Labor and the Globalization of Production

Causes and Consequences of Industrial Upgrading

Edited by William Milberg

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Why Do Firms Disintegrate? Towards an Understanding of the Firm-level Decision to Subcontract and its Implications for Labor

Asad Sayeed and Radhika Balakrishnan[1]

Introduction

The post cold-war global economy is characterized by the twin phenomena of disintegration of the production process and the integration of the world economy through trade (Feenstra, 1998). Although the phenomenon of disintegration of the production process has been observed over the last three decades, it has accelerated with trade and financial sector liberalization in the post cold-war world order. In this context, flexible production systems with vertical and at times horizontal disintegration are seen as increasingly profitable. This is especially true with regard to out-sourcing of production to developing countries. Korzeniewicz and Martin (1994) conceptualize this phenomenon as characterized by a new global division of labor.

Subcontracting is a relationship where a firm externalizes part of the production or processing of their product to another separate entity but according to the specifications of the firm that is subcontracting its work (Dickens, 1998, p. 230). By subcontracting production outside its legal precincts, firms reduce their labor cost and the transaction cost of monitoring and metering labor. More important is the fact that subcontracting enables the firm to externalize part of its capital and operational costs emanating from the regulatory environment (Appay, 1998, pp. 161–84).[2]

The phenomenon of subcontracting raises important questions with regard to its impact on employment, wages, working conditions, gender dynamics and productivity. Ong (1997, p. 61) argues that since the 1970s the process of accumulation is typified by flexible labor regimes, which in turn, are increasingly based on female and minority workers in the third world

and in poor regions of metropolitan countries.[3] Therefore, the spatial dispersion of work has largely been accompanied by a decrease in wages, deterioration of working conditions and increasing feminization of the work force.[4] Since much of this work has been un-semi skilled, it has drawn in economically and socially oppressed workers, that is, women, children and illegal migrant workers, who are prepared to work for long hours at low wages (Standing, 1989 and 1999). "This trend is most pronounced in the manufacturing industries in low and middle income countries at the early stages of industrialization.[5] Feminization is pronounced where gender wage gaps are wide, and there is evidence that as those gaps close, feminization reverses" (Seguino and Grown, 2002, p. 12). This decline in formal employment has also been accompanied with an increase in more insecure subcontracted small unit-based or home-based employment of women workers (Ghosh, 2001).

Dispersion of work has also worked as a labor-disciplining device by capital. Segregation of the production process enables firms to evade existing labor legislation and makes it increasingly difficult for workers to organize.

Others have argued, on the other hand, that the spatial dispersion of work has an employment and/or productivity enhancing aspect. This body of work suggests that work that is generally contracted out internationally is low skilled. This therefore implies that there is an increase in demand for high-skilled workers in the industrialized countries made possible by labor saving technological change. There has been some evidence that there has been an increase in productivity in the industrialized countries. The wage gap in the industrialized countries has increased and they suggest that there is possibly an increase in relative wages for high-skilled workers in low-income countries (Feenstra, 2000).[6] Firm level decision to go for labor flexibility, it is argued, is driven by productivity enhancement and therefore, in principle, there should be no negative impact on wages.[7]

The increase in demand for low skilled labor in the third world has not necessarily resulted in an increase in wages of workers in these countries. There has, however, been some evidence in a few countries that women workers in subcontracted industries, particularly those working in small sweat shops engaged in home-based work are new entrants to the labor force and therefore their ability to earn wages can be seen as an improvement in their relative status (Balakrishnan, 2002).

In this chapter we seek to specify different conditions that compel previously integrated firms to disintegrate production and the impact that those specific conditions have on wages and working conditions, particularly women workers.

In Section 1 of the chapter we revisit the literature on the "make or buy" decision of the capitalist firm, primarily because this literature provides important conceptual tools that are needed to specify different conditions in which firms decide to sub-contract. Revisiting this literature will also

provide some clues to changes in economic organization that has resulted in increasing disintegration of the production process.

