BACK TO PRODUCTION: LABOR-VALUE COMMODITY CHAINS AND THE IMPERIALIST WORLD ECONOMY

by

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A DISSERTATION

Presented to the Department of Sociology
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

June 2017

DISSERTATION APPROVAL PAGE

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Title: Back to Production: Labor-Value Commodity Chains and the Imperialist World Economy

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Degree awarded June 2017.

DISSERTATION ABSTRACT

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Despite the complexities and decentralization that characterize global supply chains in today's world economy, imperialist relations of exchange continue to prevail, due to the fact that the differences between wages of North and South is greater than the difference of their productivities. This dissertation examines the global exploitation of labor that mostly occurs in the global South, as a form of such imperialist relations, particularly under the domination of multinational firms emanating primarily from the core of the system.

I start by laying out the theoretical and empirical groundwork for the *labor-value commodity chains* framework that puts labor, along with the question of control and class, at the center of its formulation. By incorporating a calculation of cross-national variation in unit labor costs in manufacturing—a measurement that combines labor productivity with wage costs in a manner closely related to Marx's theory of exploitation—the labor-value chains framework is a means to operationalize exploitation within the framework of the labor theory of value. Findings show that the global organization of labor-value chains is a means to extract surplus value through the

exploitation of workers in the global South, where not only are wages low, but productivity is also high.

I then show the concrete processes of how global North capital, personified in multinational corporations, captures value from the global South by applying systemic rationalization and flexible systems as mechanisms to exert control over their dependent suppliers in labor-value commodity chains. The burden of such mechanisms is borne by the workers —the direct producers of commodities—employed by these dependent suppliers. Case studies of two Indonesian companies that supply to multinationals are presented to illustrate these phenomena at the point of production. This observation further suggests that labor-value commodity chains are a form of unequal exchange and thus reveal the imperialistic characteristics of the world economy.

This dissertation includes both previously published and coauthored materials.

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Suwandi, Intan. 2015. "No Reconciliation without Truth: An Interview with Tan Swie Ling on the 1965 Mass Killings in Indonesia." *Monthly Review* 67(7): 14-30.

Suwandi, Intan. 2015. "Behind the Veil of Globalization." *Monthly Review* 67(3): 37-53.

ACKNOWLEDGMENTS

Sampurasun.

This dissertation is a product of many years of research and learning that would not happen without the help, support, and guidance of many individuals. To begin, I thank my adviser and mentor of six years, John Bellamy Foster—the main reason I pursued my study here at the University of Oregon. My interest in Marxist political economy started a long time ago, but it was under his mentorship that this interest could manifest into a meaningful learning experience and, later, writings. He has taught me so many things, not only in the academic sense, but also in other aspects. From him I learned perseverance in pursuing knowledge. And he always encouraged me to do more than I thought I could. To him I owe a debt of gratitude.

I also thank my other committee members. Two of them are my mentors from the Department of Sociology: Richard York and Val Burris. Richard has supported my research in many ways since the beginning. His encouragement have also made it possible for me to overcome difficulties during my graduate study, and his pedagogical excellence will forever be an inspiration. Val's extensive knowledge of theories and methods, along with his feedback on my earlier work on this dissertation, has been very important to the development of my research. I also thank Daniel Buck, my outside committee member from the Geography/Asian Studies Department, from whom I learned a lot about the current situation in China, and who provided me a chance to closely revisit *Capital* in one of his geography seminars.

I thank R. Jamil Jonna, who, along with John Bellamy Foster, coauthored our paper that I used as a basis for the chapter on labor-value commodity chains. Jamil has made our goal of providing an empirical groundwork for this theory possible. I also thank the individuals who helped me during my fieldwork in Indonesia. These were the people without whom the fieldwork would not succeed. Thanks to them, I was given access to the companies and was able to learn what I intended to learn, plus other things. The study was supported in part by the Southeast Asian Studies Award and the Wasby-Johnson

Sociology Dissertation Research Award. I thank the generous sponsors who have provided such funding.

I thank my friends at the department. I do not have many, but the ones I have are invaluable. Thank you, Tongyu, Cade, Ryan, Brian, and Shihchi. Without you folks, I would not have survived the mean and lonely world of graduate school. I also thank the authors and colleagues at *Monthly Review*—from whom I learned many, many things that have influenced the development of my thinking in a significant way.

I thank the people whose friendship has been central to my life, those whose love has kept me going all these years: Louie, Sirry, Abhi, Vania, Yuping, Tri, and Stefanie. I also thank my family here in Eugene: Ben and Leslie Lee, Carrie Ann Naumoff, Theresa Koford, and Kim Donahey. Without them, Eugene is nothing but a wet and dreary place.

Most importantly, I thank my family: Mama, my sister Irma, and brothers Iman and Iwan, my nieces and nephews, as well as my uncle Pancha. Their support is everything. And I thank my partner in life, Eli, who has always been there without fail. He is a partner in every sense of the word. Not only is he a loving husband, but also a skilled editor, and a brilliant discussion partner. He was the first one who read this dissertation, and without him, the process of writing this would have been painful. (And I thank my cat, Lu Xun, who sat next to me, or on my lap, every single night I stayed up to work on my dissertation. Even Eli could not do that.)

Last but not least, I dedicate this dissertation to my dad, who passed away in July 2016. It was not easy for me to finish this work in the middle of an overwhelming grief, but I managed to do it because I knew that he would have wanted me to continue. If he were alive, he would be the one who called me and asked how the writing was going. He was the most important person in my life. He was my best friend. He was the first person from whom I learned about Marx. He was the one to whom I turned every time I needed to talk—about my studies, my fieldwork, the new things I learned, my plans and my thoughts. He was there every step of the way. He is here on every page. And he will be there in every path I take in the future. *Hatur nuhun, Papa.* I will forever be grateful.

To Papa

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CHAPTER I

INTRODUCTION

This chapter includes a section adapted from Suwandi, Intan. 2015. "Behind the Veil of Globalization." *Monthly Review* 67(3):37-53. It also includes several paragraphs from Suwandi, Intan and John Bellamy Foster. 2016. "Multinational Corporations and the Globalization of Monopoly Capital: From the 1960s to the Present." *Monthly Review* 68(3):114-131.

> So all these big developed countries, they have their own protection measures to face globalization. But a country like us, we are so naïve, so innocent, so young. We are a developing country. We don't have expertise in making this kind of regulation. Indonesia in the end becomes the target market. We have to open [our market], people come in. Some investments come in because our labor is very cheap. But in the end of the day, what happens? They're selling their products here, mostly, and we don't have any protections.
>
> Java Film Executive

The quote above was taken from one of the interviews I conducted at two Indonesian companies in Indonesia. I interviewed members of these companies' top management as a part of my research presented here. Interestingly, the opinion expressed by this interviewee—himself a representative of capital from the global South—reflects an understanding of the persistence of the hierarchical world economy, a phenomenon that recently has rekindled a debate among scholars, including Marxists.

The debate itself largely centers on the question of whether "imperialism" is still relevant in today's world economy—an economy characterized by a new reorganization of production on the global level that gave birth to global supply chains or production networks. Some argue that the current globalized production has done wonders to

decrease inequalities among nations, since the incorporation of the global South countries into the world economy has allegedly allowed these countries to experience economic growth. The new success stories of some Asian countries—such as China, India, and Indonesia—often serve as the poster child of such an argument (see e.g., Baldwin 2016, Milanovic 2016). Numerous figures, even on the left, see the complexities of global supply chains or production networks, along with the rise of "emerging economies" (such as China, Russia, Brazil, India, South Africa, and Indonesia, among others) as "evidence" that what we have now is no longer an imperialist world economy, but merely "shifting hegemonies."[1] Economists, sociologists, and geographers, both mainstream and radical, often focus on the decentralized characteristics of such chains (see e.g., Gereffi 1994, 1995, 2005; Milberg and Winkler 2013).

The crucial questions, however, are: (1) whether such decentralized global supply chains or production networks can be seen as constituting a decentralization of power among the major actors within these chains or networks, and (2) whether the complexities of these chains or networks suggest that the hierarchical, imperialist characteristics of the world economy have been superseded.

This dissertation argues that the answer to both of these questions is "No." Despite the seemingly decentralized networks, and in spite of the existing complexities that characterize the global supply chains, the global capital-labor relations inherent in these chains are still imperialistic in their characteristics. Imperialism can be defined

[1] David Harvey, following Giovanni Arrighi, is one of the contributors to the debate that argues for this position (strangely, as he himself admits, despite the fact that he authored the 2005 book, *The New Imperialism*). He wrote about this position in his reply to the Patnaiks' book (Harvey 2017), but his most clear explanation is probably expressed in his talk as a panelist in a panel entitled: "Imperialism: Is It Still a Relevant Concept?" held by The New School's Center for Public Scholarship in New York City on May 1, 2017 (http://www.newschooljournal.com/is-imperialism-a-relevant-concept-today-a-debate-among-marxists/).

broadly, as in Lenin's conceptualization, as the "complex intermingling of economic and political interests, related to the efforts of large capital to control economic territory" (Ghosh 2017). Imperialism has several interrelated aspects: (1) *geopolitical struggle* by nation states for position within the international hierarchy of the system, including the control of colonies or neocolonies (see Foster 2006), (2) *expropriation* of petty producers outside of capitalist production (see Patnaik and Patnaik 2017), and (3) *global exploitation* of labor in capitalist production (see Smith 2016), particularly under the domination of multinational firms emanating primarily from the core of the system. This dissertation focuses almost entirely on the third aspect, without in any way denying the significance of the other two. At issue is the extraction (or drain) of surplus from the poor countries by the rich countries and/or their corporations. I argue that one way to understand the persistent imperialist characteristics of the world economy is through examining the exploitation that occurs in what Marx calls "the hidden abode of production"—which, in the era of global supply chains, is located in the global South. Although production has shifted to the South, imperialist relations of exchange continue to prevail, due precisely to the fact that the differences between wages of North and South is greater than the difference of their productivities.

In the capitalist mode of production, the capital-labor relation is the central relation of exploitation. As Sweezy (1984:238) argues, while "every class society is characterized by the necessary/surplus labor dichotomy, hence by an implicit rate of exploitation…only in capitalism does this take the value form, with the rate of exploitation expressing itself as a rate of surplus value." It is impossible to examine the capitalist economy—even when it is on a global level—and the class struggles central to

it without focusing on the issue of exploitation, analyzed through the labor theory of value. It is precisely this that becomes one of the main tasks of this dissertation.

The examination begins with a framework of global supply chains that puts labor at the center of its formulation. The framework is called *labor-value commodity chains*, or labor-value chains for short. Unlike mainstream theories on this subject, this framework takes into account the questions of power, class, and control—questions that must be addressed if we want to bring the exploitation that occurs in global supply chains out into the open. Moreover, the theoretical and methodological analysis of labor-value chains incorporates a calculation of cross-national variation in unit labor costs in manufacturing. The measurement of unit labor costs—typically presented as the average cost of labor per unit of real output, or the ratio of total hourly compensation to output per hour worked—combines labor productivity with wage costs, in a manner closely related to Marx's theory of exploitation. In this sense, labor-value chains framework is a means to operationalize exploitation within the framework of the labor theory of value.

The maximization of gross profit margins through the reduction of unit costs is the goal of capitalists—and this "sets in motion a continuing search for new methods of production, new sources of labor, new ways of organizing the labor process." The reduction of unit costs, most importantly, depends on "the portion of total unit costs that derives from the labor input, i.e., the unit labor cost." This in turn depends on two factors: the price (wage) of labor power and labor productivity—the two factors integral to Marx's concept of exploitation (Edwards 1978:110). The concept of unit labor costs, in this sense, is an operationalization of the rate of exploitation, which considers not only the question of wages, but also the question of productivity.

The labor-value chains framework, empirically operationalized through the examination of unit labor costs, thus allows us to see that, behind the complexities of global supply chains, exploitation persists. Global capital (i.e., multinational corporations) engage in the search for low unit labor costs around the globe to accrue higher profit margins and overall profits. Data on unit labor costs show that countries with the highest participation in labor-value chains—the top three being China, India, and Indonesia—also have very low unit labor costs. This means that not only are wages low in these countries, but productivity is also high. The global organization of labor-value chains, then, is a means to extract surplus value through "superexploitation" of workers in the global South.

But how exactly does this extraction happen? It is difficult to find current works in the field that provide a more-or-less complete picture of how global supply chains work. On the one hand, there are excellent works by Global Commodity (or Value) Chain framework's proponents that examine firms and how value is added (read: captured) from suppliers in the global South. But most of them are not concerned with the question of labor exploitation—some of them even represent the view of capital, suggesting that corporations in the North grab the opportunity to extract the surplus value "offered" by the global South. On the other hand, there are also many excellent works in social sciences, including in sociology, that provide detailed examinations of how workers are treated in the factories that assemble goods for multinational companies. But these works usually omit the connection between the control of the labor process and the intricate power relations that govern the supply chains in a way that can bring out the specific mechanisms in which control is exerted through different actors within the chains.

This dissertation does not claim that it can give a comprehensive picture—but it does try to offer an approach that can address both issues: the macro workings of the labor-value chains and the way these mechanisms affect production processes in specific firms, in particular how they ultimately affect the workers who make the commodities. How do multinationals exert control over their dependent suppliers? And in turn, how do these unequal relationships between companies affect the other end of unequal power relations—those between the employers and the workers at the firm? Using another set of theories—works on systemic rationalization and flexible production—I connect the labor-value chains framework with the case studies of two Indonesian companies that I conducted. From the examples gained from the case studies, I explain how dominant companies (giant multinationals) within the chains extract surplus value through various mechanisms of control—both in terms of controlling the production processes of their dependent suppliers and in terms of controlling the labor process of workers employed by these suppliers. The goal here is to make sure that unit labor costs are *stably low*—even in cases where wage costs are increasing (such as the increase in minimum wage enforced by governments), such control mechanisms allow global capital to maintain a low unit labor cost by making sure that productivity can be increased.

In the end, these observations suggest that labor-value chains, as a part of the restructuring of the world economy driven by the imperative of capital accumulation, are imperialistic in their characteristics: the very reality captured by the concept of the "global labor arbitrage" within global finance. Labor-value chains involve a form of unequal exchange based on a worldwide hierarchy of wages, in which global capital (firms headquartered in the North) captures value from the global South—in this context,

they capture value from the exploitation of labor of workers that manufacture the goods. In essence, more labor is obtained for less. Giant oligopolistic multinationals take advantage of differential unit labor costs within an imperialist system of "world value"—they control much of the world market through their international operations, and the fact that capital can move much more freely than labor (the movement of which is restricted by factors such as immigration policies) allows multinationals to take advantage of immense labor price differences on a global level, and to possess more freedom in pursuing higher profits through the substitution of higher-paid labor with low-paid labor globally.[2]

This means that, far from moving towards "transnationalization," the processes that occur in labor-value chains reflect the fact that capital accumulation processes are tied to the unequal relations among nation-states and to the higher rate of exploitation of workers in the global South—with the state still serving as an instrument of and locus of capital accumulation.[3] Indeed, the complexities of global supply chains that are often highlighted in the mainstream discussion of the subject have often disguised the relationship of underdevelopment—where export of capital that characterizes our world economy, as Baran and Sweezy (1966:107-08) observe, "far from being an outlet for domestically generated surplus, is a most efficient device for transferring surplus generated abroad to the investing country." The concept of labor-value chains, then, is a theoretical and empirical device with which to look at this issue from a global South

[2] This paragraph is taken from: Suwandi, Intan and John Bellamy Foster. 2016. "Multinational Corporations and the Globalization of Monopoly Capital." *Monthly Review* 68(3):114-131. Portions taken from this work will be referred to as "Suwandi and Foster (2016)."
[3] Taken from Suwandi and Foster (2016).

perspective—that is, to reveal the exploitative relations that hide behind the veil of globalized production.

Globalized Production in the World Economy[4]

Both the cheerleaders and the critics of capital can at least agree on one thing: there is clear evidence of new characteristics that mark our present day global economy. Relatively distinctive patterns of the current wave of globalization that started in the late 1970s/early 1980s can be seen in both the spheres of production and finance: the dramatic increase in trade and direct foreign investment flows, along with the massive expansion of international portfolio flows. But what is especially important to note is the accelerating pace of offshoring—especially in the manufacturing sector—whether through arm's length contracts (offshore outsourcing) or within the confines of a single multinational corporation, or what is known as intra-firm trade (Milberg and Winkler 2013).

Foreign direct investment (FDI), which is tied to intra-firm trade, has been rising "much faster than world income" in the last few decades, with an increasing trend in FDI inward stock—from 7 percent of world GDP in 1980 to about 30 percent in 2009 (Foster and McChesney 2012:105). A big portion of global FDI goes to the global South, starting with the "slow and steady rise" of these countries' share of world FDI in the late 1980s. In 2010, "for the first time, more than half of all FDI went to third world and transition

[4] This segment is adapted from a section taken from Suwandi, Intan. 2015. "Behind the Veil of Globalization." *Monthly Review* 67(3):37-53.

economies" (Hart-Landsberg 2013:18). A 2003 World Bank report claims that FDI is the biggest source of external funding for developing countries (Solomon 2010).

However, direct investments do not tell us the complete story of offshoring. Arm's length contracting (sometimes referred to as subcontracting or "Non-Equity Modes of Production," abbreviated as NEMs) is also an important part of the workings of our global economy. This is where multinationals engage in contractual relationships with partner firms without equity involvement, generating about $2 trillion in sales in 2010, "much of it in developing countries" (UNCTAD 2011:131). Through this process, firms can capture "extremely high profit margins through their international operations and [exert] strategic control over their supply lines—regardless of their relative lack of FDI." Even multinationals with high levels of foreign direct investment are also major international subcontractors (Foster and McChesney 2012:111).

