Gender Equality through Labor Standards and Living Wages: An Exploration of the Issues for Asian SIEs

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Abstract

Expanding women’s outside options, including paid work at living wages, is a mechanism for improving their well-being. But in developing countries, the dual phenomenon of women’s segregation in export industries and increased firm mobility constrain women’s ability to improve their wages, work conditions, and to bargain for more secure jobs. Efforts to bargain for higher compensation can lead to employment losses, if firms relocate to lower wage sites. These structural factors, rather than gender gaps in education, are largely responsible for persistent wage inequality. The World Bank views trade and market liberalization as unambiguously beneficial mechanisms to improve women’s relative status, but this view must be questioned in light of the structural conditions faced in labor markets. 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 negative effects on output and employment? This paper seeks to answer that question, and considers the macro level policies 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
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 ...(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...is unlikely to arise out of ad hoc, piecemeal and self-serving demand for universal labour standards (Naila Kabeer, Power to Choose, p. 391).

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 as well as 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. Women’s access to income can be improved through a variety of mechanisms, including redistributions by the state, and improved access to and control over property. This paper focuses on macro-level policies that can contribute to increases in relative female income generated in exchange for labor services,¹ examining the effects of such policies on output and employment. In particular, I provide evidence that females have relatively less bargaining power in labor markets than men, thus inhibiting gender income equality, and I propose ways to overcome this impediment.

¹ Labor income can be generated from self-employment activities (e.g., in the informal sector), or subsistence farm labor, but this paper focuses primarily on wage income.
This analysis is juxtaposed against the World Bank’s (2001) prescriptions for narrowing gender gaps in income, which are based on proposals to level the playing field in institutions and human capital investment, and the promotion of economic growth based on principles of free markets and free trade. The Bank has argued that by closing the capabilities gap, women’s relative access to labor markets is improved. The resulting direct effect, it is presumed, will 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 and job security, 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. This strategy, while likely to disproportionately benefit women, has been proposed more generally as a response to growing global inequality, and is 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. 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. Instead, the Bank emphasizes educational gaps as the root cause of wage inequality. Moreover, *a priori* the Bank opposes efforts to interfere with market-
determined wage outcomes, advocating instead for greater flexibility in labor market institutions and more female education. 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 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 effects of improved labor standards and wages can be avoided, or at the very least, attenuated, through the adoption of development strategies that shift the export production mix to goods that are more price inelastic and income elastic. Under some conditions, higher wages may also stimulate increases in labor productivity, neutralizing the effect of wage hikes on unit labor costs, and thus leading to the avoidance of job loss. Further, if labor standards are enacted simultaneously among competitor countries, a country’s relative competitiveness is not likely to deteriorate, with the result that negative employment effects are avoided. 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 trends in foreign direct investment (FDI), and their gender-related effects. 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 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

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2 See, for example, Brenner (2002) on issues related to calculating global living wages, Heintz (2002), Polaski (2003), and Sengenberger and Campbell (1994) on implementation concerns.
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 can get. Those issues are discussed in the next section as they relate to the current environment of globalized production processes.

III. Firm Mobility, Bargaining Power, and Gender

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 production 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.

Mobile Capital and Foreign Direct Investment

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 expected 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 \textit{physical capital mobility}. This effect can be captured by summing 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 (see totals in bold italicized type for each region) and indeed, the share of total FDI in gross fixed capital formation has more than doubled in the period 1987-2000. 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.\footnote{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.}

\begin{table}[h]
\centering
\caption{Trends in FDI in Developing Countries} \label{table1}
\begin{tabular}{lccc}
\hline
Region & 1987 & 2000 & Change from 1987 to 2000 \\
\hline
\textit{Latin America and Caribbean} & & & \\
Inward & 5.4\% & 20.7\% & 15.3\% \\
Outward & 0.7 & 2.4 & 1.7 \\
Total & 6.1\% & 23.1\% & +17.0\% \\
\textit{Sub-Saharan Africa} & & & \\
Inward & 7.1 & 10.5 & 3.4 \\
Outward & 6.9 & 1.2 & -5.7 \\
Total & 14.0\% & 11.7\% & -2.3\% \\
\textit{Asia} & & & \\
Inward & 3.3 & 11.6 & 8.3 \\
Outward & 1.6 & 7.4 & 5.8 \\
Total & 4.9\% & 19.0\% & +14.1\% \\
\hline
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Developing Economies

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<td>Inward</td>
<td>13.4</td>
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<td>Outward</td>
<td>9.5</td>
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Note: Numbers in bold type are the sum of inward and outward FDI, representing the degree of physical capital mobility, and by inference, the size of the “threat effect” posed to workers who bargain for improvements in compensation and work conditions.