In Section 2 we present a conceptual framework that explores the relationship between long-run profit maximization and subcontracting. We start with the proposition that the firm maximizes its long-run profits essentially through minimizing unit labor costs. A modified unit labor cost equation is introduced which incorporates different transaction costs that are highlighted by the literature on "make or buy" decisions. In Section 3, we specify the ex-post decision of the firm in terms of a push and pull towards subcontracting. Based on the theoretical framework developed earlier we specify the productivity enhancing character of subcontracting (the pull mechanism) and the cost reducing motivation (the push mechanism) along with their attendant impact on wages and working conditions. Section 4 concludes.

1 Make or buy? A brief literature review

The decision of a firm to make or buy raises fundamental questions about economic organization in market economies. Coase (1937) posed the question as to why firms exist in a market economy where *prices* are expected to provide signals for efficient allocation of resources to all factors of production. Coase's answer to this question was that the hierarchical structure of the capitalist firm enhances the efficiency of resource allocation. He characterized this phenomenon as an 'island of conscious power' in the sea of price-coordinated market exchange.

Much of the subsequent literature that seeks to answer the question regarding the existence of the capitalist firm does so through two seemingly opposing explanations. Neoclassical economists have followed Coase in explaining the existence of the capitalist firm in terms of enhancing efficiency of the production process.[8] The (neo)Marxists, on the other hand, have argued that the essential purpose of the capitalist firm is to control the labour process.[9] See Putterman (1986) for a useful summary on the existence of the capitalist firm that is couched in terms of its efficiency or control characteristics.

The efficiency argument has been developed by introducing the notion of transaction costs. Transaction costs are most succinctly defined as the cost of exchange that firms have to undertake to buy inputs from the market and to conduct the production process efficiently (Williamson, 1985). The cost of writing, negotiating, policing and enforcing contracts are some transaction costs in this realm. Transaction costs are, however, also incurred within the firm. Supervision and monitoring of the labour process is an essential transaction cost (Alchian and Demsetz, 1972). Firms, therefore, integrate the production process if the cost of managing market interactions is less than the monitoring cost. Because of the hierarchical nature of the firm the internal transaction costs are generally deemed to be less than those encountered externally. Going by the operational use of transaction costs in explaining

the integration of economic activity, Eggertson (1990, pp. 15–16) has shown that these costs can be categorized exclusively as arising out of either high information costs or the existence of asymmetric information.[10]

The Marxist conceptualization of the control function of the firm has its origins in Marx's distinction between the spheres of circulation and production where surplus value is created in the production sphere, that is, the firm. Without necessarily invoking the surplus value argument, the neo-Marxists demonstrate the process of labor control through de-skilling as the principal basis of the existence of the firm. The work of Braverman (1974) on the Fordist mode of integrated, assembly line production is taken as the benchmark in much of these analyses.

That the hierarchy within the firm and the freedom of market exchange coexist in capitalist economic organization is recognized by exponents of both neo-classical and Marxist positions (see Putterman, 1986, pp. 25–9). Both will also agree that regardless of motivations to integrate production, the bottom line in corporate governance remains the maximization of long-run profits.

We, however seek to understand the opposite phenomenon of *Why Firms Disintegrate?* The purpose of the brief review of the literature on firm integration is helpful in borrowing important conceptual tools used in that literature. Whether firms decide to make or buy is determined by the firm objective of profit maximization. Firms achieve this objective in a milieu where technology and institutions facilitate to reduce transaction costs through disintegrating the production process and/or increasing capitalist control over labor power.

2 The conceptual framework

The long-run objective of the capitalist firm axiomatically is to maximize profits. The decision to make or buy will thus hinge on this bottom line. Profitability can be expressed simply in equation (1) as:

$$P = R - (K_c + \mathrm{UL}(Q)) \tag{1}$$

where P = profitability, R = total revenue and is the product of price per unit and output, K_c = capital consumption, measured through the rate of depreciation on the given capital stock and UL is the modified unit labor cost equation which takes the form.

$$\mathrm{UL} = W\,L/Q + O \tag{2}$$

where W = total labor related costs, L = total labor employed,[11] Q = total quantity of goods produced and O = per unit overhead economic costs such as utilities, taxes, levels of inventory and non-labor regulatory costs (environmental, health, etc.)

The modification in equation (2) from the standard unit labor cost conceptualization is first, the inclusion of overheads (O) and second, instead of taking W as nominal wages, we take the entire cost on labor as

$$W = w + N_w + S \tag{3}$$

where w = nominal wages, N_w = non-wage firm level benefits to workers[12] and S = cost of supervision and monitoring, including the pay package of those supervisors and managers whose job is to monitor and regulate labor.