These trends were later echoed by a recent ILO (2015:131) report, which confirms that the world economy is now characterized by the "increasing fragmentation of production into different activities and tasks" along global supply chains by both direct and indirect means, namely, by foreign direct investments or outsourcing practices by lead firms and by the purchase of production inputs from a domestic supplier. The emphasis here is on the fact that both increases (in intra-firm trade and contracting practices) signify globalized production, with increased production in low-wage areas in the global South. This pattern has governed the relationship between capital and labor on the global level throughout the last three decades, with some distinctive characteristics.

One such characteristic is the booming of export-oriented industries in the global South, focused on the manufacturing sector (Caraway 2007). These export-oriented

industries are usually located in specific industrial complexes, in which companies operate factories that manufacture goods or other materials for foreign clients, including multinationals. Since around the mid-1990s, scholars have made important claims about the search by multinational corporations for "cheap labor" in the global South. Edna Bonacich and her coeditors (1994:16), for example, argued in their introductory chapter to *Global Production* that an "important feature of the new globalization is that [multinational corporations] are searching the world for the cheapest available labor and are finding it in developing countries." And if we examine the period between the mid-1990s and mid-2010s, we can see that there is a rapid increase in the number of jobs related to global supply chains. The 2015 ILO report mentioned above claims that there is a 157 million increase of such jobs within 18 years, from 296 million workers in 1995 to 453 million in 2013—with much of this increase occurring before the 2007-09 economic crisis. Further, this growth in supply-chain production is concentrated in "emerging economies" where such job-growth reached an estimated 116 million—here, export-oriented manufacturing serves as the predominant sector, with global North countries as the main export destination (ILO 2015:132).

As a consequence, we have seen the formation of a global labor force concentrated in the global South. By 2010, 79 percent of the world's industrial workers lived in the global South, compared to 34 percent in 1950 and 53 percent in 1980 (Smith 2016). At this rate, manufacturers became "the chief source of the third world's dynamism" both in exports and in production, especially in East and Southeast Asia—where, by 1990, GDP share in manufacturing was higher than other regions (Gereffi 1995:107). A report by the Asia Development Bank shows that most countries in

Southeast Asia, particularly those that are considered developing, experienced an increase in their manufacturing output shares from the 1970s to 2000s (Felipe and Estrada 2007).

The Structure of the Dissertation

Laying the Groundwork for the Labor-Value Commodity Chains Framework

The special characteristics of our current global economy discussed above have been considered a hot topic in social sciences, including in sociology. As a result, many theories and empirical studies about globalization and globalized production in particular have been published in the last three decades or so. One of the popular approaches is the global commodity chains or global value chains (GCC/GVC) frameworks and their derivatives. Coined by Immanuel Wallerstein and Terence Hopkins in the 1970s, the concept "commodity chain" was part of the world-systems perspective. Later developed by sociologists, economists, and geographers, these frameworks dominated the mainstream discourse on global supply chains and, according to their critics, have lost their original macrohistorical perspective and succumbed to an organizational analysis centered on firms and industries (see Bair and Werner 2011). With it, the frameworks have also lost attention to global patterns of uneven development (Yeung and Coe 2015). Other critics believe that even the original form of commodity chains theory needs some work—the most important being the incorporation of labor and an analysis of capitalism, along with its global class relations, into the theory (Selwyn 2012; 2014).

This dissertation starts with this task. Chapter 2 is an attempt to lay both theoretical and methodological groundwork for the formulation of a perspective on global commodity chains that puts labor and class relations at the center—namely, labor-value

commodity chains. (For that reason, the usual review of the literature and methodological discussion is contained principally in Chapter 2 rather than this Introduction.) The labor-value chains framework is an analysis of global commodity chains that incorporates the main point that was missed by its predecessors: an examination of the extraction of surplus from the global South within a Marxist perspective. I argue that this is the most useful means to analyze the processes of globalized production, since this approach allows us to see the power relations—namely, between capital and labor—that underlie our present-day world economy.

To develop this framework, I argue that the following approaches are necessary to include in our formulation of the theory: (1) the development of monopoly capitalism and the oligopolistic power of multinational corporations, and (2) the process of profiting from international wage differentials through "global labor arbitrage." While the former is especially powerful in helping us to examine the current stage of capitalism with strategic positions still held by multinational corporations—a discussion whose significance was brought to the surface by the seminal work of Paul Baran and Paul Sweezy's (1966) *Monopoly Capital*—the latter is a useful lens precisely because it looks directly through the eyes of capital. Global labor arbitrage is first and foremost a creation of capital—the term itself was popularized by Stephen Roach, a former chief economist of Morgan Stanley—that was later often used in mainstream analyses (sometimes under different terms, such as "Low-Cost Country Strategy," abbreviated as LCCS) to rationalize (in the Weberian sense) inequalities that characterize the globalization of production as inevitable market phenomena. For example, global labor arbitrage is seen largely as corporations' "new imperatives of cost control"—necessary to deal with

unfortunate macroeconomic factors such as excess supply and the lack of pricing leverage (Roach 2004b).

Interestingly, however, when analyzed with a little "Marxist twist," the mainstream examination of global labor arbitrage often reveals the power dimensions of the globalized production processes—as recently shown by British political-economist John Smith (2016) in his book *Imperialism in the Twenty-First Century*, as well in an anthology by John Bellamy Foster and Robert McChesney (2012), *The Endless Crisis.* In this perspective, special attention needs to be given to the labor theory of value (Marx 1976, Amin 1978) to allow us to see who actually benefits and captures value in a global commodity or value chain, and how they get these benefits through practices such as arm's length contracts that characterize the global labor arbitrage.

In addition, a brief presentation of empirical data is given in the discussion of labor-value chains to give a general picture about what this framework should highlight when it comes to unequal global capital-labor relations. An examination of unit labor costs (a measurement that can appropriately combine productivity with wage costs in a way that relates to Marx's theory of exploitation) reveals that participation in global supply chains does not necessarily benefit global South labor—instead, the benefits go to the global North corporations who are able to maintain their low-cost production, even amidst the Great Financial Crisis of 2009. There is a great discrepancy both in wages and in unit labor costs between countries in the global North and global South, and most importantly, there has been a decline of unit labor costs since the 2009 crisis—these facts allow us to unmask the superexploitation, both in absolute and relative terms, of workers in the global South.

The Issue of Control in Labor-Value Chains: From Technology to the Labor Process

After the formulation of labor-value commodity chains, the next task in Chapter 3 is to connect this framework to the concrete processes that occur in the production realm, including how multinationals with their oligopolistic power control technological knowledge within labor-value chains as well as how the labor process is controlled on the shop floor. To bridge the gap between the abstract framework and the concrete processes, I use the concepts of systemic rationalization and flexible production. The former is a concept born out of German industrial sociology (see Altmann, Köhler, and Meil 1992), while the latter was popularized by Bennett Harrison's (1994) book *Lean and Mean*.

These two approaches offer a critical look at production networks and global supply chains—a much more critical approach compared to the GCC/GVC framework—by highlighting the notion that decentralized networks do not necessarily lead to a dispersion of power. Both approaches emphasize that huge firms, like global North-based multinationals, are able to maintain (and even enhance) their powerful position in production and distribution processes within such networks, mainly by exerting control over their upstream and/or downstream dependent companies. This allows multinationals to engage in "lean" and flexible production—where they are able to accommodate the fluctuating market demands in their search for greater profit—by transferring production work and responsibilities to the dependent companies.

Made possible by a rapid development in information technology, new rationalization strategies that "address the reorganization of the value creation chain of a final product over and beyond the reach of individual companies" are taken by powerful corporations to enable practices of flexible production. Examples include management

strategies such as delivery on demand systems (also known as "just in time" or Toyota Production System), a myriad of international certifications issued by a third-party (such as the International Organization for Standardization or ISO) that become a requirement for supplying to multinationals, as well as an open-costing system where suppliers need to reveal their cost structures to their prospective multinational customers. Through these means, dominant companies are able to retain their exclusive access to innovations and other technological know-how, while putting pressures on their dependent suppliers to provide flexibility in production. When we speak of global labor-value chains, many companies are located the global South countries like Indonesia.

In the end, it is workers, the direct producers, who bear the burden that results from all the above strategies. This new rationalization and organization of production, contrary to the mainstream argument, does not provide a more humanized form of work; forms of Tayloristic control of the labor process remain in many segments of production within labor-value chains (Altmann and Deiß 1998). Marxist approaches to forms of control over the labor process are still relevant to examine the exploitation of workers and the extraction of surplus value in our current labor-value chains. And this is where Harry Braverman's seminal work *Labor and Monopoly Capital* (that examines the control of the labor process under monopoly capital), along with other works on the subject, become especially useful. With the application of Tayloristic control and the development of technology, the deskilling of labor and the degradation of work become enhanced under monopoly capitalism. Braverman's theory and other Marxist approaches (e.g., Edwards 1978, Gartman 1978, Marglin 1974) highlight particular means in which

control is administered on the shop floor in monopoly capitalism, but the aim remains the same: exploitation of workers driven by the imperative of capital accumulation.

Under our present labor-value chains, we will see that these mechanisms of control towards the labor process are still present, but the workings are further complicated by the layers of power relations within the chains. To provide a concrete picture of these processes, I present case studies of two companies in Indonesia in the next chapter.

Case Studies of Two Companies in Indonesia

Although there are recognitions of the global scope of systemic rationalization and flexible production, most studies in this field focus more on national or regional levels in the global North—including on European (especially German) industries and networks, the United States, and occasionally in some other countries, such as Australia (see e.g., Altmann and Deiß 1998, Harrison 1994, Wright and Lund 2003). And although there are plenty of studies on the new international division of labor (largely focusing on women workers in the global South) that have been published since the 1980s (see e.g., Caraway 2007; Enloe 2004; Fuentes and Ehrenreich 1983; Mills 2003, Ong 1991; Pun 2005; Salzinger 2003), the connection between the issue of control of the labor process (that often becomes the focus in these studies) and the complexities of production networks is rarely brought up.

In addition, to fill in that gap, the case studies of two Indonesian companies—referred to under the pseudonyms of Java Film and Star Inc.—I present in Chapter 4 are aimed at providing examples of how dominant multinationals exert control over

dependent Indonesian suppliers, who in turn transfer the pressures of flexibility in production on the one hand, and the demands of high productivity and efficiency on the other hand, to their workers on the shop floor. This is obviously not a form of generalization, but only an illustration of cases. In addition, these two Indonesian companies are not a stereotypical representation of the classic factory characterized by assembly lines and horrid working conditions—such as Foxconn (see e.g, Fair Labor Watch 2012) or factories that assemble shoes (see e.g., National Labor Committee and China Labor Watch 2004). However, the fact that they are not "sweatshops" does not necessarily eliminate the exploitative relations that are realized on their shop floors—as we will see from examples discussed in this chapter. Through various forms of control of the labor process, ranging from disciplinary actions to incentive systems to ones carried out by technological means, workers are exploited—in Marx's understanding of exploitation—and surplus value is extracted.

I mainly conducted semi-structured interviews of top-management executives in these two companies. It is these executives, after all, that manage both their relationships with customers and with workers at their plants. As Peter Evans (1979:6) argues, "to understand the decision making that goes on within firms, one must talk to the [people] who run them." In addition, I also observed their factories and offices with the limited access I had during my visits, as well as analyzing their company documents, ranging from annual reports, to brochures and videos, to presentation slides prepared by management (for similar methods see Evans 1979, 1995; Wright and Lund 2003). The interviews here serve as an important addition to the discussion of labor-value chains. In this context, my participants serve as "key informants" (Evans 1995; Kumar, Stern, and

Anderson 1993; Tremblay 1957) who explain the "rules" of corporate management, or how they manage their labor force (human resources) and business relations with multinational clients. These interviews will give us valuable insights regarding how global and local capital affect Indonesian workers who, on factory floors, produce the commodities. The executives are the ones who make decisions about various aspects of their business, from receiving orders to planning for production to managing its execution. They make sure that their companies are in order so that any conflicts are quickly resolved. They are the ones who deal directly with their customers, especially the top ones, engage in negotiations with them, as well as control the management of labor on the shop floors. There have the knowledge and experience that we need in order to understand labor-value chains better, particularly since they occupy an important position that connects global North capital and global South labor.

But why companies in Indonesia? Besides the obvious (i.e., that it is my country of origin), there are other aspects that make Indonesia an interesting case to examine when it comes to its position within labor-value chains. Indonesia—whose incorporation into the global economy has increased since the creation of the Foreign Investment Law in 1967 under Suharto (La Botz 2001)—serves as one of the pools of "cheap labor" for global North corporations. Its unit labor costs only changed by a mere 0.3 percent from 2000-09, with changes in average hourly labor compensation of a paltry 24 cents from 1995 to 2009 (see Chapter 2). Overall, Indonesia is a classic example of a place where labor is highly exploited in the labor-value chains. The country has most of the characteristics often associated with "dependent development" (Evans 1979), and it holds

the third position, behind only China and India, in terms of share of all jobs in global supply chains.

Indonesia's FDI started to grow steadily starting from the early 1970s. The FDI net inflows increased from around $83 million in 1970 to $4.7 billion by 1997. Despite a few downturns after the 1997 crisis, it has steadily risen up again and reached about $19.6 billion in 2012 (IMF 2007, World Bank 1999). This shows that the upward trend in foreign investments continued to climb even after Suharto's fall and the New Order supposedly ended in 1998. This trend does not even count for other forms of investments, including portfolio investments and subcontracting. Interestingly, this upward trend of foreign investment is accompanied by an increase in employment in the industrial sector, roughly from 13 percent of total employment in 1980 to a little less than 22 percent in 2012 (OECD 2014). In addition, the manufacturing value added (share of GDP) in Indonesia has increased as well throughout the decades—from 9.2 percent in 1960 to about 24 percent in 2012—with a dramatic increase in the mid-1960s (OECD 2014).

These situations can at least highlight the idea that Indonesia has undergone a series of industrialization and growth periods, although recent reports have shown that growth has been slowing in the last few years—only 5 percent in 2014 and 4.7 percent in the first three months of 2015 (see *Tempo* 2015, OECD 2015). Debates have emerged whether it is time for Indonesia to be categorized as an emerging economy—along with Brazil, Russia, India, and China – thus changing the acronym BRIC into BRIIC (Day 2011).[5] According to *Bloomberg,* Morgan Stanley is one of the supporters of this idea, citing the $433 billion economy as the fastest-growing major economy in Southeast Asia, and an optimistic claim from the then Finance Minister of an "achievable" 7 percent

[5] Later, with the incorporation of South Africa into the group, the acronym became BRIICS.

growth starting in 2011 (Ghosh 2009)—a forecast that was then proven wrong in later years.

But that aside, optimism was high. Jim O'Neill, a former Goldman Sachs' economist who coined the term BRIC himself, upon his last visit to Indonesia in 2013, wrote that he "found a healthy preoccupation with the country's economic prospects" (O'Neill 2013). His writing suggests that Indonesia may be ready to be soon included in the "big guys" club, although O'Neill himself has included Indonesia in the group of "frontier markets" – relatively smaller economies referred to as MINT—together with Mexico, Nigeria, and Turkey (see also Boesler 2013). Either way, these discussions suggest that Indonesia is seen by financial analysts and economists from the global North as a promising destination for investments and relocation of production—i.e., a major player in labor-value chains. According to them, the pressing problems that can prevent economic growth and the flow of foreign investments are corruption in politics (Day 2011) or the lack of human capital and infrastructure (Ghosh 2009).

What these commentators neglect to point out is that behind the euphoria of growth in the economy and in labor productivity in particular, lies the exploitative mechanisms of labor-value chains that this dissertation tries to bring out into the open—the aspects that reveal to us the imperialist characteristics of our world economy.

Labor-Value Chains and the Imperialist World Economy

In his response to Ellen Meiksins Wood's avoidance of "the intricacies of value theory" in defining the essence of capitalist imperialism, Smith (2016:199) argues that we need to apply value theory to the imperialist world economy in order to find a systematic

theory of imperialism. As he writes elsewhere, analyses of contemporary imperialism must proceed from, and attempt to explain, "*the systematic international divergence in the rate of exploitation between nations*"—particularly between the imperialist nations in the global North and the peripheral nations in the global South. He contends that there is nothing new about international differences in the value of labor-power, or about superexploitation. What is new, Smith writes, is the "*centrality* these phenomena have attained during the past three decades of 'neoliberal globalization'" (Smith 2011:10).

The labor-value chains framework is an attempt to provide yet another window to view the centrality of the phenomenon of globalized production, especially as represented by the practice of global labor arbitrage. It is not meant to be a "theory of imperialism," but it aims to examine the imperialistic characteristics of labor-value chains based on approaches that incorporate Marx's value theory.

In the conclusion, the imperialistic character of labor-value chains is briefly spelled out, in the hope that the main points from the previous chapters can be tied together. Not only does global capital engage in global labor arbitrage (a form of unequal exchange) to search for low unit labor costs—but it does so with the support of other institutions, including international organizations and the state. Through various means such as the imposition of multilateral treaties and agreements, powerful states also maintain their hegemony in accordance with the interests of capital that originates in these countries. There is a notion that is circulating even among the left that imperialism is declining, or even disappearing altogether. But along with other works on the subject, this study also finds that, contrary to that claim, imperialism is alive and well. It is just the forms and the way it works that have changed throughout history. This does not mean

that workers in the global South are powerless. Strikes and protests provide a real constant threat to capital—and workers there have engaged, and will continue to do so, in such fights against exploitation.