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

Mobility and Gender

This asymmetry suggests that investment now responds more strongly (negatively) to increases 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

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4 Thus, abstractly speaking, labor supply schedules have not become steeper to compensate as labor demand schedules have flattened.

5 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.
“mobile” industries and men in “immobile” or non-tradable industries.\(^6\) (Semi-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).\(^7\) 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 firms tend to produce goods for export rather than sale to the domestic economy. 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 are often the preferred labor force in mobile industries due to their lower wages and purportedly more limited resistance to poor working conditions, which enhance firm profits.\(^8\) The demand for female labor in mobile industries has risen,\

\[\text{Semi-industrialized economies are those with a significant share of manufacturing in GDP and a correspondingly small share of agriculture. Manufacturing output tends to be labor-intensive as compared to industrialized economies, with a large share of manufacturing goods destined for export. Amongst this group can be included economies with a large export service sector, such as informatics and data processing. Examples of these include Jamaica and Barbados.}\]

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

\[\text{For data on women’s concentration in export production, see, for example, Standing (1989, 1999), UNDP (1999), and, for a set of semi-industrialized economies, Seguino (2000b). On services see, for example, Freeman (2000).}\]
facilitated by trade and investment liberalization, leading Guy Standing (1989) to dub this period one of “global feminization.”  

Men, on the other hand, tend to be concentrated in non-tradable industries and capital-intensive industries, even if these latter produce for export.  
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 “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. 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.

*Firm Mobility and Capital-Labor Bargaining Power*

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

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9 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).

10 A digression on gender and economic structure in Sub-Saharan Africa (SSA) is in order. Unlike other regions, in the agricultural sector of many SSA 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’s 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.
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 there 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, we can hypothesize that as physical 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. Figure 1 captures 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 explains 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. These results imply that growth is not sufficient to close gender wage gaps (a point made in this volume by numerous authors, including Avin and Doss).

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11 A widening wage gap has been noted in several other countries with strong growth as well—e.g., Chile, Mexico, and Hong Kong (UNIFEM 2000). Female relative wage trends may be faring worse in other countries as well, given the push toward subcontracting and home-based work where wages tend to be lower. But because most labor surveys cover establishments with a minimum of 10 workers, women’s low wages in unsurveyed small shops may not show up in the official data, leading to artificially high estimates of average female wages.

12 In contrast, in the US, increased mobility in the 1990s was more pronounced in male-dominated industries, such as autos and machine tools, leading to a decline in male relative wages. On the “threat effect” in the US, see Brofenbrenner (2000). For a different view, see Black and Brainerd (2002) who attribute the closure of the wage gap to increased competition, rather than the threat effect of firm relocation holding down male wages.
The inverse relationship between capital mobility and wages, coupled with gendered job segregation, suggests that efforts to raise 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 wage inequality 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. The analytics of this
problem are addressed in the appendix within the framework of a simple neo-Kaleckian model of an open developing macro economy (see also Blecker and Seguino 2002, Seguino 2000b).

These results suggest that the enactment of labor standards that lead to wage increases might stimulate outward FDI and a decline in exports of labor-intensive goods. A possible result would be employment losses for women, at least partially negating the beneficial effects of higher minimum wages. Kabeer (2000) argues that beneficiaries would be northern workers who would gain these jobs. The problem is more likely to be south-south job competition, however, since northern light manufacturing jobs all but disappeared a number of years ago, except in niche markets (Ross and Chan 2002, Polaski 2003). Thus the issue of concern is the effect of (and antidotes to) investment and export competition among a set of semi-industrialized economies. The next two sections consider those issues.

**IV. The Potential for Living Wages to Reduce Gender Wage Inequality**

While there are constraints on efforts to improve the living standards of low-wage workers by raising wages, as the previous section shows, there is room to maneuver in achieving this policy goal. This maneuverability is not obvious in World Bank analyses, which assume perfect competition in goods and labor markets, and infinitely price elastic export demand.