Moreover, since efficiency is essentially gauged by improvements in productivity (Q/L), equation 2 can be re-written as $A = R/L$

$$\text{UL} = W/A + O \tag{4}$$

Going back to equation (1), we assume that the cost of capital is given[13], the firm is a price taker in both input and output markets and a range of techniques exist which are more or less labor (capital) intensive. Firms then seek to minimize their unit labor costs. The decision to subcontract is, therefore, made at the point where long run profits from subcontracting are greater than those of producing in-house.

Institutional characteristics

The decision to make or buy will vary with variation in the institutional environment in which firms operate. One such important institutional characteristic is the 'formal–informal' sector divide. When firms disintegrate production within a country, they typically move production out of the 'formal' sector to the 'informal' sector. The formal sector is characterized by adherence to the legal structure prevalent in a country. For our purposes, this will translate into adherence of labor laws and the payment of taxes. Labor laws usually refer to the existence of a minimum wage and non-wage benefits. Important non-wage benefits are over-time compensation, a holiday schedule, health benefits,[14] including maternity leave, housing allowances and bonuses. The right to unionize is also typically granted in most countries for registered firms.[15] The "cost" of being formal, therefore is that the total wage (W) in the formal sector is relatively high.[16] Compared to that such constraints do not exist in the informal sector. In countries where such distinct sectors exist, it is legitimate to ask as to why all firms and economic activity does not shift to the informal sector? While there are no theoretical answers to this question, we conjecture that beyond a certain capital and turnover threshold it is difficult to evade legality. More substantively, access to formal sector credit (which tends to be less costly than informal sector credit) is only possible for a legally registered firm.

The formal–informal divide has to be seen not only in terms of firms and products but also labor markets. Flexibility of work in terms of increasingly

insecure employment, limited job mobility and few or no benefits has been observed for all workers. But the incidence of these features for women's employment greatly exceeds that for men (Seguino and Grown, 2002). This is one important form of labor market segmentation among others.[17]

In terms of skill levels, wages, working conditions and collective action, workers in the informal sector are 'poor cousins' of their formal sector comrades. Moreover, the threat of informalization has also decreased the benefits in the formal sector. When workers in the formal sector know that any demand for increase in wages or improvements in working conditions can possibly make the management react by pushing production outside the firm, job security becomes the paramount consideration.[18]

The same intra-country logic can be applied to outsourcing of work across countries. Apart form the fact that labor is cheaper in developing countries compared to developed countries, labor rights are institutionalized in greater measure in OECD countries compared to developing countries. Most OECD countries have a legislated minimum wage and provide substantive non-wage benefits to workers across the spectrum.[19] Similarly environmental and health related regulations are much tighter in OECD countries compared to developing countries. This difference in labor legislation has shifted work from the north to the south and has decreased the female share of employment in the north. Kucera and Milberg (2000), find evidence of declines in females, share of manufacturing employment in a number of industrialized economies in response to north–south trade. That is, women employed in the formal manufacturing sector in the north have been displaced in response to increased trade with southern countries that are more intensively using women in labor-intensive industries.

This important institutional characteristic lies at the cornerstone of subcontracting and outsourcing work when profits are threatened by increasing unit labor costs.

3 The push and pull characteristic of subcontracting

To understand the impact of subcontracting on labor it is important to specify the conditions in which work is subcontracted. Building on the argument above that in a rapidly integrating global financial and trade environment, minimizing unit labor costs is critical for long-run profit maximization. We now move on to analyze different forces which prompt firms to subcontract work. We distinguish situations in which firms are *pulled* or *pushed* into subcontracting. Firms are pulled to subcontract when labor costs are reduced through improvements in productivity (or A in equation 4). In contrast, firms can be *pushed* into subcontracting when unit labor costs are minimized solely through cost minimization (W and O) without any attendant productivity improvements. A pull into subcontracting creates conditions for improvements in returns to labor over time.[20] A push into subcontracting,

on the other hand, is purely exploitative as one cannot envisage any improvements in wages and working conditions for workers involved in this form of subcontracting.[21]