This dissertation includes several previously published materials, both solo authored and coauthored, as well as an unpublished coauthored material. In Chapter 1, the section "Globalized Production in the World Economy" is adapted from a previously published solo authored article in *Monthly Review* 67(3), July-August 2015, entitled "Behind the Veil of Globalization." Both Chapter 1 and Chapter 5 include several paragraphs from a previously published coauthored article in *Monthly Review* 68(3), July-August 2016, written with John Bellamy Foster, where I served as the first author. Chapter 2 is partly based on an unpublished paper with the same title, "Labor-Value Commodity Chains: Power and Class Relations in the World Economy," written with two coauthors—R. Jamil Jonna and John Bellamy Foster—where I served as the first author. The paper was presented at the American Sociological Association, Political Economy of the World-System section, in Seattle, August 23, 2016.

CHAPTER II

LABOR-VALUE COMMODITY CHAINS:

POWER AND CLASS RELATIONS IN THE WORLD ECONOMY

This chapter is based partly on an unpublished paper with the same title, presented at the American Sociological Association, Political Economy of the World-System section, in Seattle, August 23, 2016, that I wrote with two coauthors—R. Jamil Jonna and John Bellamy Foster—where I served as the first author.

> Multinationals are always looking for the most competitive supplier, wherever they can find them. They can make comparisons. There's a competitiveness index that shows how each country is doing, how their labor is, how secure they are. They can easily assess that. And this can be a threat to our company. So we need to keep pleasing our customers.
>
> Star Inc. Executive

In the previous chapter, I have provided the background of globalized production that has started since approximately the 1970s. This chapter deals with a critical evaluation of theories known as Global Commodity Chain or Global Value Chain (GCC/GVC) framework—theories that are often used by scholars to understand the dynamics of globalized production, including the increase in arm's-length contracts abroad. While GCC/GVC studies have successfully provided us with insights about specific chains and have enhanced our understanding of various social linkages within commodity chains, they have been less successful in uncovering the unequal capital-labor relations among major players in the world economy, particularly between global North

capital and global South labor. In order to understand such relations, we argue that the question of labor must be central to the analysis of global commodity chains.

This chapter will be centered on a theoretical and methodological groundwork of a term that we call *labor-value commodity chains* (or *labor-value chains* for short). Labor-value chains would allow us to put labor, along with the question of power and class analysis, at the center of our examination of global commodity chains. Theoretically, labor-value chains will encompass (1) the development of global monopoly capital or the oligopolistic power of multinational corporations, and (2) what financial analysts refer to as "global labor arbitrage" (also known as the Low-Cost Country Strategy [LCCS]), which is a form of unequal exchange. Methodologically, labor-value chains is a way of modeling the value of labor power and surplus value, as in Marx—based on unit labor costs and gross profit margins.[6] Thus, an examination of labor-value chains should involve an analysis of unit labor costs, a composite measure that combines data on labor productivity and compensation to assess the price competitiveness of a given set of countries. Crucial here is the recognition that each node in a commodity chain can be conceived in terms of labor-value relations, with the critical node in production being the node where labor costs are most concentrated, usually at the point of assembly of the product.

[6] Profit margins are defined as price minus cost over costs (or the mark-up on prime production costs). The primary variable cost associated with net value-added at any stage of production (excluding raw material costs and disregarding value carried over from earlier stages of production, which is subject to depreciation) consists of wage costs. Profit margins in this conception are thus predominantly determined by the mark-up on the value of labor power (the costs of reproduction of labor power) as determined by unit labor costs (reflecting both wage costs and productivity). In this Marxian-Kaleckian approach, focusing on profit margins and unit labor costs it is possible to distinguish the profitability (surplus value generated) of any given node in a labor-value commodity chain. This closely resembles the operational mode of corporate accounting itself.

In the end, the labor-value chains framework should serve as a critical tool that its previous predecessors could not be, namely, framework that can provide an examination of globalized production without ignoring the arguably most important component in it: labor, placed amidst power relations in the world economy.

A Critical Evaluation of Global Commodity Chain Theories

The "commodity chain" concept was coined by Immanuel Wallerstein and Terence Hopkins in the 1970s as part of the world-systems perspective—with an emphasis on the "historical reconstruction of industries during the long sixteenth century" (Bair 2005:156). In the following years, diverging from the world-systems approach to commodity chains, several different frameworks emerged in the field of global chain studies, including the two main frameworks: global commodity chain (GCC) and global value chain (GVC) theories. The GCC framework was popularized in the mid-1990s, marked by the publication of *Commodity Chains and Global Capitalism*, edited by Gary Gereffi and Miguel Korzeniewicz. Later, Gereffi also became a prominent figure in the forming of the GVC (sometimes also referred to as "global supply chains" [GSC]) research network in 2000. This research network was created in the hope of uniting several different but similar approaches to value chains analysis (see Bair 2005). The GVC framework itself was inspired by the GCC, but mixed in with the neoclassical tradition of transaction cost economics (Bair 2009). But even the above "distinctions" are not clear-cut. For example, William Milberg and Deborah Winkler (2013) use the GVC framework in a way that is critical of transaction cost economics, while adopting GCC's concept of governance structure. In a lot of ways, these two frameworks are reasonably

overlapping and the two terms are often used interchangeably, although not without differences.

Within the world-systems or critical political-economy tradition the concept of commodity chains continues to be seen in the terms that Hopkins and Wallerstein (1994:17) defined it, as "a network of labor and production processes whose end result is a finished commodity." Such chains are usually "geographically extensive and contain many kinds of production units within them with multiple modes of remunerating labor" (Wallerstein 2000:2). Critical commodity chain scholars use the term "boxes"—or "nodes"—to refer to separable processes that constitute a commodity chain. In this context, a node signifies a particular or specific production process, and each node within a commodity chain involves "the acquisition and/or organization of inputs (e.g., raw materials or semi-finished products), labor power (and its provisioning), transportation, distribution (via markets or transfers), and consumption" (Gereffi, Korzeniewicz, and Korzeniewicz 1994:2).

One characteristic that differentiates GCC/GVC theories from the earlier world-systems commodity chains theory is the GCC/GVC's focus on such chains as reflecting "relatively recent and qualitatively novel process[es] of economic integration" (Bair 2009:10). One pattern that is often discussed as a novel process is a trend in the national development strategies of most developing countries that started in the 1970s, namely, the shift from import-substituting industrialization to export-oriented industrialization (Gereffi 1994). Offshoring practices—defined as the "decision to move the supply of goods and services from domestic to overseas locations" (Gereffi 2005:4)—that have occurred in the last few decades occupy a central place in the field of global chains

research. Mainstream GCC/GVC scholars often emphasize the increase in export manufacturing in, as well as offshoring practices to, the global South, associated with the global reach of multinational corporations. International commodity production more and more assumes the form of sophisticated value chains, with higher levels of organization, in which the core relies increasingly on imported inputs of goods and services (including assembly) in low-income countries (Milberg and Winkler 2013). As in now universally recognized, one of the striking features related to global value or supply chains is a "very large and growing proportion of the workforce… located in developing economies" (Gereffi 2005:5).

William Milberg and Deborah Winkler argue that *a shift in corporate strategy*, with offshoring as an integral part of this shift, is a key driver in this "new wave" of globalization. The strategy involves a search for lower costs and greater flexibility, as well as a desire to "allocate more resources to financial activity and short-run shareholder value while reducing commitments to long term employment and job security" (Milberg and Winkler 2013:12). Further, Gereffi (2005) emphasizes the emergence of corporations that do not manufacture their own products which he claims is central to the "new trends" of offshoring. Such corporations, which are usually large retailers and branded marketers, can be referred to as the "new drivers" in the global chains that have become more prominent over the last couple of decades. Arm's length production by multinational corporations—Nike is perhaps the most famous example—is associated with "buyer-driven" governance structures, in which corporations, usually situated at the center of the world economy, play a pivotal role in setting up *decentralized* production networks in exporting countries, typically in the third world (Gereffi 1995). They are actually not real

manufacturers, but merely merchandisers, i.e., companies who "design and/or market, but do not make, the branded products they sell" (Gereffi 1994:99). As opposed to "producer-driven" chains characterized by high FDI flows, buyer-driven chains are characterized by arm's length contracts.

The differences between mainstream GCC/GVC theories and world-systems commodity-chain analysis has deeper roots related to historical perspectives. As Jennifer Bair and Marion Werner (2011:988) explain, the mainstream GCC/GVC frameworks "have shifted from the long-range, macrohistorical perspective of world-systems theory to a more industry-centered and firm-centered model of organizational analysis"—with a focus on firms as mesolevel actors. Gereffi (1995:103) himself claims that "transnational corporations" are "the chief economic organizing agent in global capitalism"—and that the GCC framework is distinguished from previous theories (such as dependency theory) precisely because those theories "did not have a good way to tie the activities of TNCs [transnational corporations] into the structure of the world economy." Yet GCC/GVC analysis increasingly suffers from the opposite shortcoming of hypostatizing the firm level of analysis, and losing sight of the structure of the capitalist world economy as a whole.

There is no doubt that GCC and GVC scholars have made important contribution, especially in the detailed studies of commodities and firms. Studies of value chains that deal directly with exchange value, such as the ones that examine the production of the iPod and iPhone, have provided sophisticated institutionalist criticisms of abstract value-added conceptions in neoclassical economics which fail to see the new forms of exploitation of labor (see e.g., Linden, Kraemer, and Dedrick 2009; Xing and Detert

2010).[7] However, as we will see below, both GCC and GVC frameworks lack the radical apparatus necessary to analyze power and class relations within global production processes. This remains true despite several seemingly critical claims by their proponents—who argue that "power relations" among economic actors and institutions involved in the value chains are "determinants of the direction and volume of trade" (Milberg and Winkler 2013:17).

Indeed, some scholars have argued that GCC/GVC analysis has led directly away from conditions of power. Dicken and Malmberg (paraphrased in Bair and Werner 2011:989), for example, claim that the GCC/GVC theories' focus on firms, despite their ability to give "insights into the governance dynamics internal to production networks," has translated into an ideological "flattening of power relations." Economic geographers who have developed their own analysis of global value chains called Global Production Network (GPN), have similarly claimed that the GCC/GVC framework—due to their "industry- or commodity-oriented" approach—is unable to give "justice to the multiactor and geographically complex contemporary global economy" and thus, unlikely to explain the global patterns of uneven development (see Yeung and Coe 2015:32). Critics charge that GCC/GVC analysis is ridden with weaknesses, both analytical and political,

[7] Linden, Kraemer, and Dedrick (2009:144), for example, offer a valuable critique of value-added -- along with their suggestion that value is actually captured (not added). After showing that U.S. companies such as Apple benefit the most (it captures high value, even though the production itself is located in China), they end up concluding: "U.S. companies need to work with international partners to bring new products to the market. These companies will capture profits commensurate with the extra value they bring to the table. This is simply the nature of business in the 21st century, and the fact that many U.S. companies are successful in this environment brings significant benefits to the U.S. economy." Whereas Xing and Detert (2010:10), after suggesting that Apple will still have a 50% profit margin even if production is located in the U.S., conclude that "in a market economy, there is nothing wrong with a firm pursuing profit maximization. Governments should not restrict such behavior in any way." They then continue to suggest that Corporate Social Responsibility (CSR) is sufficient as an "effective policy option," with a focus on creating jobs for low skilled workers, "such as using US workers to assemble iPhones."

especially due to its failure to "comprehend the nature of capitalist exploitation and indecent work" and to engage in a "bottom-up" perspective on labor (Selwyn 2013:76).

To be sure, commodity chain theories have not always downplayed (or ignored) the unequal power relations that are integral to the maintenance of the chains at the global level. The world-systems approach to commodity chains, despite its relative lack of empirical development, does not suffer from such a problem, since it is concerned with issues of core-periphery, unequal exchange, and inequality of labor. GPN proponents—who often criticize the world-systems approach due to its "highly problematic conception of places and regions as relatively stable and enduring territorialized ensembles"—have to admit that the world-systems theory "provides a powerful reminder of the fundamental capitalist imperatives at work…leading to highly uneven developmental outcomes" (Coe, Dicken, Hess, and Yeung 2010:140-42).

Although both mainstream global commodity chain and the more critical political-economic approaches to the same issue take into account, to some extent, the international division of labor that characterizes capitalist production, critical political-economic approaches see commodity chains differently than the mainstream GCC/GVC frameworks. One may argue that the commodity chains discourse had a radical inception, before it became "power-less" in later developments, where mainstream approaches took over.

First, unlike the GCC/GVC proponents, critical political-economic theorists, including world-systems analysts, deal with a holistic and macro approach to commodity chains—this leads to a consideration regarding "how commodity chains structure and reproduce a stratified and hierarchical world-system" (Bair 2005:156). For Wallerstein

(1983:16), the "commodification of everything" is key to the historical development of capitalism itself—including how production processes are "linked to one another in complex commodity chains." In their subsequent works, world-systems theorists continue to examine how the unequal distributions of rewards and the persistent "hierarchy of wealth of the capitalist world economy" are related to the international division of labor (Arrighi 1990:22). As a result, the imperialist nature of the commodity-chain system, related to international exploitation, is largely lost sight of or discounted in the mainstream analysis.

As Giovanni Arrighi and Jessica Drangel (1986:16) argue in their study of the semiperiphery, to understand this hierarchy of wealth, we need to examine the economic activities (or nodes) of the commodity chain. Adopting this approach, they find that industrialization—what seems to be taken as a sign of national success by many GCC and GVC proponents—does not necessarily reflect widespread development and "catching-up" success stories. As Arrighi (1990:24) explains elsewhere: "In fact, the focus on industrialization is another source of developmentalist illusions…From this perspective, the spread of industrialization appears not as development of the semiperiphery but as peripheralization of industrial activities."

Second, labor was claimed to be integral to the world-systems discourse of commodity chains. Building on early formulations of commodity chains by Hopkins and Wallerstein, Bair (2009:15) writes how the world-systems tradition emphasizes that "labor power is a critical input into every commodity chain and thus seeks to identify the various modes of labor control and reproduction that one can find along a chain, or even within a single box." Such critical political economists see commodity chains "as webs

connecting… [the transformation of raw materials into final goods] with the social reproduction of human labor power as a critical input into this process" (Bair 2005:155-56).

Nevertheless, Selwyn (2012:213-15) argues that even the world-systems theory is still unable to incorporate "satisfactorily the study and conceptualization of labour into its analysis of differentiated development"—ostensibly as a result of its "limited understanding of capitalism." Thus, considering the weaknesses of the GCC/GVC frameworks and the world-systems approach, scholars have argued that the task for the next generation of commodity or value chain research is to reboot the world-systems commodity-chain approach to take into account more contemporary conditions and frameworks of analysis. Bair (2005:171) suggests that, to do this, we need to "expand the scope of analysis to encompass the regulatory mechanisms, market institutions and structural properties of contemporary capitalism that affect the configuration and operation of these chains as well as the developmental outcomes associated with them," and pay attention to how workers can benefit from their participation in the chains. Bair and Werner (2011:992) argue that we need "closer analytical attention to the relationship between inclusion and exclusion as ongoing processes that are constitutive of commodity chains." But perhaps the most succinct suggestion is given by Selwyn (2012, 2014), who urges that the crucial task is to reintegrate labor and a solid analysis of capitalism, along with its global class relations, into the studies of GCCs or GVCs.

Multinational Corporations and the Extraction of Surplus from the Global South

The crucial issue from a Marxist perspective is how to integrate a labor-value analysis of commodity chains with a wider analysis of capitalist development in the twenty-first century, so as to account for new developments with respect to offshoring and the global labor arbitrage. The GCC/GVC frameworks' attention to firms is considered a strength by its proponents, but a weakness by its critics. On the one hand, the firm-level analysis is regarded as a valuable contribution by these frameworks, especially when compared to the inability of the world-systems approach to do so. The examination of inter-firm networks is seen as a "*methodological* advance," a means to provide "a grounded way to study and operationalize the global-local nexus" (Bair 2005:158-59). But others see this as a narrow, reductionist approach, a sign of the absence of recognition of the skewed power-relations that characterize commodity chains (Selwyn 2013; Bair and Werner 2011).

One difficulty is the historic distinction between transnational and multinational corporations. Traditionally, multinational corporations have been seen as corporations that are headquartered in one country and operate in many. This was distinguished from the idea of transnational corporations in which corporations were seen as truly transnational or global, thus no longer connected to a particular state (Drucker 1974, 1997). Recently, both mainstream and radical theorists, particularly in Europe, have adopted the conception of transnational corporations, and have evoked a widespread process of transnationalization, whereby corporations with global reach are no longer seen as necessarily headquartered in the center of the world economy or connected to particular core states. This has then encouraged a shift towards an extreme firm-level

analysis of transnationalization, where nation states are seen increasingly as non-actors (or displaced actors) within a globalized economy (Robinson 2004, 2014; Sklair 2001). However, other, more realistic thinkers have rejected such notions, insisting on the role of the state and the continuation of imperial/core-periphery relations—thereby bringing the state back into global political economy.

Thus economist Ernesto Screpanti (2014) debunks the myth of the *trans*-nationalization of big firms in the globalization of production, reminding us that multinational corporations are still pretty much national in their governance structure, especially if we consider that the center of management and advanced technological research of multinationals is still concentrated in the developed global North. Through processes such as direct investments, Screpanti (2014:18-19) argues, innovations are transferred to the global South, "where they produced a derivative form of technological research." China serves as an example. Despite China's reputation as the largest exporter of high-technology goods in 2006, another economist, Martin Hart-Landsberg (2013), points out that 85 percent of the country's high-technology exports are produced by multinationals. This case can illustrate what Stephen Hymer (1979:43) said a few decades ago: the headquarters of multinationals "rule from the tops of skyscrapers; on a clear day, they can almost see the world."