An important component of arguments against labor standards is an assumption that wages rise only in one country. Thus, as with the model presented in the appendix, wages are assumed to rise in country A, while they are held 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 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 or
competitor 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 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
amongs 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 on 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 is −0.61—a 10% increase in real wages will lead to a
6.1% 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 south. In one study, northern consumers indicated they would be
willing to pay 2-6% more for goods produced under more humane conditions, which
would cover 100% of wage increases needed to bring workers up to a living wage (Pollin,
Burns, and Heintz 2001). It is thus conceivable that firms advertising the payment of
living wages would experience little decline in product demand if prices were raised.

Of course, many goods of this kind are produced and marketed 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. But this may not have a large effect on
product price if multinationals that market and distribute these goods were forced to
squeeze their mark-ups, which have been shown to be very high in the case of goods in
which brand name recognition is high (Heinz 2003). 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 total wage bill may also rise, contributing to greater gender income equality.

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.

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

Another important feature of the negative commentaries on labor standards (as well as the model in the appendix) is the assumption that there is no link between wages and productivity.13 There is a possibility, however, that higher wages for workers in labor-intensive manufacturing industries could stimulate productivity growth, thereby neutralizing the effect of wage increases on unit labor costs and prices. Empirical research on 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

13 In the model in the appendix, this is measured as the inverse of the labor coefficient (aX) in equation 2.
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). 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. Finally, higher wages may contribute to health and nutritional improvements that lead to improved labor productivity on the job.

*Unit Labor Costs and Wage-Led Productivity Effects*

One might question why employers fail to raise wages on their own, if higher wages, due to productivity effects, are cost-neutral and possibly even profitable. One explanation is that the wage-led productivity effect described here suggests multiple equilibria, as shown in Figure 2. Defining unit labor costs as:

\[ C = \frac{w}{b} \]

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14 This line of thought is not new. Powers (1999) describes the use of parasitic-industries analysis 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 was then required to take up the burden of providing for the additional costs of supporting women, via the family or through the net drain on women’s health and well-being. Demands for a living wage in sweatshops addressed those concerns.
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

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

where the “hat” signifies rate of change. Over a certain wage range, productivity growth is a positive function of the rate of change of the nominal wage or

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

Looking at Figure 2, the ray from the origin signifies constant unit labor costs. Note that the two wage-productivity equilibria ($E_1$ and $E_2$) reflect identical unit labor costs.

We can imagine a situation in which a developing economy finds itself at $E_1$, representing a low wage and low level of productivity. This is a stable equilibrium with no tendency for the wage, and thus productivity to rise (Seguino 2003). An increase in the nominal wage however, could stimulate labor productivity growth. If the wage rose to $\dot{w}_2$, the wage-induced increase in productivity would be sufficient to compensate for the higher wage such that unit labor costs remain constant. As a result, prices are unchanged and thus higher wages do not generate employment losses.

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15 At some point, the wage-led productivity function may turn negative (not shown here). Bowles and Gintis (1985), for example, posit that when full employment is approached, and the “cost of job loss” falls, higher wages exert a smaller positive effect on productivity, which may eventually turn negative, if workers “shirk” or the costs of monitoring rise. Female-dominated labor intensive industries lend themselves to monitoring, however, and thus the conditions under which the wage-productivity function turns negative is more likely to be linked to technological constraints.
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.

**South Korea and Productivity Growth in Female-Dominated Industries**

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

<table>
<thead>
<tr>
<th>Industries</th>
<th>1976</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female-Dominated</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wearing apparel</td>
<td>100</td>
<td>481</td>
</tr>
<tr>
<td>Footwear</td>
<td>100</td>
<td>562</td>
</tr>
<tr>
<td>Electronics</td>
<td>100</td>
<td>808</td>
</tr>
<tr>
<td><strong>Male-Dominated</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron and Steel</td>
<td>100</td>
<td>483</td>
</tr>
<tr>
<td>Machinery</td>
<td>100</td>
<td>592</td>
</tr>
<tr>
<td>Transport</td>
<td>100</td>
<td>317</td>
</tr>
</tbody>
</table>

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.\(^{16}\)

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...

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\(^{16}\) 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.
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 data presented in Figure 3 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 result has been confirmed in an analysis of 37 semi-industrialized economies for the period 1970-2000 (Seguino 2003). These results suggest 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.