Pull into subcontracting

The simplest pull mechanism towards subcontracting is the principle of expanded reproduction that states that the division of labor is determined by the extent of the market. As demand for a particular industry using inputs increases, the minimum efficient scale of those products used as inputs increases and leads to that product being manufactured independently (Stigler, 1968). This form of subcontracting is generally associated with capital-intensive, continuous-flow methods[22] of production and is amenable to production technologies where economies of scale are central. If economies of scale determine a minimum efficient scale of production which is greater than the need of the parent firm, then it will decide to buy rather than produce. The cost of that particular input reduces, which in turn reduces O and has a positive impact on UL.

The above form of subcontracting, however, is different from subcontracting in sectors where technology is generally based on batch production – where production is broken down into distinct and fully contained tasks. Skill-intensive sectors dominate this profile. In these sectors, innovations in the division of labor occur primarily due to technological change where general purpose and divisible machinery is brought together with skilled and trained workers. The flexible specialization paradigm á la Piore and Sabel (1984) illustrates this phenomenon. Divisibility of capital enables the large firm to outsource production and reap the gains from economies of specialization. Software development, computer-aided designing, manufacture of automobile parts and electronics are some examples of such activity.

Specifically, in the IT industry in India, women are better represented than in the formal sector as a whole though class and caste segmentation are evident. Most of the workers in the industry are educated, English speaking and urban. Though educated women are benefiting from this type of employment, roughly 61 percent of females above the age of seven cannot read and write in India (Ghosh, 2001).

High skill levels of workers and a change in their contractual arrangement from an input-based time wage to an output-based piece rate induce this form of subcontracting. In such a situation, skill intensity has a positive impact on labor productivity A, through skill embodied in L. Moreover, the total wage bill (W) reduces because supervision costs (S) are reduced if the work is sub-contracted out on piece-rates.[23] The nominal wage (w) will depend on the human capital endowment of the work force and the relative ease/difficulty in acquiring skills. If it is easy to impart or acquire requisite skills then (w) may remain depressed or may even decline and vice versa. In the case where (w) increases the only condition is that the increase in (w) should be less than

or equal to the reduction in supervision costs (S). By subcontracting work out overhead costs (O) also reduce. A combination of reduction in total wages (W) and overhead costs(O), along with an improvement in labor productivity (A) will lead to a decline in the unit labor cost (UL). Such forms of subcontracting usually takes place *within* the formal sector.

In labor intensive sectors based on batch production and where output can be broken into distinct and fully contained tasks, the supervision cost is reduced through piece rating. But in order to induce workers to perform better, a higher nominal wage (w) is paid.[24] The higher nominal wage (w) can have an efficiency wage impact and thus improve work effort, thereby improving labor productivity (A). The impulse to subcontract work is that it reduces overheads (O) and supervision costs (S) while non-wage benefits (N_w) are eliminated. Thus even after an increase in the nominal wage (W), total wages (W) as a whole are reduced. This form of subcontracting is most prevalent in lower value-added exports such as garments, footwear and carpet manufacture. *Usually formal sector export firms subcontract such work out to the informal sector.* The "efficiency wage" effects (i.e. when higher than market wages are paid to induce and retain workers in these sectors) are also less likely to take place because firms can relocate to lower wage sites as wages increase, even before productivity gains can be captured (Seguino and Grown, 2002).

The same results will occur if the supply of woman workers in the informal sector occurs at a lower reservation wage than the rest of the economy.[25] In industries where "nimble" fingers are assumed to be needed and/or women can be coerced into working long hours at subsistence wages, labor productivity (A) will improve and at the same time non-wage benefits (N_w), supervision costs (S) as well as overhead costs (O) will reduce. However, such improvements in productivity will be short-lived, simply because reproducing labor power at subsistence wages for women who have to bear the double burden of the care economy has its obvious physical limits.[26] This form of pull subcontracting will thus soon degenerate into a push subcontracting (see below) or will move into an efficiency wage like situation described above. The latter two forms of subcontracting arrangements can be observed at the low-end of the export market, such as products sold at Wal-Mart or open market sales in developed countries.