But why are multinationals able to remain on the tops of skyscrapers and even increase their ability to see—and control—"the world" even as production shifts to the periphery? The answer, we suggest, is to be found in the history and development of the giant corporations, which then became global-operating corporations. More than a half century ago, Baran and Sweezy (1966) contended that capitalism can no longer be

examined using a freely competitive model of market relations, but must be seen in monopolistic terms. One of the main reasons is the dominant position held by giant multinational corporations, whose defining power is the ability to protect their profit margins from ruinous competitions. Under monopoly capital (today monopoly-finance capital), corporations "can and do choose what prices to charge for their products," as the system bans the practice of "price cutting" under the assumption that it would lead to "economic warfare" among oligopolies (Baran and Sweezy 1966:57-58). This ability was non-existent in the traditional freely competitive system. As a result, while price-cutting—where this would seriously endanger profit margins—rarely happens, "price increases by firms generally occur in tandem, most commonly under the price leadership of the largest corporation in the industry" (Foster, McChesney, and Jonna 2011:11).

Through their ability to exert considerable control over output and prices and to protect their profit margins while dominating all sectors of production, multinationals—mostly based in mature capitalist economies—are able to exert oligopolistic power on an increasingly global scale, with a small number of multinationals playing a predominant role in world production (Smith 2016; Foster and McChesney 2012). As the size and global reach of multinationals have grown, their strength and ability to accumulate capital have also been enhanced. This has demanded a new structure of management intrinsic to the evolution of multinationals. This new management structure, as pointed out by Hymer (1979:59), who based his argument on industrial organization theory, enables corporations to rationalize production and incorporate the advances of science into economic activity "on a systematic basis." In line with this, multinationals are able to implement a vertical system of control in their decision-making capabilities, with the

head office located in global North countries at the top of the hierarchy. According to Hymer (1979:59), this allows the organization to become conscious of itself and gain "a certain measure of control over its own evolution and development."

Such patterns of power and authority can be clearly seen in one of the main processes involved in offshoring: foreign direct investments. Displacing portfolio investment, foreign direct investment became primary after the Second World War, especially in the realm of manufacturing (Gilpin 1975). As Harry Magdoff (1969:54) argues: "the acceleration of investment in foreign manufacturing ventures added a new dimension to the internationalization of capital." Foreign (especially direct) investments are a way to penetrate foreign markets. They allow firms from the global North to compete in foreign markets directly, rather than through exports only. In addition, they also allow these firms to "enter into the foreign trade channels of the competing powers" (Magdoff 1969:58). Magdoff's explanation of foreign investments resonates with Hymer's (1979:174), who emphasizes that (direct) foreign investments are a tool to maintain and expand the oligopolistic power of multinationals: "direct investment tends to be associated with industries where the market share is largely accounted for by a small number of firms."

But offshoring is not always—especially today—about direct investments abroad. Instead, it often includes arm's length contracts or non-equity modes (NEMs). By 2012, global value chains coordinated by multinational corporations account for approximately 80 percent of global trade (UNCTAD 2013), and NEMs have increasingly become a major part of such chains, with growth happening mostly in "developing economies." Between 2005-2010 the growth on NEMs in several manufacturing sectors—including electronics, pharmaceuticals, and footwear—far exceeded the growth rate for global

industry (UNCTAD 2011). As GCC/GVC scholars have noted, lead firms manage such inter-firm networks within varying governance structures.

A popular discussion of the "buyer-driven chains" mentioned above, for example, highlighted the "decentralized characteristic" of such chains. Far from representing decentralization of control over production (and valorization) as is sometimes assumed, the "dispersed" networks associated with the new non-equity modes of production, are ultimately governed by the centralized financial headquarters of the giant corporations they service, which retain monopolies over information technology, and markets, and appropriate the larger portion of the value added. As Foster and McChesney (2012:111) argue, arm's length contracts actually allow firms to capture "extremely high profit margins through their international operations and [exert] strategic control over their supply lines—regardless of their relative lack of actual FDI." But this is often difficult to examine since, in such a practice, multinational corporations have only an indirect connection with the workers/farmers who produce their goods. There are often no visible flows of profits from these foreign suppliers to their global North customers, i.e., multinationals (see Smith 2016). Empirical analysis thus becomes doubly difficult.

However, a closer look at the logic behind these forms of offshoring will allow us to see the commodity-chain and power relations embedded in them. The question is not merely about how lead firms govern commodity chains, but also how they facilitate the extraction of surplus from the global South. This is captured in the concept of "global labor arbitrage"—defined by Stephen Roach (2004a), the former chief economist of Morgan Stanley, as the replacement of high-wage workers in the United States and other rich economies "with like-quality, low-wage workers abroad." In Roach's understanding,

global labor arbitrage is rationalized as "an urgent survival tactic" for companies in the global North, pressured by the need to cut costs and to "search for new efficiencies" (Roach 2004b).

Upon critical examination, this cost control imperative discussed by Roach (2004a, 2004b) is none other than a form of arbitrage, taking advantage of wage differentials within the imperfect global market—illustrated by the unequal freedom of movement of capital and labor (Smith 2008). Although labor is still largely constrained within national borders due to factors like immigration policies, global capital and commodities have far more freedom to move around—further heightened in recent years due to trade liberalization—outside certain restrictions such as monopolistic controls and barriers to entry placed by firms, as well as protectionism in wealthy countries. Global labor arbitrage—the pursuit of higher profits through the substitution of higher-paid labor with low-paid labor—thus serves as a means for multinationals to benefit from the "enormous international differences in the price of labor" (Smith 2008:16).

Viewed through a Marxist or critical political-economy perspective, global labor arbitrage is exploitation of labor in the global South by global capital. It constitutes unequal exchange, understood as the exchange of more labor for less—in which capitalists gain much more profit from lower labor costs in the global South (Smith 2016). The process of unequal exchange at the same time marked the further incorporation of the global South countries into the global economy (Amin 1976). In the context of the labor theory of value, then, global labor arbitrage is a quest for valorization. It is a strategy for both reducing socially necessary labor costs (by employing low-wage workers) and maximizing the appropriation of economic surplus

(by extracting more out of workers through various means, including repressive work environments in foreign factories, state-enforced bans on unionization, quota systems or piece-rate work, and so on) in an imperfect global market. This, in turn, creates and enhances exploitation of the workers in the global South.

The global labor arbitrage is also associated with what Marx (1976 [1867]:781-94) refers to as "the industrial reserve army" of the unemployed—but on a global scale, thus a *global reserve army of labor*. The creation over the last few decades of a larger global reserve army is partly connected to the "great doubling" phenomenon, which refers to the integration of the workforce of former socialist countries (including China) and protectionist countries (such as India) into the global economy, and expands the size of the global labor force (see Milberg and Winkler 2013). Also central to the creation of this reserve army is the "depeasantization" of a large portion of the global periphery through the spread of agribusiness (Araghi 2000). This forced movement of peasants from the land has resulted in the growth of urban slum populations (Foster and McChesney 2012). Marx (1976 [1867]) connected the "freeing" of peasants (the "latent" part of the reserve army) from the land to the process of primitive (or primary) accumulation.

Creating this global reserve army of labor is a strategy not only for increasing shorter-term profits; it serves as a divide and rule approach to labor on a global scale in the interest of long-term accumulation by multinationals and the state structures aligned with them (Peoples and Sugden 2000). Although competition among corporations is limited to oligopolistic rivalry, competition among workers of the world (especially those in the global South) is greatly enhanced. This divide and rule strategy "integrates disparate labor surpluses, ensuring a constant and growing supply of recruits to the global

reserve army" who are "made less recalcitrant by insecure employment and the continual threat of unemployment" (Foster and McChesney 2012:114-115).

From the above discussion, we can see that, although the freely competitive model (with respect to traditional price competition and a dog-eat-dog competition between small firms) has been made obsolete, the "traditional" rule of fighting for low-cost production is still alive and well. Indeed, one may argue that it is intensified in the age of monopoly capital. The goal of multinationals is always the creation and the perpetuation of monopoly power, i.e., "the power to generate persistent, high economic profits through a mark-up on prime production costs" (Foster 2000:7). And as production becomes globalized, Zak Cope (2012:202) writes, "the leading oligopolies compete to reduce labor and raw materials costs. They export capital to the underdeveloped countries in order to secure a high return on the exploitation of abundant cheap labor and the control of economically pivotal natural resources." Whether through intra-firm trade or arm's length contracts, the increasing trend of foreign investments in the last few decades is merely a continuation of the imperialistic projects of multinationals.

Labor-Value Commodity Chains and Unit Labor Costs

In a recent ILO (2015) report, a chapter is dedicated to how changes in global production patterns influenced firms and employment. The number of jobs related to global value or supply chains has increased sharply between 1995 and 2013, with about one in five jobs estimated to be linked to global supply chains, and with more notable increases in the manufacturing sector of "emerging economies." Interestingly, the report also found that, while participation in global supply chains positively influences lead firms' productivity and profitability, it does not have significant positive effects on the

wage share of output. This increase in productivity and the absence of any commensurate positive impact on wages means that participation in global supply chains leads to a drop in "the portion of value added that goes to workers"—indeed, the report concludes, "this is the result when relating GSC participation directly to the wage share in both emerging *and* developed economies" (ILO 2015:143, emphasis added).

Here cross-national variation in unit labor costs is calculated—a measurement that gets at the same underlying issues as raised by the ILO, but in terms that aim at uncovering gross profit margins or the rate of surplus value. Unit labor costs measurement combines productivity with wage costs in the manner closely related to Marx's theory of exploitation (see Gordon 1998; Foster 2000). It combines data on labor productivity and compensation to assess the price competitiveness of a given set of countries. It is typically presented as the average cost of labor per unit of real output, or the ratio of total hourly compensation to output per hour worked (labor productivity). Although unit labor cost data can be compiled for the economy as a whole, most analysts narrow the focus to the manufacturing sector to improve comparability. Unit labor costs can be seen as a more comprehensive indicator—compared to labor productivity growth rates—to measure international competitiveness (see Foster 2000; OECD 2014). In a capitalist economy, neither relative productivity measures nor relative wages are adequate by themselves in analyzing the relative positions of various capitalist economies: unit labor costs combine both sets of data.

For example, a country with a higher rate of productivity growth may lose out in the competitive race to a country that has a somewhat lower rate of productivity growth, but lower wage costs. Conversely, a country with lower wage costs may lose out in the

competitive race to a country with higher productivity growth. By combining both sets of data, unit labor costs estimates also reveal where gross profit margins—which, in Kaleckian terms (Kalecki 1971:156-64), represent the degree of mark-up (the degree of monopoly) on direct production costs—will be the widest.

In a debate with Brenner on intercapitalist competition, Foster (2000) uses the average annual rate of change in unit labor costs (in manufacturing) to compare the G-7 countries, in two periods ranging from 1985 to 1998. The data shows slower growth of unit labor costs in the United States than in other G-7 countries during the period, a fact that gained the United States, as concluded by the Bureau of Labor Statistics' (BLS) analysts, a "*decisive advantage*" in "*overall competitive position* over its major competitors in the period after 1985," despite its somewhat lower levels of productivity growth. This reflects the "effectiveness of the class struggle against labor in the United States" (Foster 2000:14).

This finding suggests that it would be useful to elaborate on what changes in unit labor costs can tell us about "capturing value" from labor in the global South through offshoring practices—and the figures below will give us the picture.[8] To start, Table 1 lists ten countries with high levels of participation in global supply chains. We can see that China and India rank the highest, with shares of all jobs in global supply chains

[8] To investigate the connection between unit labor costs and global supply chains, we construct an original dataset using the World Input Output Database (WIOD), which was recently made publicly available (http://wiod.org/). The power of dataset was showcased in the 2015 edition of the ILO's "World Employment and Social Outlook" (cited above), which focused on measurement of the extent of global supply chains. The WIOD dataset contains data on 40 countries from 1995 to 2009, covering 85 percent of world GPD and, crucially, includes key countries from the global South, such as China, India, Indonesia, and Mexico (Timmer et al. 2015:578). Combining data from the Socio-Economic Accounts (a subset of the WIOD database) with new, more rigorous data on relative prices (or purchasing power parity [PPP] exchange rates) from the Penn World Tables (see Feenstra, Inklaar, and Timmer 2015), makes it possible to construct comprehensive cross-national measures of hourly wages unit labor cost.

reached 40.8 and 16.8 percent, respectively. For China, 17.8 percent of the share are jobs designated for primary export destination, while for India, it is 22.5 percent. Mexico, on the other hand, while its share of all jobs in global supply chains only reached 2.2 percent, 54.7 percent of this share are designated for primary export destination. All three countries have the same primary export destination: United States.

The question here is how changes in unit labor costs over time relate to such countries' participation in global supply chains, and how this relationship can help explain the extraction of surplus from the global South. The underlying assumption driving this analysis is that the global labor arbitrage promoted by multinational corporations and international finance is a form of unequal exchange in which the difference between the productivities is less than the differences in the wages (Amin 1977), creating a global siphoning of surplus from South to North, generating crises of overaccumulation in the center, while taking advantage and promoting global inequality.

In order to understand the significance of the unit labor cost data that we shall provide, it is useful to look first at a comparison of hourly compensation in dollar terms. Although international wage-cost comparisons tend to be sketchy, they are crucial for multinational corporations engaged in the global labor arbitrage. Figure 1 provides an index of average hourly labor compensation in manufacturing for G7 (North) and non-G7 countries (South). What stands out in Figure 1, of course, and what can hardly be denied, is the vast discrepancy in wage levels between North and South, which is the basis of the new phase of globalized monopoly-finance capital, in which production, along with the exploitation of labor, now occurs on a global basis, taking advantage of the vast differences between the global South and the global North.

Table 1. Jobs in Global Supply Chains in 2011: Total Share and Share in Primary Export Destination

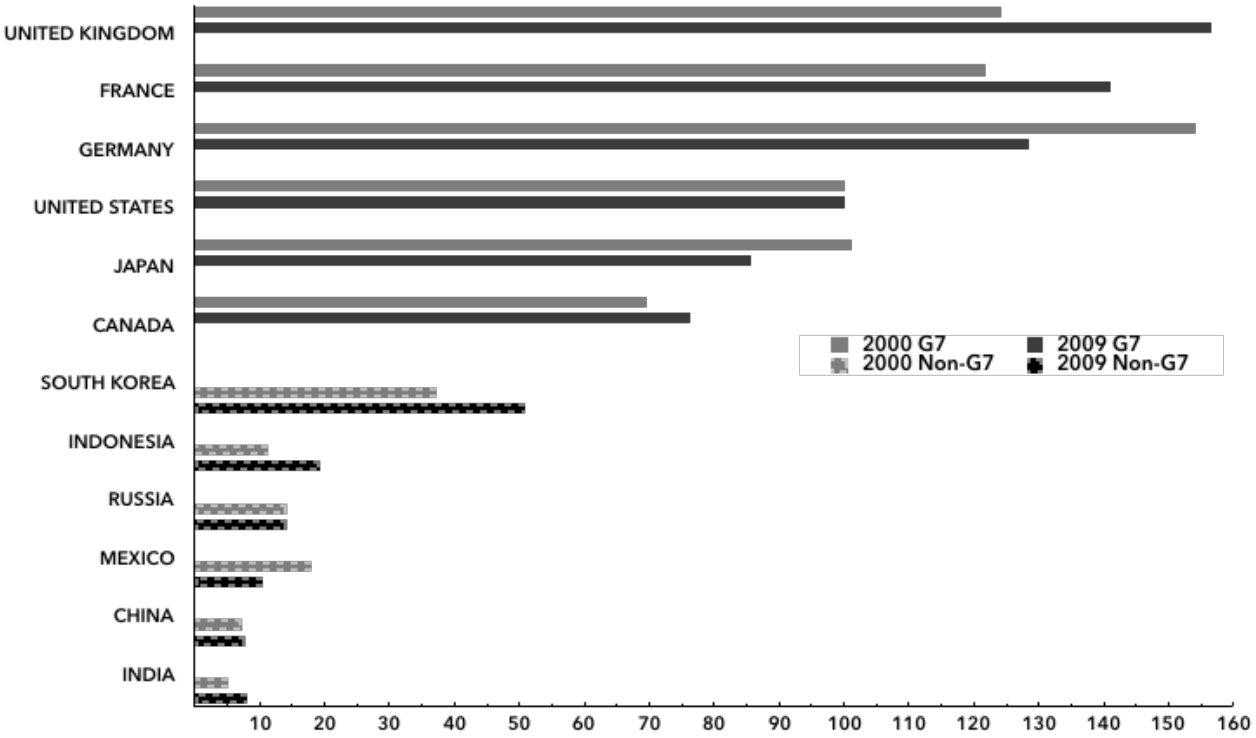
Country	Share of All Jobs in Global Supply Chains	Primary Export Destination*	Percent of Jobs in Primary Export Destination
China	40.8%	United States	17.8%
India	16.8%	United States	22.5%
Indonesia	4.7%	China	10.6%
Russia	4.0%	China	9.1%
Germany	3.6%	United States	8.1%
United States	3.4%	Canada	10.5%
Mexico	2.2%	United States	54.7%
South Korea	1.9%	China	19.6%
United Kingdom	1.9%	United States	11.3%
Japan	1.8%	China	18.5%
France	1.3%	Germany	12.5%
Canada	1.0%	United States	49.8%
TOTAL	83.40%		

* The primary export destination here is determined by the number of jobs.
Source: This is a modified version of data taken from Table 2 of Kizu, Kühn and Viegelahn (2016:15).

However, this gap in hourly wage rates tells the whole story, since the exportation of state-of-the-art production technology in manufacturing to the global South by manufacturing corporations (though this technology is controlled in various ways,

including patents) virtually guarantees that productivity increases are greater in the South than in the North, resulting in rapidly expanding gross profit margins, much of which is captured by multinational corporations, disproportionately feeding the coffers of Northern capital.

Figure 1. Index of Average Hourly Labor Compensation Across Manufacturing Industries, 2000 and 2009 (U.S.=100)



Sources: *Labor Compensation*: World Input-Output Database (WIOD), Socio-Economic Accounts (SEA), July 2014 Release, http://www.wiod.org; *Exchange Rates*: Penn World Table (PWT) Database, Version 9.0, University of Groningen, DOI: 10.15141/S5J01T; *U.S. Dollar Conversion Factors*: Sahr (2016).

