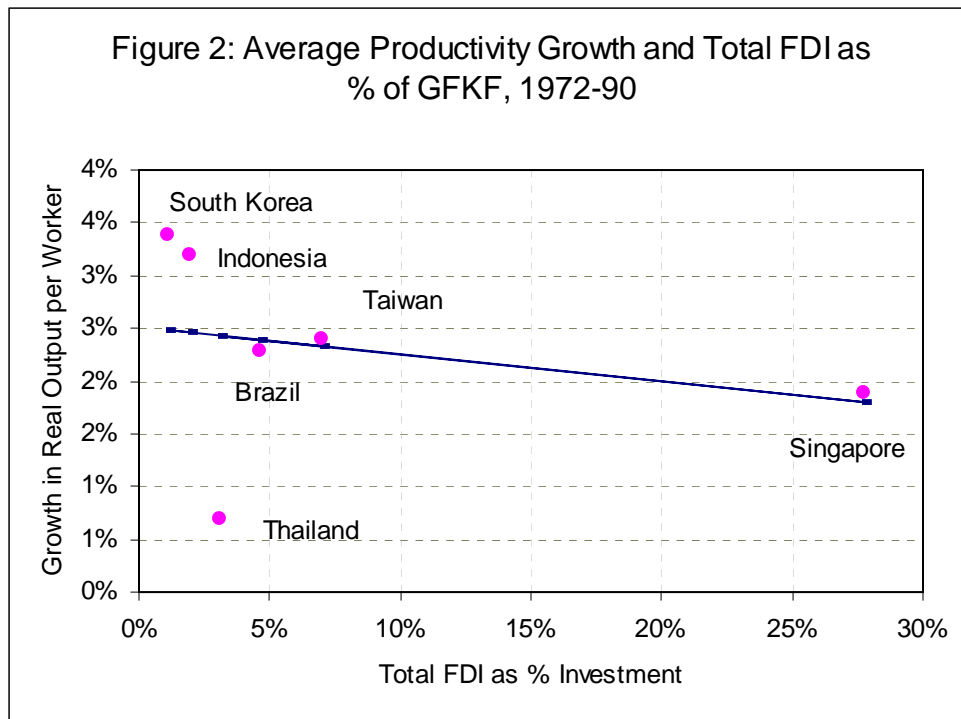
Source: Korean Productivity Center.

The case of South Korea suggests that living wage standards that raise the wages of female manufacturing workers can stimulate productivity growth, either through increases in labor effort or because firms are prodded to become more efficient, and perhaps to increase investment in more sophisticated technology.

This result is less likely to occur in an environment of footloose capital, it would seem, since firms can bargain down wages, using low wages as a cost advantage in lieu of productivity-enhancing investments. If that is the case, we would expect to see slower—not more rapid—productivity growth in countries for which physical capital mobility is high. That is, investment liberalization, because it reduces worker bargaining

power and thereby depresses wages, can lead to a “low wage-low productivity growth” trap. In short, investment liberalization can make firms “lazy” in pushing for cost advantage via efficiency gains. The preliminary data presented in Figure 2 are consistent with this hypothesis, and show that those countries with the least physical capital mobility (total FDI as a share of investment) have had the most rapid productivity growth in recent years.

This relationship between physical capital mobility, gender wage gaps, and productivity requires further investigation. If it does hold up to more sophisticated empirical scrutiny, it suggests that global labor standards, which essentially act as a constraint on capital mobility by reducing the incentive for firms to run from higher wages, may also induce higher rates of productivity growth.



VII. Conclusion

II. Gender, Bargaining Power,

Unequal female bargaining power vis-à-vis employers in the workplace is not given attention by the World Bank in its analyses of gender. This stands in marked contrast to the willingness to acknowledge unequal female bargaining power within households (see Chapter 4 of World Bank, 2001). There, the Bank notes that outside options, such as human capital, earning income, and transfers, can have a strong positive effect on women's access to household resources. This was underscored by one of the background papers for this report (Quisumbing and Maluccio 1999).

The failure to mount a broader consideration of the factors that lead to unequal gender outcomes in labor markets may reflect the absence of a theoretical understanding of the linkages between gender, wages, economic structure, and macroeconomic outcomes at the World Bank.¹³ Rather, the Bank's concern is with eliminating pre-market discrimination, underscoring its Beckerian¹⁴ penchant for ignoring within market constraints on equitable and fair wage payments. As a result, there is a glaring omission in the Bank's recommendations for ways of overcoming unequal wage payments for women.

¹³ This comment applies not only to the Bank report in question, but also to numerous Bank studies on the topic of poverty and growth. Other authors in this volume address the Bank's failure to fully address the links between gender and macroeconomic outcomes as well (see, for example, Rose-Marie Avin and Cynthia Wood.). The Bank is not the only entity that lacks such an understanding, which extends to other international financial institutions, bilateral agencies, as well as many otherwise progressive macroeconomists. Most of the published work in the area of structuralist macroeconomics which deals explicitly with inequality and macro outcomes is silent on gender.