This trend can also be seen in buyer-driven commodity chains, which refer to "those industries in which large retailers, brand named merchandisers, and trading companies play the pivotal role in setting up decentralized production networks in exporting countries, typically located in the Third World" (Gereffi, 1994, p. 97). These industries are not manufacturers as such, but merchandisers who farm out all of the production to different agents around the world (Gereffi, 1994).

The pull into subcontracting is thus dependent on the ability of the firm to forego the supervision and metering cost. The particular mix of skill intensity, demand for the product and increased work effort as a result of the

efficiency wage can create a situation where subcontracting work results in a positive-sum outcome. On the one hand, the firm is able to minimize its unit labor cost and thereby increase profits and on the other hand it creates conditions for the realization of better wages and/or working conditions for skilled and informal sector workers. Of course the realization of better wages and working conditions is relative. If production has moved out of developed countries or the formal sector in developing countries, then the comparison is invalid because of different labor market and institutional characteristics. For developing country informal sector workers, productivity enhancement, *ipso facto* creates labor market dynamics for improvements in wages and working conditions. The same can be said about skill intensity in outsourcing. As Feenstra (1998) states "... outsourced activities are un-skilled labor intensive relative to those in the developed economy but skilled labor intensive relative to those in the less developed economy". Thus skills, as well as skill intensity, should be seen on a spectrum.[27]

Push into subcontracting

Push subcontracting is characterized always by a move from the formal (internationally or domestically) to the informal, unregulated product and labor markets.

In contrast to the pull towards subcontracting, firms can be *pushed* into outsourcing in three cases: (i) increase in economic costs (O), (ii) increasing product market competition and (iii) the possibility to circumvent the regulatory environment (both labor and others). Production of consumer non-durables at the lower end of the market segment and much of home-based work are examples of the *push* into subcontracting. The outsourced work process is usually the least skill-intensive, involving minimal capital outlays, and the labor process is generally repetitive and monotonous. Rather than improving productivity and product quality, reducing costs to survive in the market is the dominant criterion. Much of this push into subcontracting can be explained by technical change and the onset of neo-liberal economic policies instituted in the developing as well as the developed world. In developing countries these policies have resulted in familiar stabilization and structural adjustment programs. In the developed world, a more gradual process of deregulation and dismantling of the welfare state – and thereby social protection – has been observed. Deregulation coupled with technical change has made firms more risk averse in a milieu of increasing competition. As Standing observes: Stimulated by high unemployment, by new technology, by more aggressive international competition (notably from Japan and the newly industrialized countries), by deregulation and the erosion of union strength, and by the desire to overcome the uncertainty induced by the international economic instability, enterprises every where are devising means of reducing the fixed costs of labor. There is a global trend to reduce the reliance on full – time wage and salary workers earning fixed wages and

various fringe benefits. Companies and the public sector enterprises in both the developed and developing economies are increasingly resorting to casual or temporary workers, to part-timers, to subcontracting and to contract workers (Standing, 1999, p. 1078).

The first case we examine is that of firms being pushed into subcontracting as a response to increasing economic costs of production (O). The price of raw materials increase due to a fast deteriorating exchange rate or high interest rates due to a contractionary monetary policy and/or an increase in the cost of utilities increases because of structural adjustment/stabilization policy packages. Since the overall increase in production costs is beyond the control of individual entrepreneurs, they resort to reducing labor and overhead costs by outsourcing those aspects of the production process wherever it is technologically and administratively feasible to do so. Such outsourcing will not necessarily lead to any productivity enhancement, and the expected impact on wages and working conditions is negative.

In terms of our formulation, an increase in overhead and economic costs (O) will lead to an increase in the unit labor cost (UL). Thus the incentive to reduce labor cost.[28] Such a move also reduces the overheads of the firm in terms of renting space and electricity but the increase in other elements of (O) will be high. It is clear in this situation that (A) is not affected and the (UL) reducing mechanism operates essentially through a reduction in (W).

The second case of push subcontracting is where firms are subjected to excessive levels of price-based competition. At the lower end of the market spectrum,[29] where price rather than quality is the determining criterion for capturing market share, cost reduction takes place through subcontracting work, typically to home-based workers. Removal of domestic entry barriers and deregulation of investment has resulted in increasing the level of domestic competition in many developing countries. As a result push subcontracting is a frequent phenomenon in a number of such industries.