Notes: For consistency, nominal dollar figures on labor compensation (variable: *lab*) were first converted to 2005 dollars using the value added prices variable (*va_p*; converted from 1995 prices) included in the WIOD dataset. This figure was then converted to 2005 US dollars using exchange rate data from PWT. Finally, 2005 dollar figures were converted to 2015 dollars using inflation conversion factors from Sahr (2016) and then divided by employment (variable: *emp*). This process was carried for each of the nine major industry groups included in the WIOD dataset, and then averaged to get a single figure for each country and year.

Average hourly wages also stagnated or increased only marginally in economies of the global South over the period of 1995–2009. This can be seen in Table 2, which presents hourly wage figures in 2015 US dollars at current prices. In Mexico, real hourly wages actually *decreased* while in Indonesia the increase was a paltry 24 cents. The picture was different in India and China, where wage gains could be construed as "significant" if the figures are only presented in terms of percent change. However, in real terms the hourly wages increased by less than $1 over the entire 14-year period. In 2009, manufacturing workers in these four countries averaged less than $3 per hour, compared to an average of close to $40 in the U.S., Germany and Japan. This shows the global labor arbitrage at work. The economic surplus siphoned off by the multinational is correspondingly huge. This helps explain Apple's 64 percent profit margins on the shipping price of its iPhones assembled in China (Xing and Detert 2010).

Table 2. Average Hourly Labor Compensation in Manufacturing at Market Exchange Rate, 2015 USD

Year	Indonesia	China	Mexico	India
1995	$4.89	$0.69	$3.80	$0.63
1996	$5.07	$0.76	$3.69	$0.57
1997	$4.49	$0.81	$3.90	$0.57
1998	$3.84	$0.90	$4.24	$0.61
1999	$2.79	$0.96	$4.42	$0.63
2000	$2.33	$1.07	$4.72	$0.68
2001	$2.54	$1.30	$4.87	$0.69
2002	$2.61	$1.49	$4.86	$0.66
2003	$2.89	$1.53	$4.76	$0.65
2004	$3.13	$1.56	$4.04	$0.64
2005	$3.85	$1.61	$4.34	$0.76
2006	$4.91	$1.30	$3.97	$0.92
2007	$5.13	$1.37	$3.87	$1.06
2008	$5.59	$1.43	$3.59	$1.16
2009	$5.13	$1.51	$3.58	$1.40

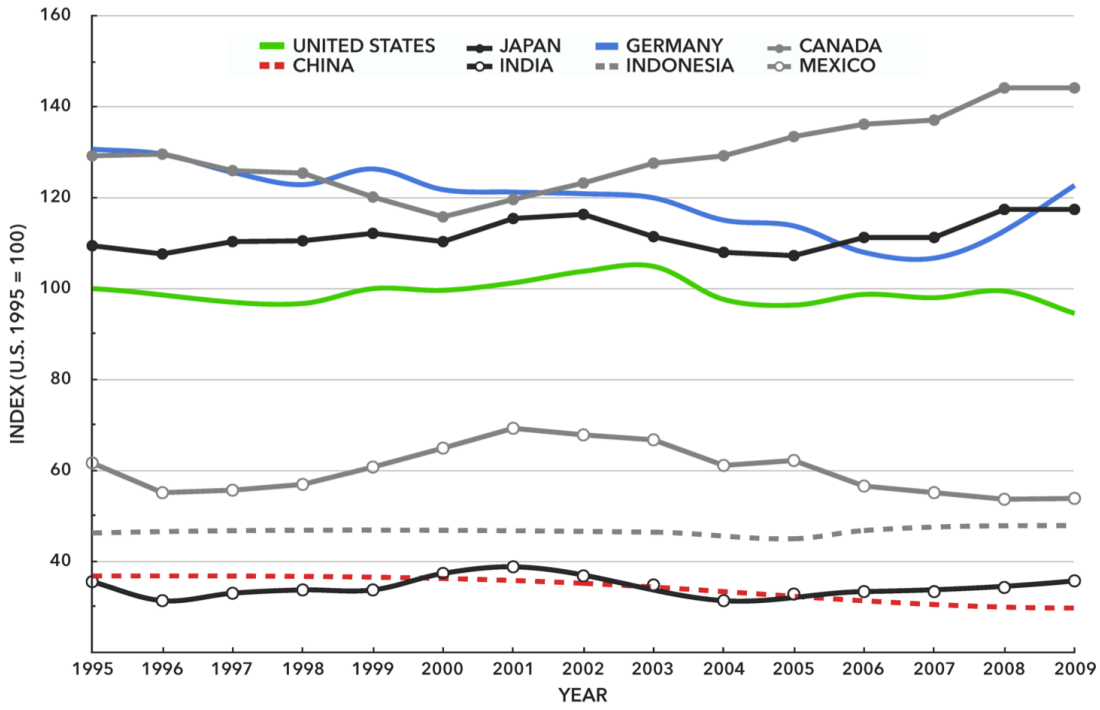
Sources and Notes: See Figure 1.

Indeed, if a central issue in critical political-economic analysis today is commodity chains, or else value chains, the key element in this relationship from the standpoint of workers is consistent, high rates of exploitation, i.e., in the formation of labor-value commodity chains that allow the rich-imperial countries to extract surplus from poor countries on a scale never before seen in world history. It is in this overall context that we can appreciate more fully the international struggle over unit labor costs.

Figure 2 presents an index of unit labor costs in key developed and developing countries in the global economy between 1995 and 2009—a period stretching from the development of the high-tech bubble of the 1990s to the onset of the Great Recession.[9] This series is unique in that it covers a much longer time span than other available series, allowing us to see the specific annual changes in unit labor costs for economies at each pole of today's labor-value commodity chains.

[9] A final limitation of existing data is the availability of historical figures. The BLS series is by far the longest, going back to 1950 for the U.S. and the 1970s for a handful of other countries; while OECD data is spotty before the 2000s. However, a few researchers (Ceglowski and Golub 2007, 2011) have recently developed a methodology for calculating unit labor cost data from the United Nations Industrial Development Organization's Industrial Statistics Database (INDSTAT). Apart from the availability of historical data, INDSTAT database contains a much larger subset of countries, and the figures are specifically on the manufacturing sector. Due to the reasons above, we are planning to use this dataset for our research. The INDSTAT data is ideal with respect to our conception of labor value commodity chains since it allows us to construct a statistically comparable time series (at least back to 1990 for key developed and developing economies. The greater coverage allows us to utilize ILO data on global supply chain participation to follow a theoretically consistent group of counties.

Figure 2. Index of Unit Labor Costs in Manufacturing Relative to the United States (1995=100)



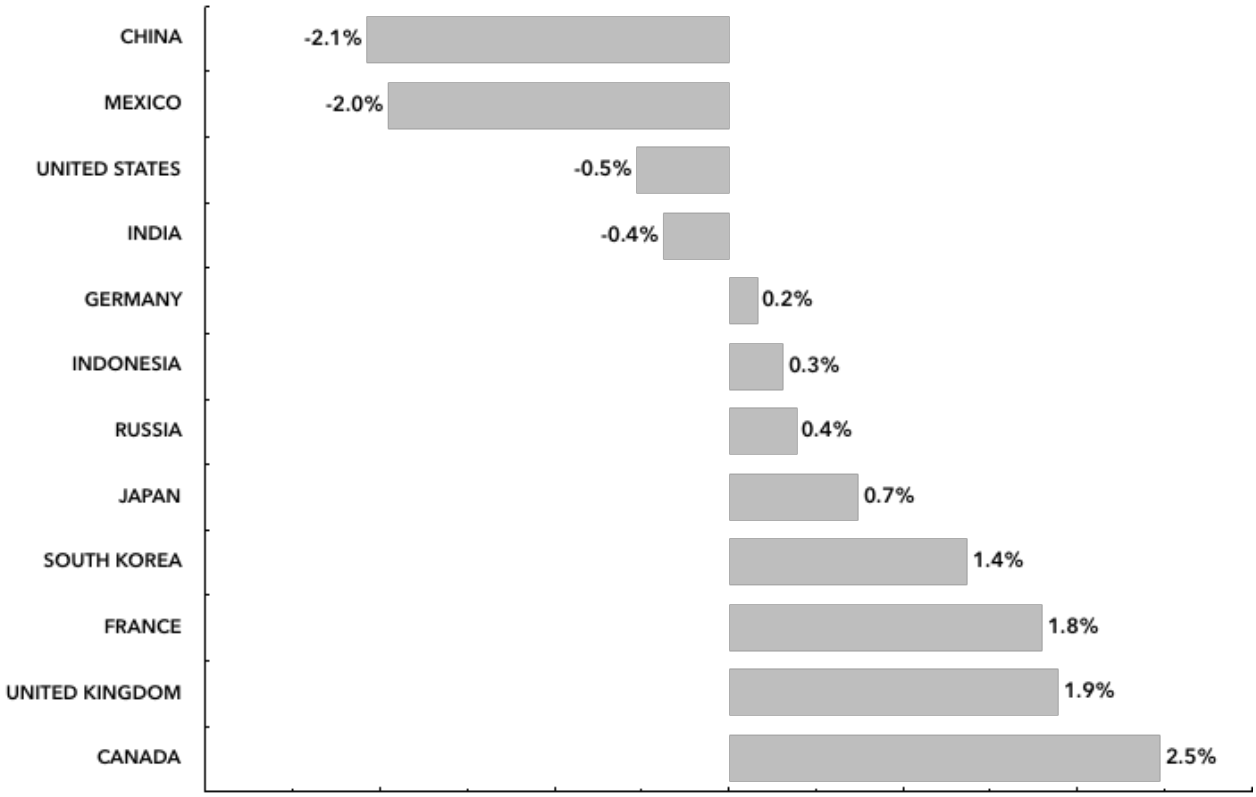
Sources: *Value Added and Labor Compensation*: World Input-Output Database (WIOD), Socio-Economic Accounts (SEA), July 2014 Release, http://www.wiod.org; *Exchange Rates*: Penn World Table (PWT) Database, Version 9.0, University of Groningen, DOI: 10.15141/S5J01T (See also Feenstra, Inklaar, and Timmer 2015); *Relative Price Deflators*: GGDC Productivity Level Database, July 2013 update (2005 benchmark), University of Groningen, http://www.rug.nl/research/ggdc/data/ggdc-productivity-level-database (See also Inklaar and Timmer 2012).

Notes: Following accepted statistical practice, productivity is based on nominal manufacturing value-added per employee, which is converted to U.S. Dollars using relative price deflators, while wages are converted to dollars at the market exchange rate. Unit labor cost is calculated as labor compensation per person (variables: *lab* and *emp*) divided by value added per person (variables: *va* and *emp*) in constant dollars. Nominal dollar figures were first transformed into 2005 dollars using the value added prices variable (*va_p*; converted from 1995 prices); then 2005 exchange rate data taken from the Penn World Table database was used to convert from nominal to 2005 US dollars; finally, relative price deflators (or PPP exchange rates) from the GGDC Productivity Level Database (2005 benchmark) were used to convert value added figures.

Figure 2 above reveals not only the stable or declining unit labor costs in countries of the global South, but also significantly lower unit labor costs overall relative to the United States. In other words, unit labor costs in the global South countries are *stably low*. In contrast, unit labor costs either increased or were stagnant in all of the countries in the global North, apart from the United States. It should be noted that China, which experienced the greatest decrease in unit labor costs in this period, was also the fastest growing economy in the world, as Chinese wages remained extremely low on average in relation to the South itself. This can be seen more clearly in Figure 3, which calculates the average annual change in unit labor cost from 2000 to 2009.

The results in Figures 2 and 3 show clearly why it has been so beneficial—indeed, a necessity from the standpoint of profitability—for economies of the global North to maintain substantial parts of their labor-value commodity chains in countries like China, India, and Mexico (as shown in Table 1). By maintaining these labor-value commodity chains, with their critical nodal points (in terms of labor-value) in low-wage countries, corporations in the global North are able to maintain low-cost positions essential to their global competitive position. Here it is crucial to understand that a given product, such as an iPod or an iPhone, often has its parts manufactured in a number of different countries, for example, Germany, Korea, and Taiwan, but the assembly occurs in China—a country that has among the lowest unit labor costs and offers developed infrastructure, scale effects, etc.—so it is marked as made in China (Hart-Landsberg 2013).

Figure 3. Average Annual Change in Unit Labor Cost, 2000–2009



Sources: See Figure 2.

Notes: The method developed in Figure 2 was also used here, but instead of indexing the values to that of the U.S. the annual change for each year was averaged for the given period.

In other words, while the commodity chain is complex and extended, the country with the lowest unit labor cost tends to be the site of final production/assembly and becomes the most critical node for the enlargement of gross profit margins.

The above data reflecting (1) the great discrepancy in wages and in unit labor costs between countries in the global North and the global South, as recently as 2009 (marking the Great Financial Crisis), and (2) the decline of unit labor costs since then in the global

South, as evidenced in the case of Asian economies in Figure 1, show the power of the global labor arbitrage. Lowell Bryan (2010), director of the New York office of the high-level investor's publication, the *McKinsey Quarterly*, has stated: "Any company sourcing its production or service operations in a lower-wage emerging-market country…can save enormously on labor costs….Even today, the cost of labor in China or India is still only a fraction (often less than a third) of the equivalent labor in the developed world. Yet the productivity of Chinese and Indian labor is rising rapidly and, in specialized areas (such as high-tech assembly in China or software development in India), may equal or exceed the productivity of workers in wealthier nations."

The way in which the labor-value commodity chains work is best illustrated by looking at a particular example, like Apple iPhones manufactured in China, which has become the global assembly center for much of modern manufacturing. Most for-export production in China, catering to the orders from multinational corporations, is in the form of assembly work. Low-wage migrant workers who assemble the products usually came from the countryside—or those who are referred to as "the floating population" (Foster and McChesney 2012). Moreover, the main technology components were manufactured in other countries before they were imported into China for final assembly. As Foster (2015:13-14) writes:

> Apple subcontracts the production of the component parts of its iPhones in a number of countries with the final assembly in China subcontracted to Foxconn. Due in large part to low-end wages paid for labor-intensive assembly operations, Apple's [gross] profits on its iPhone 4 in 2010 were found to be 59 percent of the final sales price. The share of the final sales price actually going to labor in mainland China itself…is only a tiny fraction of the whole. For each iPhone 4 imported from China to the United States in 2010, retailing at $549, only about $10 went to labor costs for production of components and assembly in China, or 1.8 percent of the final sales price.

Similar conditions of globalized exploitation, largely hidden in these labor-value commodity chains, pertain to other countries, particularly where multinational corporations subcontract with other firms (or arm's length production). In the international garment industry, in which production takes place now almost exclusively in the global South, direct labor cost per garment is typically around 1-3 percent of the final retail price, according to senior World Bank economist Zahid Hussain (2010). In 1996, a year for which data on the labor-value component of Nike's commodity chain for its shoes is available, a single Nike shoe consisting of 52 components was manufactured in five different countries. The entire direct labor cost for the production of a pair of Nike basketball shoes in Vietnam in the late 1990s, retailing for $149.50 in the United States, was 1 percent, or $1.50 (Ballinger 1997). As reported by the National Labor Committee and China Labor Watch in 2004, unit labor costs for the production of a pair of sneakers for PUMA, a German multinational, in China were so low that that the hourly profit on each pair of sneakers was more than 28 times greater than the wages workers in China received to make the sneakers.

These empirical relations help us to understand the reality of labor-value commodity chains and how they relate to the global labor arbitrage. In essence, each node within a labor-value chain represents a point of profitability, and can be understood as defined by the profit margins associate within that given node in the overall global chain, based primarily on differential in unit labor costs, themselves the product of the immobility of labor in relation to capital. Each central node (and indeed each link in the chain) represents in corporate accounting a link in a chain of value (or labor values). This is partially disguised by conventions with respect to GDP accounting and hence ways of

computing value added. In effect, as numerous analysts have now shown, labor values generated by production are "captured" and not registered in the incomes in the peripheral countries, due to asymmetries in power relations, in which multinational corporations are the key conduits (Smith 2012, 2016).

Hidden in the pricing and international exchange processes of the capitalist global capitalist economy—a reality hardly captured in traditional commodity chain or even value-chain analysis—is an enormous gross mark-up on labor costs (rate of surplus value) amounting to a kind of superexploitation, both in the *relative* sense of above average rates of exploitation, and also, frequently, in the *absolute* sense of workers paid less than the cost of the reproduction of their labor power. The conditions of political-economic power in relation to the periphery of the world economy feed widening gross profit margins leading to today's global overaccumulation. So extreme is this overaccumulation, manifested in world inequality, that the world was startled by an Oxfam (2017) report indicating that the eight wealthiest individuals in the world, six of whom are Americans, own as much wealth as the bottom half of the world's population, 3.6 billion people. Structurally, this level of inequality has become possible, as the present article suggests, as a result of a globalized commodity chain system of exploitation, and new, more globalized division of labor, and a new imperialism, characterized global monopoly-finance capital. In contrast, those who suggest (e.g., Harvey 2017:169) that the relations between the North and South and West and the East in the world economy have been "largely reversed," at the expense of the North and West, rely on a superficial analysis of the growth of emerging economies, particularly China. The truth is that the world economy in terms of wealth/asset concentration is

becoming more centralized and hierarchical than ever (Piketty 2014). What we are seeing is the emergence of a global pyramid that puts those at the top in a position relative to humanity as a whole that places in the shade the Pharaohs of old. As Oxfam (2017) indicates, the issue before us is the question of "an economy for the 99%." In the meantime, imperialism, reflected in relations of unequal exchange, continues to cast its long shadow over the global economy.