¹⁴ Gary Becker was among the first to argue that gender (or racial) discrimination within labor markets would eventually dissipate, since profit-maximizing firms would be anxious to hire lower cost female or male labor, thus putting out of business those firms with a "taste for discrimination." The market, then, is self-correcting as far as social biases against women and people of color is concerned..

This paper outlines some of the important macroeconomic issues related to enacting living wage standards on a global scale as this relates to gender wage equality. These comments refer particularly to semi-industrialized economies. The results may differ for economies of differing economic structures.

While there is evidence that low wages for women relative to men are a stimulus to growth in the context of job segregation with women concentrated in export industries, this does not preclude more optimistic scenarios. The evidence on efficiency wage effects suggests that higher female wages that approach living wages can be consistent with economic growth by providing a stimulus for firms to innovate. The potential negative effects of higher wages on investment, when adopted in an individual country, can be lessened if implemented as a global labor standard.

The potential for this outcome to occur, however, could usefully be explored through additional research. Two areas of investigation seem particularly relevant. The first is the relationship between higher wages and productivity growth in labor-intensive industries. South Korea provides some evidence of the possibility for higher wages to stimulate productivity, and further evidence as to the strength of this relationship and the institutional context necessary for it to occur would be useful.

For example, one reason why firms may have been able to respond to the wage-push stimulus in South Korea is that they possessed the internal resources, as large conglomerates, to purchase new technologies and to implement new processes that raise productivity. Smaller firms may not be similarly equipped. Rama (2000) found, for instance, that when Indonesia doubled the real minimum wage in the early 1990s,

productivity and employment rose in large manufacturing firms, but not in small firms.¹⁵

In fact, workers in small firms experienced substantial job losses as a result of the minimum wage hike. Why was this so? It may very well have been due to the technical and resource constraints small firms experience in attempting to raise productivity. Thus a related research question is to explore the effect of higher wages on firm-level productivity by firm size. This is a particularly important issue as regards the enactment of living wages and gender equity, since women workers tend to be more concentrated in small firms with informal work arrangements than men.

¹⁵ In another interesting study on minimum wage effects in developing countries, Saget (2001) estimates the effect of real wage increases on employment and finds little evidence of negative effects. This may be explained by non-compliance. It may also suggest that wage-led productivity effects are significant.

APPENDIX

Wages in a Two-Sector Macroeconomy with Gender Segregated Labor

A stylized characterization for is a two-sector economies, with a non-tradables sector producing “home” goods that employ male labor and a tradables (export) sector that employs female labor.¹⁶ Assuming complete gender segregation, the mark-up price equations for the “home” and export goods sectors, respectively, can be written:

$$P_H = \tau(w_m a_H + eP_n^* n_H), \quad \tau > 1 \quad (1)$$

$$P_X = \varphi(w_f a_X + eP_n^* n_X), \quad \varphi > 1 \quad (2)$$

In these equations, τ and φ are the mark-up factors; w_m and w_f represent male and female wages, respectively; H is home goods and X is exports; the a_i ($i = H, X$) are the labor coefficients; the n_i are the intermediate input coefficients; P_n^* is the world price of intermediate inputs; and e is the exchange rate (domestic currency price of foreign exchange). The home sector mark-up (τ) is rigid due to high protectionist barriers, heavy subsidies, and a highly concentrated oligopolistic structure. The export-sector mark-up (φ) is assumed to be flexible in response to international competitive pressures.

The primary macroeconomic effects of any increase in female wages are thus exerted on export demand as well as investment in export industries. To see this, consider first the following expression for export demand:

$$E_X = A \left(\frac{eP_X^*}{P_X} \right)^\psi, \quad 0 < \psi < \infty \quad (3)$$

where E_X is export demand, A is a shift factor (such as foreign income), P_X^* is the price of competitive foreign exports, and ψ is the price elasticity of demand. Equation 3

¹⁶ This formulation is from Blecker and Seguino (2002); see that paper for full details of this model.

implies export demand can be stimulated by a devaluation and a decline in P_X and underscores that a decline in the price elasticity of export demand will attenuate the negative effects of a rise in the domestic price of exports on export demand.

Semi-industrialized economies tend to have rigid (price inelastic) import demand, due to the manufacturing sector's reliance on imported intermediates and capital goods in the production process. Based on this structural characteristic, a simple reduced form investment function (*pace* Bhaduri and Marglin), with investment expenditures a function of profits in the two sectors, can be written:

$$I_H = I_0 + b_1 R_H + b_2 R_X \quad (4)$$

where I_H is home investment goods, and R_H and R_X are sectoral profits. The left-hand side is desired investment spending on imported and domestic investment goods and the right-hand side is the investment demand function, in which I_0 is a constant term or shift factor (reflecting Keynesian “animal spirits”) and $b_1, b_2 > 0$ measure the responsiveness of domestic investment to profits in the two sectors (call this the “profitability” effect). We can assume that $b_2 > b_1$ since the X sector is more “footloose,” reflecting the greater ease with which such firms can move into or out of a country in response to changes in profitability.

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