Reduction in tariffs due to trade liberalization policies can also exacerbate price-based competition. Only a small segment of the third world consumer market corresponds to the quality-conscious western consumer, where niche markets for customized products are increasingly ruling the roost. In such markets, healthy "competition" exists, where quality and design rather than price is the determining factor. Much of the consumerism in the developing world is based on either cheap (read affordable) imitations or "modern" necessities. As tariff barriers come down, intra-third world competition for imitation Gucci handbags or Levi jeans or simply garments or toothbrushes, soaps and slippers intensifies. And since price is the only criterion through which market share is to be captured among these labor-intensive industries, competition ensues between poor countries over whose labor is cheapest. If the Pakistani slipper maker is to survive on the back streets of Karachi selling her product, she has to pay less to her worker than her Chinese or Vietnamese counterpart. The bottom line is thus clearly defined.

Niches in this case shift from products to workers. Employers/producers then prowl for women and children of the poorest households, who are usually migrants either from rural areas or from war-ravaged or calamity-hit neighboring countries. Once such segmentation in the labor market is intensified, then the wage rate in the labor market as a whole also drops. If the producers are successful in reducing the overall wage level, then in popular parlance they have attained competitiveness.[30]

In terms of unit labor costs, the impact of excessive competition is similar to that of increasing overhead costs. The pressure to decrease the price of the product is paramount with quality (measured through supervision costs (S) and labor productivity (A) in equations 3 and 4 above) having little relevance. In this case, work is subcontracted out to eliminate none-wage benefits (Nw) and reduce the nominal wage (w) to the lowest possible level. This form of subcontracting might be done at the level of small sweatshops or home-based work, depending on the level of direct monitoring required. Garments, plastic products and other consumer non-durables are good examples of this.

The trend towards small shop and particularly home-based work has been increasing internationally. As Ghosh (2001) points out "in the garment industry alone, the percentage of home workers to total workers has been estimated at 38 percent in Thailand, between 25 and 29 percent in the Philippines, 30 percent in one region in Mexico, between 30 and 60 percent in Chile and 45 percent in Venezuela." The shift to home-based work has a significant impact on the defeminization of formal sector employment in these sectors. The predominance of women in home-based work has possibly contributed to a shift in workers from factories to lower paid subcontracted work. In Thailand there was evidence that many of the garment factories that closed as a result of the 1997 financial crisis, transferred their production to small shops and homes (Balakrishnan, 2002).

The third condition for push subcontracting to emerge is in response to legislation which protects labor rights. Such legislation, prevalent in South Asia and Latin America has resulted in increasing (w) through a minimum wage legislation and by increasing Nw.[31] Push subcontracting eliminates Nw and minimizes w. The impact on labor productivity of this push for subcontracting is at best neutral and may even decline. But given the institutional setting, firms are able to lower their unit labor costs. In countries where pro-worker, particularly pro-women workers, legislation has taken place there has been a decrease in the employment of women and there is evidence that the casualization of work through subcontracting has increased (Ghosh, 2002).

A similar outcome will emerge when firms seek to evade environmental and/or health related regulations or union power prevalent in OECD countries. They will then farm out production to developing countries where such regulations either do not exist or are weakly enforced.[32]

4 Conclusion

In this chapter we have sought to conceptually specify different conditions in which firms disperse their production activities. Our primary concern has been the impact that this increasingly prevalent mode of industrial organization has on labor in general and gender dynamics of the labor market in particular. By focusing on the long-run profitability concern of firms, we seek to understand the bottom line benefits of decentralized production at the firm level.

This framework also offers a window into examining subcontracting at the national level inside developing countries. Most of the theoretical literature in the field has focused on multinational firms subcontracting and integrating developing country firms into the production process. The process of subcontracting is also taking place within national industries in the third world for the national market. By focusing on profitability we intend to capture both the effect of international trade regimes as well as national and international macro economic policy.