Figure 3: Average Productivity Growth and Total FDI as % of GFKF, 1972-90
VI. Taking Bargaining Power Differentials Seriously: Policy Implications

The patterns of gender segregation and the differential bargaining power that arise in jobs in mobile vs. immobile industries underscore the need for intervention in labor markets as part of any effort to close gender gaps in well-being. A hands-off approach to labor markets will not suffice.

Focusing on labor standards and living wages as a means to close gender gaps, there are four related policies that can be adopted to make such a strategy work, in the sense that women’s wages rise and job losses are avoided. First, coordination among developing countries to ensure stable relative export prices would be necessary. In particular, monetary authorities would play a role in ensuring that no country’s exchange rate movements offset the effects of a wage increase any more than in competitor countries.

Second, governments should develop industrial policies to move their labor-intensive sectors up the industrial ladder to the production of goods where price matters less, and quality more. When this occurs, the price elasticity of export good demand falls, and the negative employment effects of wage hikes are attenuated. The role of the state is particularly important in the case where exports are largely produced by small firms since they often lack the technological expertise, or access to marketing and distribution networks that would permit them to shift to the production of more price inelastic export goods. Indeed, 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.

17 An obvious policy approach, not discussed here, would be to take steps to integrate labor markets.
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. 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. 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.

Third, anti-sweatshop campaigns have advanced a variety of mechanisms to link better labor practices with rewards in product markets. Heinz (2002) discusses these in detail. I simple note here that these campaigns have gender implications and efforts to improve gender equity should include ways to integrate such northern campaigns with efforts to improve work conditions and wages for women in the global south. The World Bank’s support of such a strategy would be beneficial.

Finally, a major constraint on making living wage and labor standards work is firm mobility. There is increasing evidence that it is time to implement “speed bumps” for physical capital as has been done for financial capital in such countries as Chile. Reductions in firm mobility can permit wage-led productivity effects to emerge, thus producing a gain for workers, particularly female workers, in terms of higher wages while keeping unit labor costs low. 18 How is this to be done? This is a question that requires some study and debate. I will point out here that South Korea, Taiwan, and

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18 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.
Japan, and, more recently, China are examples of countries that have managed and constrained foreign direct investment to their advantage. Controls on investment are not currently in vogue. The current World Bank fashion, for example, emphasizes liberalization. But these winds of liberalization should not prevent those concerned with gender equality from arguing for more gender-equitable macro strategies and a debate on how to implement such policies.

A final note on the effects of labor standards on women employed in informal sector work. The effects of such standards on the work conditions and wages of those employed in the informal sector are ambiguous. Among informal sector workers are the self-employed and those working as home workers doing industrial piecework. The latter group may benefit indirectly, if formal sector work conditions improve, thus raising the wage floor. Further, technological improvements induced by higher wages as formal sector firms attempt to hold down unit labor costs would make those industrial piecework activities less profitable. Further, an effort to organize home workers is likely to be necessary to prevent increased informalization of formal sector jobs. Because informal sector work is often residual employment, a more direct mechanism to improve the conditions of those who work as self-employed workers such as street vendors, would benefit more from macroeconomic stimulus, and would be harmed by policies that increase formal sector unemployment.

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19 A common reference on this topic is Alice Amsden (1989). See also Braunstein and Epstein (2002) and Ha-Joon Chang (2002).

20 This would not require direct policy action, if redistributions from capitalists to female workers led to a rise in the economy-wide marginal propensity to consume, thus stimulating aggregate demand. See Blecker and Seguino (2002) on this topic as well as the appendix.
VII. Conclusion

Unequal female bargaining power vis-à-vis employers is an important aspect of in the current globalized environment. This constraint is given insufficient attention by the World Bank in its analyses of gender. This stands in marked contrast to the Bank’s willingness to acknowledge unequal female bargaining power within households, and the positive effect of outside options, such as human capital, earned income, and transfers, on women’s access to household resources. The Bank’s 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.21

In an effort to fill that lacuna, this paper lays out some of the important macroeconomic considerations related to closing gender wage gaps in labor markets via enactment of labor standards and living wages. In particular, I address effects on investment, exports, consumption, and productivity. These comments refer primarily to semi-industrialized economies; results may differ for economies of differing economic structures.