An examination of labor-value commodity chains reveals the exploitation that is hidden in today's fetishized global commodity chains. This empirical reality reinforces the critical political-economic analysis of commodity chains, introduced by Hopkins and Wallerstein in the early development of the theory. The labor-value commodity chains approach acknowledges the components largely missing from the GCC/GVC framework, namely (1) global capital-labor relations; and (2) the deep inequalities between the global North and global South in particular. Most importantly, the labor-value chains approach incorporates Marx's labor theory of value as an analytical tool in order to provide a more effective critique of the contemporary global political economy (see e.g., Amin 2010, 2013; Smith 2016). All of this helps us understand how the global commodity chains of monopoly-finance capital—the power configuration behind today's neoliberal globalization—are rapidly changing class relations and struggles worldwide.

The next question that needs to be answered is how these broad, global patterns of labor-value chains affect the labor process of workers in the global South? Indeed, Marx (1976 [1867]:279) himself elaborates the question of labor process in the first volume of *Capital*, and discuss it as a process that happens in the "hidden abode of production," where capitalists appropriate the labor-power of workers, the primary producers of

commodities, and turn it into surplus value. It is in such "hidden" places the exploitative class relations that govern the seemingly voluntary exchange between workers who sell their labor power and the capitalists who buy it can be brought into the open. And in the context of labor-value chains, these places are tucked away in the factories in the global South. The next two chapters will address this question.

CHAPTER III

FLEXIBILITY AND SYSTEMIC RATIONALIZATION:

CONTROL IN LABOR-VALUE COMMODITY CHAINS

> The way I see it, [our multinational clients] would observe, control how you work. This is a challenge for us, especially if we aim to increase our export orders for these multinationals… [These clients] control what you do. We can even say that they have power over you, 'You have to do this and that.' This is what we need to be wary about: how far they try to lead you.
>
> Star Inc. Executive

> Well, we've already had the procedures for everything [in production], and everybody is supposed to follow them. But to make sure that they are done properly, somebody has to control [these workers], right? Like you don't know how Indonesians are. If they are not controlled, they're like…you know.
>
> Java Film Executive

As explained in Chapter 2, the concept of labor-value commodity chains reveals the extraction of surplus from the global South by global North capital in the world economy, and the measurement of unit labor costs can illustrate this extraction process. In this chapter, I try to examine the impact of labor-value chains on what happens on the production floor, in particular regarding how multinational corporations can control concrete processes that occur in the production realm. This chapter serves as a theoretical bridge between the abstract notion of labor-value chains and concrete issues, such as control over technology and, especially, the labor process, before we continue to Chapter 4, where I will discuss my findings from my fieldwork in two companies in Indonesia.

The discussion here is divided into several segments. I start with introducing the theories that can be useful to connect what happens on the macro-level (i.e., global supply chains) with what happens on the meso-level (i.e., labor-management relations in

firms)—the theories of systemic rationalization and flexible production—and how they can help us understand the impact of globalized production on workers who make the commodities. However, regarding the labor process in particular, to successfully bring out the logic of capital accumulation that characterizes labor-value chains, both approaches need to be used in accordance with a Marxist approach that lays out how the persistence of Tayloristic forms of work help perpetuate and even enhance the exploitation of labor in the age of globalized production. This approach can also help us see how the control of the labor process is central to the development of monopoly capitalism.

Lastly, I try to strengthen some of the main assumptions used in the theories of systemic rationalization and flexible production. I argue that we cannot gain a comprehensive understanding of the development of supply chains themselves if we fail to see the process of capital accumulation that underlies this phenomenon. And in monopoly capitalism, with the rising profitability of giant firms holding oligopolistic power, this process has led to stagnation whose burden must be borne by the working class, both at home and abroad. This understanding of the larger context in which systemic rationalization and flexible production occur helps us reevaluate the common assumptions that are often used in studies of supply chains or production networks. Seeing the emergence of today's production networks as *merely* a managerial response to the "trauma" caused by economic crises and to the need for increasing productivity, or as an inevitable consequence of heightened competition and the rapid development of information technology is not enough. Veiled behind the intricate mechanisms embedded

in supply chains is the exploitation of workers driven by the imperative of capital accumulation.

Systemic Rationalization and Flexible Production

Control and the Supply Chains

While the concept of GCC/GVC is popular in the United States, German industrial sociologists use the concept of *systemic rationalization* to refer to the technological and organizational changes by corporations, beginning since around the 1970s (some argue mid-1980s). These changes are enabled and continuously maintained by new information technologies, and are a form of new corporate strategies aimed at establishing production, administration, and distribution processes that are "more flexible and economical" (Sauer, et.al. 1992:47). In many ways, this theory is similar to the GCC/GVC framework—especially in its focus on the rise of decentralized production throughout the globe, one that includes, as two of the main proponents of the theory, Norbert Altmann and Manfred Deiß (1998:139-40), write: the "decentralization of the entire production chain through segmentation of the individual processes."

If capital representatives such as Stephen Roach (2004b) see the implementation of global labor arbitrage as an "urgent survival tactic" to cut costs and search for new efficiencies, the discussion of systemic rationalization emphasizes that the "flexibilization and economization of manufacturing," as well as R&D, logistics, and other aspects, are the main drivers forcing corporations to seek new strategies (Altmann and Deiß 1998:139). Economization of manufacturing may not be a stretch from the search for new efficiencies, but flexible production is an important addition to the characteristics of global production processes.

Also popularized in the 1990s by scholars like radical economist Bennett Harrison, "the age of flexibility" had restructured production processes and management practices by corporations, especially through the creation of networks among producers. As Harrison (1994:190) writes in his popular book *Lean and Mean*, flexible production includes "lean production, downsizing, outsourcing, and the growing importance of spatially extensive production networks governed by powerful core firms and their strategic allies." Firms everywhere, big and small, search for greater flexibility "through reorganization and technological change, in labor-management relations, and in the reconfiguration of each firm's (and establishment's) transactional and longer-term relations to other companies and operating units"—they become "more integrated into one another's orbits." This is what British geographer Phillip Cooke identifies as "flexible integration" (Harrison 1994:127).

Specific to management practices within firms, flexibility may include *functional flexibility*, where managers "redefine work tasks, redeploy resources, and reconfigure relationships with suppliers." This may include the strategy of adopting new technologies that enable "rapid product design or tool changes," and that allow "a greater decentralization of decision making and responsibility," thus make it possible to change from one design to another in the middle of production operations. Another type of flexibility is *wage flexibility*—or attempts by managers to "reintroduce greater competition among individual workers," including through means such as payment through individual performance-based bonuses and systematic union avoidance. There is also *numerical flexibility*, which consists of two forms: first, the redesigning of jobs from full-time employment with benefit coverage (e.g., health insurance and pensions) to

various kinds of "part-time, contract, and other 'contingent' workers who… receive few or no benefits." The second form of this kind of flexibility is the management practice of "outsourcing production, maintenance, catering, clerical, and other activities that arguably were formerly…undertaken in-house" (Harrison 1994:129-30).

Two significant consequences of flexibility are the persistence of segmented labor markets and growing earnings inequality among groups of workers. Harrison (1994:11) explains: "According to a central tenet of best-practice flexible production, managers first divide permanent ('core') from contingent ('peripheral') jobs. The size of the core is then cut to the bone—which, along with the minimization of inventory holding, is why 'flexible' firms are often described as practicing 'lean' production. These activities, and the employees who perform them, are then located as much as possible in different parts of the company or network, even in different geographic locations." And most of these peripheral jobs are done by poorly paid workers in low-wage areas—globally, this often means workers in the global South.

Although the discussions of flexible production and systemic rationalization can be seen, on the surface, as something similar to the discussion of global supply chains in the GCC/GVC framework, the former has something that the latter lacks: an attention to the issue of *control*. Coming from a radical perspective, Harrison (1994:9) strongly emphasizes the point that Gereffi and his colleagues could not, that is, the idea that "decentralization of production does not imply the end of unequal economic *power* among firms—let alone among the different classes of workers who are employed in the different segments of these networks." Somewhat echoing Hymer, Harrison claims that flexibility has been largely used by global financial centers—the megacities where

multinational corporations are headquartered—instead of serving as a means to decentralize power. Indeed, Harrison argues that flexible production is driven by what he calls "concentration without centralization"—that is, "concentrated, powerful business enterprises" (Harrison 1994:12) that increasingly run the world "without as much centralized organization of production of products (i.e., large factories or formal hierarchies) as in the past" (Devine 1996). The persistence of concentrated power held by multinational corporations is made clear by Harrison (1994:12) in his argument: "Dressed in new costumes, and armed with new techniques for combining control over capital allocation, technology, government relations, and the deployment of labor with a dramatic decentralization of the location of actual production, the world's largest companies, their allies, and their suppliers have found a way to remain at the center of the world stage."

The discussion of systemic rationalization also pays attention to control. Even though they are probably not considered radical, German industrial sociologists orient their theories and studies to the political sphere, and they engage in a more critical perspective. Their approach also intersects, in some ways, with Marxist approaches to labor and production (see Altmann, Köhler, and Meil 1992; Meil 1992). In general, systemic rationalization is often seen as a strategy by big corporations to exert control over the dependent companies (such as suppliers) within the value creation chain—and all this leads to leads to capital's main goal, i.e., "to increase overall productivity of the entire production chain" (Altmann and Deiß 1998:139). In some cases, however, systemic rationalization theorists seem to emphasize the "control" issue, instead of the goal of increasing productivity, by highlighting corporate strategies to ensure "that

control is not endangered by complications generated by greater recourse to external resources" (Sauer, et.al. 1992:49). Core companies in the supply chains, in other words, have to make sure that the exclusive access to knowledge, technology, and development, remains only within their inner circles—a point that is also explained by other radical economists such as Screpanti (2014) and Hart-Landsberg (2013), as mentioned in the previous chapter, in their example of China.

Technology and Labor

In a way, the concepts of systemic rationalization and flexible production can bridge the macro-level discussion of global supply chains to the meso-level analysis of firms that in turns enables the examination of how management practices influence workers, especially those who work on the shop-floor, on the micro-level. It can also bring out the intricate relationship between dominant and dependent firms, and how their unequal relations in the end affect workers. This can be a starting point in our attempt to concretely examine global capital-labor relations.

I argue here that the emphasis on control discussed above allows us to examine two important components in globalized production that can help us examine such relations in a more specific context: (1) the issue of technology, and (2) the impact of globalized production on workers. These issues will be further developed later in the chapter—where the approaches put forward by both systemic rationalization and flexible production scholars will be brought back within the context of monopoly capitalism. But here, I will explain how control plays out in both technology and labor issues, as viewed through the lens of the two approaches.

Technology is seen as a central component in systemic rationalization—where information technology networking serves as a means to integrate "company-wide and inter-company production processes" and technology in general serves as an instrument to secure flexibility" (Sauer, et.al. 1992:46). As stated above, through systemic rationalization, multinationals—who serve as the core companies in global supply chains—make sure that they can maintain exclusive access to their manufacturing know-how, investment strength, as well as to "the heart of company-specific technology for reasons of securing innovation and (thus also) market positions" (Sauer, et.al. 1992:49). Often, such core companies have to balance their control with occasional "freedom" and let the dependent companies have some autonomy. To do this, neither market-related interventions nor the reduction of transaction costs is sufficient. Instead, as Altmann and Deiß (1998:139) explain, systemic rationalization allows core companies to govern (control) their supply chains or production networks "through the supra-company regulation of functions such as joint R&D, logistics and quality management." The point here is clear: systemic rationalization serves as a "new form" of control that may often be concealed behind a series of "rational systems" and regulations that may look fair and benign.

The issue of technology also holds a central place in Harrison's discussion of flexible production. One big part of his analysis is a rebuttal to the mainstream liberal view of the prospect of small-business egalitarianism. Harrison points out how California's Silicon Valley—often hailed as a prime example of such an idea—is actually "enmeshed in networks formed by big business, big government, and big education (especially Stanford) which relies on cheap and low-skill labor wherever possible"

(Devine 1996:50). In addition, companies in Silicon Valley have been "fiercely antiunion…since the beginning" (Harrison 1994:109).

Moreover, Harrison also refutes the idea that small businesses serve as a center of job creation and technical change—a view associated with David Birch and George Gilder (Devine 1996). Contrary to the suggestion that well-informed small firms can defeat big firms due to the former's flexibility "in identifying new wants and in getting new products to market," as well to take advantage of various new technologies, small firms "turn out to be systematically *backward* when it comes to technology," especially due to their inability to invest in huge-scale innovative technology, such as computer-controlled factory automation (Harrison 1994:7). Another supposed ability of small firms that Harrison debunks is their ability to cater to niche markets, where they produce specialty products to certain markets. Harrison refutes this by arguing that the claim ignores the fact that the big firms, partly due to their ability to access innovative technology, "can produce for both mass *and* niche markets—a neat trick that the small firms can't pull off." Therefore, he continues, "Toyota can deliver both its big-selling, inexpensive Corolla *and* the high-priced, world-class Lexus" (Harrison 1994:7). Through refuting the argument for small-business egalitarianism, Harrison once again shows that big firms continue to take center stage in the realm of global supply chains.

Another component of globalized production that can be examined through the issue of control brought up by both systemic rationalization and flexible production is perhaps the most important one: labor. While the GCC/GVC framework fails to deliver a sufficient analysis of labor, systemic rationalization and flexible production can help examine these issues. As Pamela Meil (1992:15), a U.S. sociologist who was working

with German industrial sociologists on the topic of systemic rationalization, explains, the methodological tool that the studies of systemic rationalization scholars use, that is, the industrial case study, "leads researchers into the production area where they examine the effects of the technological and organizational structures on workers in detail." And one way to examine this issue is through the study of the management of labor within certain industries (see Wright and Lund 2003).

But aside from this methodological question, the theory of systemic rationalization, as well as Harrison's work on flexible production, is a critical response to other theories of work published in the 1980s and early 1990s—such as those of Michael Piore and Charles Sabel—which put forward the idea that the trend was "toward a 'professional' work pattern in which all workers have greater autonomy and responsibility in a more open work and company organization as an important component of a new, post-Tayloristic phase of industrial development" (Altmann, et.al. 1992:4-5). These patterns, according to such post-Tayloristic or post-Fordism theories, lead to supposedly "relatively egalitarian networks embedded in communities of skilled workers" (Devine 1996:50). While systemic rationalization scholars claim that some forms of work do "break with Tayloristic rationalization strategies" due to pressures from the sales markets to produce in a more flexible and integrated manner, what they emphasize is the fact that "[a]t the same time, powerful forces remain which push toward the continuation of Tayloristic forms of work organization even under altered circumstances" (Altmann, et.al. 1992:5). The classic characteristics of Tayloristic forms of work are still as we know it:

> The separation of conception and execution in work; the extension of the division of labor according to functions, hierarchical levels and work tasks; the tendency to plan fully all production processes and to standardize the work process; careful control of performance, based on wage incentives; finally, and most strongly tied to the above-mentioned points, a widespread simplification of tasks and thus the deskilling and polarization of the labor force. (Altmann, et.al. 1992:4)

In fact, systemic rationalization entails "heterogeneous structures" along the value chain that enable the persistence of conventional forms of production and work such as "Tayloristic forms of work, where economies of scale are still attained for parts of the final product; unfavorable working conditions where such conditions are still accepted while also incurring low costs, even given low productivity, as long as it is functional for the total productivity of the production network, etc."—this leads to the conclusion that "with systemic rationalization there is no 'good work' without 'bad work'!" Such heterogeneous production networks still have an "extensive share of areas operating on low technological levels with traditional forms of Tayloristic work organization." The so-called end of Taylorism is far from reality, and "a vast amount of work forms with a high division of labor remains in place in global networks" (Altmann and Deiß 1998:141-2, 145). Similar with Harrison's (1994) claim that lean, flexible production perpetuates and perhaps enhances the mean aspects of production—i.e., inequality among classes of workers and labor market segmentation (the "primary labor market," where successful unions, relatively high wages, and job security exist vs. the "secondary labor market," where workers are paid low wages and hold a precarious position)—systemic rationalization scholars argue that workers are polarized. Only in limited positions could we find shop-floor workers with greater autonomy and decision-making power as well as higher skills. Moreover, workers who work in "the weakest or most dependent position in

the hierarchy of the entire production chain" can find their positions become even more vulnerable (Altmann, et.al. 1992:7, see also Wright and Lund 2003).

While the worsening position of workers is often only implied (if at all) in the GCC/GVC framework, the studies of systemic rationalization allow us to deal with the concrete details of how changes in the macro level—i.e., globalized production and the complexity of global supply chains—affect workers through an examination of labor-management relations. As emphasized above, the supposed "decentralized" networks of production do not necessarily lead to the dispersion of power. In line with the problem in the control of technology and knowledge, practices such as outsourcing fail to guarantee greater autonomy, not only to workers who manufacture the goods, but also to the dependent companies along the chain who employ these workers. Systemic, supra-company rationalization has instead created hierarchical structures in the production chain—consisting of dominant (or core) and dependent segments. Dominant firms can control the dependent ones through

> indirectly built-in control mechanisms, especially in simultaneous engineering, delivery on demand systems (just in time; JIT), ranking of suppliers by ABC-evaluation, and so forth, not to mention the continuing pressure on competitors for (supply) orders to disclose their costs, to keep to target prices, to orient themselves to benchmarks, and so on. This form of exerting influence is just as stringent for companies participating in the value creation chain as mere price and competitive pressure. Information technologies are the precondition and medium of the integration of production processes within the chain. (Altmann and Deiß 1998:139)

The impact of such mechanisms for workers and unions is fundamental and tends to be devastating. Through their study of German industries, Altmann and Deiß (1998:151) argue that systemic rationalization "tends to result in a decentralization and weakening of conventional employee interest representation," often through decisions

influenced by specifications and regulations that are "made outside and beyond the boundaries of their companies and enterprises"—most likely shaped by the demands of dominant firms within the chain. Harrison (1994:211) argues similarly; the revival of labor market segmentation due to flexible production "further weakens the bargaining power of labor unions, making it more difficult for them to organize new workers and to pressure companies to innovate continually in order to generate the additional productivity out of which to meet a rising wage bill." Especially when we talk about dependent firms, they do not have the resources and power needed to control innovative technology to begin with.