Notes

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2. Regulatory costs will include compliance with financial, social, and environmental regulation including health and safety related regulations as well as fringe benefits to workers.
3. Ong argues that the world recession in the 1970s compelled capitalists in metropolitan countries to restructure production in the face of rising labor costs and increasing competition and to employ low-paid workers in informal settings. This same strategy is used in developing country contexts as well.
4. The trend toward feminization of employment, that is increased share of women among paid employees, has been hastened as firms compete more intensely to reduce costs, with women's wages universally lower than that of men. However, there is some evidence to show that women's share of employment in the formal sector is decreasing. In some regions the move toward informalization is dominated by women.
5. However, the example of East and South East Asia shows that the share of women in employment has fallen in the latter part of the 1990s even before the financial crash of 1997 but particularly after (Ghosh, 2001).
6. See essays in Feenstra, Robert (ed.) 2000. *The impact of International Trade on Wages*, Chicago: University of Chicago Press.
7. Presumably the argument will be that the loss in terms of foregone non-wage benefits will be compensated by employment generation.
8. Principal exponents of this position are Williamson (1975 and 1985), Alchian and Demsetz (1972), and Jensen and Meckling (1976).
9. Marglin (1974), Edwards (1979), and Bowles (1985) have theorized the phenomenon along these lines.

10. Because there is no conception of power in neo-classical economics, non-economic or transaction costs appear to occur only because of information failures. Otherwise agents would be able to negotiate perfect contracts based on their respective utility functions.
11. L will embody human capital as well as asset specificity.
12. Apart from regulation, the existence of unions and their level of effectiveness will influence non-wage benefits.
13. Financial globalization has resulted in increasing convergence of interest rates globally. Coupled with flexible exchange rate regimes and removal of barriers on the flow of financial capital have meant that the actual cost as well as transaction costs have made national boundaries increasingly irrelevant so far as capital mobility is concerned.
14. Maternity benefits are particularly important in this context for women workers.
15. In developing countries, those production facilities that are not registered with state authorities are generally termed as part of the informal sector. By not registering, they remain outside the remit of the legal structure governing production activities.
16. In the case where there is no minimum wage and legislated worker benefits are not substantial but the right to unionize exists, union action can increase W by negotiating higher wage demands and non-wage benefits for workers.
17. In developing countries, labor market segmentation along ethnic or caste lines is commonly observed.
18. A large mutlinational corporation in Pakistan used this tactic to keep its unionized workers from demanding wage and non-wage benefits.
19. There may be small islands of third world like "informal sector" wage and employment conditions, but that is the exception rather than the rule.
20. This of course will depend on a number of factors, such as the degree of segmentation in the labor market, the regulatory environment and the future course of technical change.
21. Given the abundant supply of labor in developing countries an increase in N does not mean an increase in W.
22. Continuous flow technologies are those where the production process cannot be separated and stopping the process in midstream is costly in terms of time. Steel and cement production are some examples of such technologies.
23. S is reduced, as instead of continuous monitoring of work effort input, only discrete monitoring of the output has to be undertaken.
24. Note that this higher nominal wage is paid to workers already in the informal sector. Because they have never become accustomed to Nw, this is an increase in their total real wage.
25. See Standing (1999) where empirically this is seen as a frequent feature in developing countries.
26. This problem can be ameliorated through constant turn over in the labor force as is evidenced in many export-processing zones where workers are generally kept only for a few years and then substituted with other similarly placed workers. Internationally, firms can move from one country with very low wages to another for this purpose.
27. The only defining criterion must be specific training acquired to undertake a specific task.
28. More specifically to eliminate Nw and reduce W.
29. These are goods aimed primarily at the lower income end of the domestic market.

30. See Dickens for increase in intra third world trade from mid 1980s to mid 1990s. For example in 1985, less than one-fifth of the Asian Newly industrializing economies were sold within the region whereas by 1994 nearly two-fifths were sold in the region. The intra third world trade has increased.
31. See ILO labor standards to compare the ratification of minimum wage regulations in several countries in these two regions.
32. See Rodrik for discussion of the effect of globalization on labor legislation. There is some evidence that environmental regulations effect firm location, there is political pressure against governments that environmental regulations are too costly. The actual threat of location of industry is highly debated. For an interesting discussion see Eban Goodstein's "Malthus Redux? Globalization and the Environment" in *Globalization and Progressive Economic Policy edited by Dean Baker, Gerald Epstein and Robert Pollin. Cambridge University Press.* See also Tony Cleaver 2001. *Understanding the World Economy* Routledge Press.

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