The evidence on wage-led productivity effects suggests that higher female wages that approach living wages can provide a stimulus for firms to innovate. The result will be an increase in productivity, thus making wage increases cost-neutral and possibly even profitable, thus protecting against job loss. The realization of this positive effect of higher

21 This comment applies not only to the Bank report in question, but also to numerous Bank studies on the topic 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.
wages requires constraints on firm mobility. Even without restraints on firm mobility, 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. Industrial policies that shift production to price inelastic exports will also help. All of these policy proposals suggest an important role for the state in managing the process of development and growth. Despite the Bank’s resistance to state intervention in the production sphere of the economy, there is a clear connection between such intervention and improvements in gender equity. A virtuous cycle can be set in motion by reasoned state level actions, with the resulting increase in gender equality further stimulating development and growth—a link the Bank does acknowledge.
Wages in a Two-Sector Macroeconomy with Gender Segregated Labor

A stylized characterization of developing country economies with a significant manufacturing or service export sector (that is, a semi-industrialized economy) is that these are two-sector economies, with a non-tradables sector producing “home” goods that employ male labor and a tradables (export) sector that employs female labor. Assuming complete gender segregation, the mark-up price equations for the “home” and export goods sectors, respectively, can be written:

\[ P_H = \tau(w_m a_H + eP^* n_H), \quad \tau > 1 \]  \hspace{1cm} (1)
\[ P_X = \phi(w_f a_X + eP^* n_X), \quad \phi > 1 \]  \hspace{1cm} (2)

In these equations, \( \tau \) and \( \phi \) 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; \( P^* \) is the world price of intermediate inputs; and \( e \) is the exchange rate (domestic currency price of foreign exchange). The home sector mark-up (\( \tau \)) is rigid due to high protectionist barriers, heavy subsidies, and a highly concentrated oligopolisitic structure. The export-sector mark-up (\( \phi \)) is assumed to be flexible in response to international competitive pressures and in particular, changes in the real exchange rate.

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

23 Modelling price formation as a mark-up pricing process (reflecting oligopolisitic power) can in part account for the different viewpoint on the employment effects of labor standards as compared to neoclassical analyses. A neoclassical approach (e.g., Brown 2001), which assumes perfect firm competition, would imply an export price equation such as \( P_X = w a_X + rk \) 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.
The primary macroeconomic effects of any increase in female wages are exerted on export demand as well as investment in export industries. To see this, consider first the following expression for export demand:

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

(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 \( \psi \) is the price elasticity of demand. Equation 3 implies that export demand can be stimulated by a devaluation and a decline in \( P_X \).

Further, it can be seen 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.

A simple reduced form investment function, with investment expenditures a function of profits in the two sectors, can be written:

\[ I = I_0 + b_1R_H + b_2R_X \]  

(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 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.

These equations can be used to demonstrate the constraints on raising women’s relative wages in an open economy. The effects of raising the female wage operate through two major channels: 1) an export price effect—the export price rises, causing the exchange rate to appreciate; and 2) a class redistribution effect—the firm-mark-up in the
export sector is squeezed by higher wages, reducing the profit share from that sector. The first implies that higher female wages will cause export prices to rise, and export demand to fall \[\text{equations (2) and (3)}\]. Profits may also be squeezed, resulting in a decline in aggregate investment \[\text{equation (4)}\]. The combined negative demand-side effect is larger the more price elastic exports \(\psi\). It is possible, of course, that a redistribution to women workers will induce an increase in consumption spending \(\text{if female workers’ propensity to consume is higher than that of capitalists}\).\(^{24}\) 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):

\[
I_{w_f} + X_{w_f} < S + M
\]

\[
(-) \quad (-) \quad (?)
\]

where \(S\) is aggregate saving and \(M\) is imports demand. 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 to consume out of wage and profit income will influence the effect of higher female wages on consumption demand for both the export good and the “home” good.

Higher female wages that lead to a decline in output and female employment 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

\[\text{Thus there is a third potential effect—}\text{a consumption effect. There is, however, little empirical evidence on which to base such an assumption about spending propensities, other than Seguino and Floro (2003), which considers only gender differences in saving propensities among workers.}\]
likely to obtain in countries in the early stages of industrialization, and in that regard, the fears of Kabeer (2000) and others appear well-founded.\textsuperscript{25}

An 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. One can think of relatively few countries that fall into this category, but an important and instructive example is South Korea (discussed in section V). Nevertheless, under some conditions, higher female wages are consistent with increases in employment and output, even when there are no wage-led productivity effects.

\textsuperscript{25} 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 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.
Bibliography


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