The point here is that pressures exerted by dominant firms on dependent firms—i.e., suppliers along the supply chain—will in the end affect the labor process and the bargaining power of workers who make the products. Unfortunately, although the studies of systemic rationalization and flexible production pay attention to the impact of these new forms of work organization on workers and unions, they often go around—instead of tackling—some aspects that are central to this subject: an elaboration of how the labor process is controlled through labor-management relations within the context of monopoly capitalism. To do this, it is necessary to bring in the analysis of the control of the labor process as offered by Marxists in the 1970s—whose emergence was largely influenced by the publication of Harry Braverman's *Labor and Monopoly Capital* in 1974. In his review of Harrison's *Lean and Mean*, James Devine (1996:52) mentions that although "Harrison's theory is not based on a Marxian analysis of capitalism's laws of motion," he did see a "tendency toward deskilling that Harry Braverman stressed in his *Labor and Monopoly Capital* (a work that is strangely not cited)." But this point about deskilling (in

Braverman's terms, "the destruction of craftsmanship") still needs to be discussed as a process that, as Braverman sees it, "is not divorced from capitalist exploitation and accumulation" (Foster 2009:xviii). Thus, before we can apply the question of the control over the labor process to the current mechanisms of systemic rationalization and flexible production, we need to review first the approaches proposed by Braverman and other Marxist scholars to this issue.

Control over The Labor Process in Monopoly Capitalism

In Chapter 7 of the first volume of *Capital*, Marx (1976 [1867]:283) writes: "Labor is, first of all, a process between man and nature, a process by which man, through his own actions, mediates, regulates and controls the metabolism between himself and nature." Through labor, humans produce use values to meet their needs—but this process differs from one mode of production to another, and for Marx, in the capitalist mode of production, the labor process is governed by exploitative capital-labor relations expressed through its organization of work. As studies of the labor process that emerged in the 1970s show, the organization of work in capitalist societies is not a "neutral productive instrument." Instead, it is a political instrument "molded by the attempts of capitalists and their managerial representatives to exert control over recalcitrant workers on the shop floor" (Gartman 1978:97). Among these works, Braverman's *Labor and Monopoly Capital* was one of the most important on the subject—a work that has since generated an "abundance of intellectual activity," ranging from books, new courses, to conferences (Zimbalist 1979:xi).

Braverman adopts Marx's argument that labor power is transformed by management "into work actually done in order to ensure profitability"—and considers the

"implications of this capitalist logic for the organization of work" (Attewell 1984:96). One especially valuable contribution of Braverman's work to the discussion of the labor process is the fact that he developed an impressive analysis of the labor process under monopoly capitalism. Baran and Sweezy (1966:8) themselves admit in *Monopoly Capital* that they were aware that their approach in the book "resulted in almost total neglect of a subject which occupies a central place in Marx's study of capitalism: the labor process." And according to Sweezy (1998 [1974]:xxv) in his foreword to Braverman's book, *Labor and Monopoly Capital* offers a "solidly successful effort to fill a large part of this gap."

Indeed, phenomena such as the growth of giant corporations and the "demise of internecine competition" are only two among many characteristics that accompanied the transition from competitive to monopoly capitalism. In fact, it is precisely this "highly successful battle of the employers and an army of industrial engineers to put the management of the labor process on a scientific footing"—in other words, as emphasized by Braverman, "the implementation of Taylorism" (Foster 1984:66). It was this process, "more than anything else," argues Foster (1984:66), which made the emergence of monopoly capital "possible and inevitable." The growth of the giant corporations and Taylor's scientific management were closely linked. In *The Wealth of Nations,* Adam Smith (1910 [1776]:15) writes that the extent of the division of labor "must always be limited by the extent…of the market" and the scale of production. In the context of monopoly capitalism, this means that the "growth in firm size made the implementation of industrial engineering cost efficient," and it became "the main source of the 'economies of scale' of big business." As a result, giant firms accrued "prodigious profitability" through this implementation, which in turn "enormously accelerated the

transition from freely competitive capitalism to the new regime of monopolistic competition" (Foster 1984:67).

Marx himself pointed out this form of capitalist development when he wrote about the "real subsumption of labor under capital" in "Results of the Immediate Process of Production" (included in the first volume of *Capital* in the Penguin edition)—a possible development that did not yet exist in his time. For Marx (1976 [1867]:1035), the real subsumption of labor "transforms the nature of the labor process and its actual conditions," and it was "developed in all the forms evolved by relative surplus value" that center on the increase of productivity. Further, he states: "With the real subsumption of labor under capital, all the changes in the labor process…now become reality. The social forces of production of labor are now developed, and with large-scale production comes the direct application of science and technology." What Marx "foresees" here is the development of Taylorism—"an attempt to apply the methods of science to the increasingly complex problems of the control of labor in rapidly growing capitalist enterprises"—along with the scientific-technological revolution, which enabled the appropriation and commodification of science and innovative technology by capital to respond to its immediate needs (Braverman 1998[1974]:59). Both are used by capital to restructure the organization of work and bring the control of the labor process to a whole new level, in an effort to increase relative surplus value as driven by capital accumulation under monopoly capitalism.

In general, Braverman expands Marx's fundamental idea that labor power is transformed by management "into work actually done in order to ensure profitability"—and Braverman considers the "implications of this capitalist logic for the organization of

work" (Attewell 1984:96). Rejecting Adam Smith's assertion that the division of labor is merely a matter of technical efficiency and an enhancement of specific work skills that would lead to a "proportionable increase of the productive powers of labor" (Smith (1910 [1776]:6), Braverman starts his analysis from the work of classical liberal theorists of management, Charles Babbage and Andrew Ure—whose works provided a rebuttal to Smith's argument, fifty years after *The Wealth of Nations* was published. These theorists argue that the division of labor is a mechanism that serves as a means to reduce labor costs "through the systematic degradation of human labor" (Foster 1998:xvi). Adopting this, Braverman claims that "the deskilling of work and a fine division of labor" are dictated by cost considerations (Attewell 1984:96).

In other words, capitalist logic creates the necessity to cheapen labor whenever possible. Breaking down complex skilled tasks into simple, routinized ones is the easiest way to do this. The Babbage principle, writes Braverman (1998 [1974]:57) shows that the labor power capable of doing the labor process "may be purchased more cheaply as disassociated elements than as a capacity integrated in a single worker." He then concludes that labor power is a commodity, and once it is sold, "its uses are no longer organized according to the needs and desires of those who sell it, but rather according to the needs of its purchasers, who are, primarily, employers seeking to expand the value of their capital. And it is a special and permanent interest of these purchasers to cheapen this commodity." Taylorism embodies this principle to the core—it is a reflection of "nothing more than the outlook of the capitalist with regard to the conditions of production" (Braverman 1998 [1974]:59).

But the main point of Braverman's argument is not merely the issue of cheapened labor, but above all else of how capitalists *control* labor through management, and how this whole process is "dominated and shaped by the accumulation of capital" (Braverman 1998 [1974]:37). Taylorism exerts control through these mechanisms: (1) the "dissociation of the labor process from the skills of the workers," (2) the "separation of conception from execution," and (3) the use of "monopoly over knowledge to control each step of the labor process and its mode of execution" (Braverman 1998 [1974]:77-83). With the implementation of these mechanisms, workers become more dependent on management. Whenever workers hold control over their own knowledge of their skilled or craft labor, it is management who is dependent upon them. So the strategy is to appropriate their knowledge and skills by reorganizing work "into narrow, low-skilled jobs with no conceptual content" and transforming workers into "mere executors of work"; this, in turn, results in a "steady degradation" and the deskilling of labor (Attewell 1984:97). Marx himself addresses the issue of control in the labor process in the first volume of *Capital*: "The driving motive and determining purpose of capitalist production is the self-valorization of capital to the greatest possible extent, i.e. the greatest possible production of surplus-value, hence the greatest possible exploitation of labor-power by the capitalist" (Marx 1976 [1867]:449).

What is also important for Marx is that he sees the issue of control not as merely something natural that comes out of the cooperative production of use values, but "by antagonistic relations of production under which use values are produced"—namely, class struggle (Gartman 1978:103). As Marx (1976 [1867]:449) continues in his quote above: "As the number of the co-operating workers increases, so too does their resistance

to the domination of capital, and, necessarily, the pressure put on by capital to overcome this resistance. The control exercised by the capitalist is not only a special function arising from the nature of the social labor process, and peculiar to that process, but it is at the same time a function of the exploitation of a social labor process, and is consequently conditioned by the unavoidable antagonism between the exploiter and the raw material of his exploitation."

It is precisely in this spirit that Braverman elaborates the question of control. For him, the issue of management control is examined as something that is born out of social relations within history—and in the context of the capitalist mode of production, the relations are in the form of class struggle. In modern capitalism, (Braverman 1998 [1974]:47) writes, it was not the "modern" element that gave birth to the new situation, he claims. Rather, it was "the new social relations which now frame the production process, and the antagonism between those who carry on the process and those for whose benefit it is carried on, those who manage and those who execute, those who bring to the factory their labor power, and those who undertake to extract from this labor power the maximum advantage for the capitalist." This position was later clarified by Andrew Zimbalist (1979:xii) in his introduction to an anthology of case studies on the labor process inspired by Braverman's work: "Indeed, a central argument of the book is that the antagonism between classes gives rise to the problem of management and the degradation of labor."

Braverman was not the only author who dealt with the question of control and the labor process during that period. In the same year in which Braverman's published his seminal work, Stephen Marglin wrote an article entitled "What Do Bosses Do?" that was

published in the *Review of Radical Political Economics*. Marglin's paper was partly a critique of Adam Smith; similar to Braverman, Marglin (1974:62) argues that "the social function of hierarchical work organization is not technical efficiency, but accumulation." Further, Marglin views specialization and separation of tasks in the division of labor under capitalism as a means to grant capitalists an essential role in the production process, namely, the role of integrator. Tracing his analysis to the period of nascent capitalism, Marglin uses the example of the "putting-out system"—in which workers made textiles by using their own simple machinery at home, with materials and specific tasks assigned by the capitalist, but no single workers produced the entire product—to highlight the first distinctly capitalist attempt to remove "individual producers from access to a market" and to allow the capitalist middle-man to gain profit (Attewell 1984:109). Here, the role of capitalist as integrator is highlighted:

> Separating the tasks assigned to each workman was the sole means by which the capitalist could, in the days preceding costly machinery, ensure that he would remain essential to the production process as integrator of these separate operations into a product for which a wide market existed; and specialization of men to tasks at the sub-product level was the hallmark of putting-out system.
>
> The capitalist division of labor, as developed under the putting-out system, embodied the same principle that "successful" imperial powers have utilized to rule their colonies: divide and conquer. (Marglin 1974:70)

In this early stage of capitalism, the putting-out system only eliminated the producer's control over their own product, according to Marglin. It was not until the factory existed that this system was developed into one that managed to deprive the producer not only from the control over their product but also from the control over their labor process (Marglin 1974). But what needs to be emphasized here is Marglin's attention to the issue of control and the "divide and conquer" characteristic of the specialization of tasks—and

how this origin of the fine division of labor "derived from the need to make workers dependent on the capitalist, and not from increased efficiency or other technological factors" (Attewell 1983:110).

In conversation with Braverman's work, David Gartman and Richard Edwards also elaborated the question of control in the labor process in their articles in *The Insurgent Sociologist* in 1978. Interpreting Marx's discussion of control, Gartman (1978:103) argues that there are two types of control. The first one is *basic control*, a type of control that is necessary in any large-scale production of use values in order to "coordinate and direct the action of individual workers, no matter who appropriates the surplus, or how this is done." The other type of control, *surplus control*, is the control that is specifically born out of the antagonistic relations of production—the class struggle—where use values are produced. It takes the control of the labor process out of the hands workers. Driven by the motive to repress the resistance of the exploited workers, surplus control increases the rate of surplus value through means that allow capitalists "to make work more intense, extensive, and productive than laborers would voluntarily make it."

Richard Edwards (1979:111) offers a similar argument. He claims that the workplace is a "perpetual battleground"—the continuing conflict in the labor process is driven by the class division between workers and capitalists, and expressed in the effort by the latter to "extract the maximum effort from workers [who] necessarily resist their bosses' impositions." But what is especially worth noting from Edwards article is his attempt to expand Braverman's analysis by offering three categories of control under monopoly capitalism, focusing on the organization of work in large corporations in advanced capitalist countries. The first one is *simple control*, which focuses on the direct,

personal control of individual workers by their employers. This type of control is actually no longer the "principal organizing device in today's corporate sector" in advanced capitalist societies, although it may also accompany the execution of the other forms of control. The second one is *technical control*, where "the entire production process of the plant, or large segments of the plant, are based on a technology which paces and directs the labor process." Technical control is not merely simple mechanization or simple machine pacing—but a form of technological evolution that is based on "the inherent class nature of capitalist production" and involves "designing machinery and planning the flow of work to minimize the labor/labor-power problem." The last one is *bureaucratic control*, where workers are governed by "the firm's law"—a rationalized set of rules and criteria determined by the top-echelon management. Through this form of control, the job of an individual worker is defined more by "formalized job descriptions or 'work criteria' attached to the job"—interpreted by their supervisors—"than by specific orders, directions, and whims of the supervisor." Workers are evaluated, namely, disciplined and rewarded, using these criteria (Edwards 1978:115-119).

These three forms of control can be a useful basis in our examination of the organization of work in its more complex forms—including the ones that can be seen from the relationship between core and dependent companies in labor-value chains, which in turn affects labor in the dependent companies, as alluded to by systemic rationalization scholars above. The point is, these types of control illustrate that the labor process continues to be an "arena of class conflict" under monopoly capitalism—and "faced with chronic resistance to their efforts to compel production, employers over the

years have attempted to resolve the matter by reorganizing, indeed revolutionizing, the labor process itself" (Edwards 1978:112).

This, of course, brings us back to Braverman, whose work inspired Edwards's elaboration of the control typology. One of Braverman's most important arguments was in recognizing how the development of monopoly capitalism went simultaneously with the development of "scientific management"—also known as Taylorism, an organization of work based on the study of F.W. Taylor. Also starting during the late 1800s was the development of corporate research laboratories in the United States, with the first research organization "established for the specific purpose of systematic invention [being] set up by Thomas Edison at Menlo Park, New Jersey, in 1876, and the first government laboratories … established by the Department of Agriculture under the Hatch Act of 1887" (Braverman 1998 [1974]:112). This ties monopoly capitalism to scientific management and the scientific-technical revolution that is based on "the systematic use of science for the more rapid transformation of labor power into capital" (Braverman 1998 [1974]:175). As Zimbalist (1979:xiii) writes, Braverman was "concerned with Taylorism as the expression of capitalist management ideology, as well as the reflection of a new division of labor and basic reorganization within the workplace." Zimbalist reminds his readers that, for Braverman, the emphasis was on the idea that "the central lesson of Taylorism is the separation of skill and knowledge from the workers in the production process."

In its development, Tayloristic forms of work became the foundation of the (in)famous assembly lines in factories, a development that took place mostly in the late nineteenth and early twentieth centuries in the United States. This system was often

credited in the country to the system of work organization and technological innovation by Ford Motor Company, the giant corporation that manufactured automobiles—an association that later gave the alias "Fordism" to Tayloristic forms of work. What happened on the Ford shop floor was a prime example of what Braverman was alluding to: the application of the Babbage principle *and* the use of control over workers. In the case of Ford and similar U.S.-based companies (such as General Motors), as David Gartman (1979:196-7) points out, their "innovative" work organization was made possible by technological innovation of "precisely machined and thus interchangeable parts"—a development that was achieved as early as 1908 in the manufacturing industries of farm equipment, fire arms, and sewing machine, but was taken up by Ford Motor at an unprecedented pace and they soon surpassed other firms. In the same work, Gartman (1979:196) details an example of Fordism in his study of the company:

> Skilled assemblers became tied to one spot, and their discretionary time—their wandering about—was cut down. They had to remain busy at their assembly work or suffer the harassment of Ford foremen. The pores of the working day were beginning to fill up, thus intensifying labor. In a further development, stock handlers, who transported the parts for an entire car on a truck, became specialized in handling one part only. Work within assembly gangs was also becoming progressively more divided. There seems to have been a division within the work gang first…then there emerged a specialization between gangs. One group of two to five men handled the attachment of the motor to the frame; other groups specialized in axles, springs, transmissions, etc. The gangs moved from one stationary chassis to the next as they completed their particular jobs. Thus, in the assembly department, the "all-round" mechanic slowly gave way to the specialized worker.

Such "specialized" worker was easily replaced many others from the industrial reserve army, enabling the company to hire low-wage workers and decrease labor costs. This was a significant change from the company's early years, where the labor process at Ford was "largely in the control of skilled workers who generally determined the

intensity and productiveness of work" (Gartman 1979:195). But due to the reorganization of work described above, what was left in the labor process was only a series of fragmented, "specialized," degraded tasks that were meaningless and of no importance when done on its own. This is captured well in the following conversation between a superintendent of an automobile factory in Geneva, Switzerland and his newly hired employee who happened to be an ex-Ford worker. The superintendent just found out that the new employee "did not even know where or how to commence the assembly" (cited from a Federal Trade Commission document in Gartman 1979:203):

> "We thought you were a skilled erector of automobiles."
> "I thought I was," replied the new employee.
> "Where did you work?"
> "At the plant of Ford Motor Co."
> "What did you do?"
> "I screwed on nut No. 58."

Such an understanding and description of the Tayloristic forms of work are of course not news in sociology and other related social sciences. In addition to the studies about this subject in the United States, in the last two decades or so, studies about assembly lines performed in the global South by low-wage workers, mostly women, have also deepened our understanding about the impact of such forms of work on workers and their vulnerable, precarious position—down to the discussion of how such labor process affects their bodies (see e.g., Caraway 2007; Enloe 2004; Fuentes and Ehrenreich 1983; Mills 2003, Ong 1991; Pun 2005; Salzinger 2003). But what Braverman and other Marxist scholars discussed here offer us an understanding of the fundamental mechanisms that underlie working life: the implementation of control over the labor process that gives capital "the ability to increase exploitation and hence surplus value" (Gartman 1979:196).

In the light of the works on the labor process above, through the concept of labor-value chains, we need to rethink the main goal of the implementation of control in such chains: it is not *merely* to increase efficiency and productivity, as capitalists seem to have expressed (and as echoed by many theories of supply chains), but at its core is the extraction of surplus driven by capital accumulation, as reflected in the quest for low unit labor costs by multinationals. This, and some misconceptions perpetuated in the discussion of supply chains—including those that belong to systemic rationalization and flexible production schools—will be briefly examined below.

Straightening the Assumptions

Both systemic rationalization scholars and the "lean and mean production" proponent Bennett Harrison seem to mostly point to heightened competition—both on national and international levels—as the main drive for changes in production, administration, and distribution processes to forms that are deemed more flexible and economical. For Dieter Sauer and his coauthors (1992:46), German sociologists and proponents of systemic rationalization, heightened competition is included with other factors, including increasing market saturation, shorter product life cycles, and "the pressure exerted by rising internal costs." But in general, these scholars often only mention the causes of the emergence of these "new" strategies in passing, driven mostly by the increasing national and global competition. The emphasis was more on the enabler of such strategies, namely, the "availability of computer-aided organization and control technologies in technology markets and the ways they get implemented" (Sauer, et.al. 1992:46).

Similarly, Harrison (1994:126) sees the emergence of production networks as a result of "a veritable sea change in the nature of international economic competition" geared by the declining profits influenced by economic crisis; further, with the development of new technologies onto the factory and office floor, this then created the increase in the number of competing firms both in developed and developing countries. Thus flexible production and the rise of production networks were a response to this growing competition: "Of all the reactions, all the experiments, the most far-reaching may well turn out to be the creation by managers of boundary-spanning networks of firms, linking together big and small companies operating in different industries, regions, and even countries. *This* development—not an explosion of individual entrepreneurship or a proliferation of geographically concentrated industrial districts, per se—is the signal economic experience of our era." In this sense, lean production—that entails the greater use of outsourcing of work to smaller suppliers, or the increase in the employment of contingent, low-wage workers by big corporations—is a form of "experimental reactions by big business to the trauma of the worldwide economic crisis of the 1970s and early 1980s" (Harrison 1994:127).

The fact that the emergence of production networks was a response to such corporate trauma is not much of a debatable subject. Inventing strategies to create more profit and offset loses is probably a "natural" task for corporate management everywhere at anytime, let alone when their losses are large, as in the time of economic crisis. But I argue that this alone is not enough to explain the driving forces that underlie the creation of production networks that are viewed by both Harrison and the German industrial sociologists as a means for giant corporations to sustain and enhance power and

control—not only over workers, but over smaller, dependent companies. It is also necessary to see the larger macro processes that are related to monopoly capitalism, including stagnation.

As we see in Chapter 2, unlike what could happen under competitive capitalism, practices such as price-cutting—where this would seriously endanger profit margins—rarely occur in monopoly capitalism. Instead, price increases occur in tandem, usually under the leadership of the most powerful corporations in the industry. As a result, we are witnessing the "law of rising surplus" under monopoly capitalism (Baran and Sweezy 1966:72).[10] And as discussed above, since its earlier development in the late 1800s, monopoly capitalism has been accompanied by the massive reorganization of work enabled by a systematic application of scientific management and a commodification and appropriation of science and technology. This led to the ability of giant firms to accrue large amount of profits due to the increase in productivity. With the growing concentration (the growth in scale of individual firms) and centralization (as illustrated by phenomena like mergers) of capital under monopoly capitalism, surplus production also keeps growing, and productive capacity becomes larger than the market. This, in turn, contributes to stagnation.

Indeed, as Baran and Sweezy (1966:108) argue, stagnation—marked by "a pattern of slow growth and rising unemployment and excess capacity, with capital formation fluctuating around the level of zero net investment" (Foster 1987:62)—has become "the

[10] Baran and Sweezy (1966:9-10) define surplus as "the difference between what a society produces and the costs of producing it. The size of the surplus is an index of productivity and wealth, of how much freedom a society has to accomplish whatever goals it may set for itself. The composition of the surplus shows how it uses that freedom: how much it invests in expanding its productive capacity, how much it consumes in various forms, how much it wastes and in what ways."

normal state of the monopoly capitalist economy" since it has become its defining, most persistent characteristic. In an oligopolistic system, high productivity and the ban on price-cutting together create such a huge and growing surplus that cannot be absorbed by investment and capitalist consumption. Constrained by capital's "neurosis" towards state intervention in private profit, surplus cannot be absorbed by government civilian spending. This results in the dependence on great waste in areas such as military spending and speculative finance, which function as "external stimulants boosting production"—but stimulants are just drugs: they are "bound to prove inadequate to support the economy over time, since bigger and bigger injections [are] needed just to get it going" (Foster and Magdoff 2009:15).

The financial sector uses a lot of resources, and it "does its part to offset the surplus productivity of modern industry" (Sweezy and Magdoff 1987:102).[11] However, the financial sector does not produce any commodities with significant use value. One main consequence is that the production sector becomes idle—investments hardly flow to the production sector, and demand becomes stagnant. In turn, the cost of production is trimmed, and workers are usually the main victims; their wages are cut or they get laid off. Another consequence is the rise of "speculative psychology" in the financial community, namely, the search for bigger profits through quick, speculative means that result in crises. In the end, we can say that the dominating presence of the financial sphere perpetuates *stagnation* in the sphere of production, and *inflation* in the financial

[11] Sweezy and Magdoff (1987:102-3) claim the following as examples of "real resources": the high consumption by millions of employees in the financial sector—who "consume on the average as much as (and perhaps even more than) employees in the rest of the economy; fancy buildings where financial offices, including banks, are located; and a "very substantial part of the output of the hi-tech industries (computers, communication equipment, etc.)" that goes to this sector.

sector.[12] Overall, this is the situation under monopoly capitalism—where stagnation has become the normal state.

Interestingly, the issue of "secular stagnation" has now occupied the hot seat and been discussed widely by orthodox (neoclassical) economists, especially since it was brought up by Larry Summers in a 2013 IMF meeting—who referred back to the work of Alvin Hansen, a prominent Keynesian in the United States, in the 1930s and 1940s. In a *Foreign Affairs* article, titled "The Age of Secular Stagnation," Summers (2016) continues to write about how the recovery from current crises and recessions, in the U.S. and the world, "has fallen significantly short of predictions" and "far weaker than its predecessors"—this is dangerous and thus, alleviating the pain caused by secular stagnation, Summers argues, is "of profound importance." But sadly, as the editors of *Monthly Review* said in their notes in January 2016, these discussions fail to take into account "the role of Marxian and heterodox thinkers, who have been developing the stagnation thesis in great historical and theoretical detail for more than half a century, building on the debates of the 1930s." This prompted several critical responses from the left, including one from Charles Mudede (2013), who wrote a column for Seattle's weekly *The Stranger*, titled "What If Economists for Once Give Marxists Some Fucking Credit?" There, he criticizes Paul Krugman—who writes about how today's stagnation could be the "new normal"—for ignoring the decades of work "on this very subject by Marxists (most notably the late Paul Sweezy) at the *Monthly Review* since the 1970s."

[12] This is a critique of a position held by many economists, even ones on the left, who often disregard the fundamental logic of financialization. They instead see it as the culprit that causes stagnation, while disregarding the real problem. In this view, phenomena such as wage stagnation and increased income inequality are a result of "changes wrought by financial sector interests" (see Foster and Magdoff 2009:106). The idea can be traced back to Hyman Minsky, who puts financialization in the execution chair and focuses on the financial instability argument.

Not long after Summers delivered the speech at the IMF meeting, Krugman also wrote several essays in the *New York Times*, supporting Summers' argument—in one of them, Krugman (2013) went as far as claiming that not only was Summers right, but that he presented a "radical manifesto." In his recent column entitled "Robber Baron Recessions," writing about Verizon's monopoly power, Krugman (2016) writes: "And Verizon's case isn't unique. In recent years many economists, including people like Larry Summers and [myself], have come to the conclusion that growing monopoly power is a big problem for the U.S. economy." No mention of the decades of work by Marxists on monopoly capitalism and the stagnation thesis. But "ignorance" aside, the fact that stagnation has even entered the mainstream discourse suggests not only the significance of Marxist approaches but also that of the analysis of crises that pays attention to the dynamics of capitalism itself, as offered by overaccumulation theorists and their examination of monopoly capital.

There are several points that can be evaluated here. First, in relation to the claim proposed by systemic rationalization scholars and by Harrison regarding the heightened competition that is said to drive the emergence of production networks or supply chains. The so-called competition is not in the form of what these scholars imply in their discussions: it is not based on a system where everybody—big and small firms in both global North and global South—is engaged in fighting amidst competition. Dependent suppliers in production networks, due to their small size and lack of power, may have to face such a heightened competition to get "high-class" multinational customers, for example, but it is a different story for these very high-class customers themselves. Even though it may be true that the world remains competitive for corporations in some

respects, “the goal is always the creation [or] perpetuation of monopoly power—that is, the power to generate persistent, high, economic profits through a markup on prime production costs” (Foster 2000:7). Systemic rationalization and lean, flexible production are not merely new management strategies to be more economical—just like global labor arbitrage is not only an imperative to search for efficiencies needed for survival. Viewing it within the context of the oligopolistic nature of monopoly capital, it is an attempt to extract surplus from workers in places where they can be superexploited. In the context of global commodity chains, these are mostly workers from the global South.

Second, monopoly (or monopoly-finance) capital’s severe “addiction” to stimulants needed to boost growth is not a mere abstract economic process. To deal with the financial fragility problem, the system always needs “constant new infusions of cash”—but instead of cutting profit, giant corporations obtains this cash from the “working population through drastic increases in exploitation” (Foster and Magdoff 2009:74). And as Sweezy and Magdoff (1987: 103-4) emphasizes, stagnation in the productive sector means, among others, “trimming costs of production (especially by firing workers and cutting wages).” On the global level, global labor arbitrage, through its specific practices such as arm’s length contracting, does precisely that—corporations are cutting their costs at the expense of labor by moving production to places that have the lowest unit labor costs possible.

This also means the idea that the search for greater productivity is the main aim of the creation of production networks, as proposed by systemic rationalization scholars, does not tell the whole story. After the crisis of 1974-75, the mainstream and business media, including the *New York Times* and *Business Week*, blame the slow recovery from

the severe recession on the "supposed slowing down" of labor productivity (defined as the output per man-hour of its workers)—this simply means that rather than focusing on the persistent stagnation and the growing oligopolistic power in the U.S. economy, the representatives of capital think that "workers are simply not producing enough" (Magdoff and Sweezy 1979:1). This supposed drop in U.S. productivity is seen as threatening to the nation's economic growth as well as leading to the danger of increasing inflation and unemployment. But what was addressed by the economists, businessmen, and government officials during that period was not precisely a decline in labor productivity; instead, what was actually being claimed was that "the rate of increase in labor productivity in recent years has not been as large as it was in the early postwar decades" (Magdoff and Sweezy 1979:2). Most importantly, this rhetoric conceals the fact that productivity never stopped increasing. Accompanied by examples from the U.S. automotive industry, in another article published a year later, Magdoff and Sweezy (1980:7) conclude that:

> all this statistical flimflamming has effectively served to conceal the deeper implications of productivity changes in the recent history of capitalism. The truth is that it is the enormous and persistent growth of productivity in the factory and on the farm that has provided a sufficient surplus of goods to support the growth of an expanding and increasingly complex service economy…. And if this very real increase in labor productivity shows up less and less in benefits for the mass of people, the reason is the growing irrationality and wastefulness of monopoly capitalism as it channels more and more labor into activities having to do with the making and spending of profits and less and less into useful pursuits that could serve the needs of the people.

Seen in this light, then, increasing productivity in the era of labor-value chains is not a goal in itself. What global capital is after through global labor arbitrage is, as discussed in Chapter 2, low unit labor costs. And unit labor cost depends not only on

labor productivity but also on wage or the price of labor power (see also Edwards 1978). Yes, the systemic rationalization and the lean, flexible production may provide means to increase productivity—but not forced merely by the development of information technology or to offset a loss experienced by capital in the times of crisis. Instead, labor productivity is "powered by the needs of the capital accumulation process," where means to exploit labor are continuously searched for and applied to production (Braverman 1998[1974]:141].

But that issue aside, the studies of systemic rationalization and flexible production are particularly useful in placing the significant question of control into the realm of production networks, bridging the abstract workings of the world capitalist economy and the concrete processes that happen between firms as well as inside the firms (i.e., labor-management relations and the labor process)—as long as we are able to re-contextualize the issue within the frame of the workings of exploitation and capital accumulation under monopoly capitalism.

In addition, we also need to consider the geographical context of our approach. While the GCC/GVC studies lack the component of power and control, they are usually global in scope—a characteristic lacking in most studies conducted using the systemic rationalization framework, since they usually focus on the European (especially German) industries. The same issue can be applied to Harrison's work, which, although he includes the discussion of Nike's global reach in one of his chapters, still mainly focuses on the forming of networks in the triad and their consequences for U.S. workers and unions. As Devine (1996) points out, "capitalism's globalization pushes us to transcend Harrison's implicit nationalism." The next chapter is an attempt to contribute to this

conversation. By using examples from Indonesia's local companies who are catering to multinational corporations in labor-value chains, I wish to deliver an analysis of such chains by adopting the strengths of the various approaches I have discussed so far.

CHAPTER IV

"WE'RE JUST A SEAMSTRESS":

CASE STUDIES OF TWO INDONESIAN COMPANIES

> I know that the sales department is supposed to service customers, but we also need to educate them, so that our company can run smoothly. This way, it's not always the case when a customer tells us to do A, we do A. If they want B, we give them B. As it is now, we only follow their lead, and because we have a lot of customers, we have to run all over the place.
>
> Star Inc. Executive

> That's why, in management, we can't afford not to be vague. We're not supposed to. We must be strict. If yes, say yes. Be clear…. It's not easy to manage human resource…. We must be careful, if we make a mistake in our decision, that's it. All would go to shambles. Workers would become uncomfortable, and finally, they would reach out to a third party, to a labor union. Then [chaos] would ensue.
>
> Star Inc. Executive

In a 2016 online article written by an Asian Development Bank economist, Indonesia is hailed as a country with "dynamic, youthful labor" that has become "a magnet for foreign investment" and "a driver of economic growth" over the last twenty years (Allen 2016). Indeed, as mentioned in the Introduction, Indonesia has been a "hot bed" for foreign direct investment, with FDI net inflows continuing to increase since the 1970s, and only minor downturns after the 1997 crisis. In addition to FDI, as we saw in Chapter 2, Indonesia holds the third place—"defeated" only by China and India (although the percentage is much lower than these two countries)—in share of all jobs in global supply chains. This suggests that Indonesia has also become a destination for the Low-Cost Country Strategy, or global labor arbitrage, where local companies produce materials or products as suppliers for foreign-based companies, including multinational

corporations. Nike Corporation is an example. It moved its production from South Korea to Indonesia in the 1980s, before it pulled out and moved to China (see Enloe 2004), in its relentless quest to find the lowest unit labor costs.

But the classic example of Indonesian low-wage workers, mostly women, assembling shoes or electronics for multinationals in "sweatshops" located in Export Processing Zones is not the only way that global South countries are incorporated into globalized production. Some variations exist—among them are the two Indonesian companies who are the subjects of case studies here: Java Film and Star Inc.[13] Both are B2B (business-to-business) companies that often refer to themselves as companies that belong to the "capital-intensive" category—as opposed to "labor-intensive" industries such as textiles and electronics, although the number of workers varies according to different segments of their production. Java Film is a plastic manufacturer. Their plastic (film) is usually sold as a material for what is referred to as "flexible packaging" used for a variety of FMCG (fast-moving consumer goods, or also as known as consumer packaged goods) products—from cigarette wrappers to shampoo labels to food packages. Their customers can be (1) the main companies who produce these cigarettes, shampoo, and food varieties—to which they sell the film directly; or (2) companies who serve as converters, i.e., converting companies that put logos, texts, etc. on the plain film and transform them into labels used for packaging. Star Inc. is an example of this latter type. They buy materials from companies like Java Film and print on them for their customers, which belong to the first type of customers of Java Film. Depending on the customers'

[13] These are pseudonyms. See Appendix ("Some Notes on the Methodology for the Case Studies") for more information about the fieldwork.

orders, sometimes the finished goods produced by Star Inc. are in the form of printed plastic film, or packaging "bags," such as standing pouches for cooking oil.

So, it is possible that Java Film and Star Inc. have the same customers, and they often do. Included in their list of customers are several giant multinational corporations. Most of them are based in the triad—the United States, Western Europe, and Japan—to where they export their goods directly (or, in very few cases, to their subsidiaries in neighboring Southeast Asian countries). This portion of their production is a straightforward example of these companies' participation in labor-value chains. They supply to multinational corporations based in the global North by exporting the packaging materials used for the brands owned by these multinationals, to be consumed in the home market.

In addition to that, there are variations in the destination of where their products go once they are finished. The majority of their finished goods (approximately 70 percent for each company) are sent to other factories that process the final products for their customers, also in Indonesia. There, the packaging is filled with the appropriate content until it becomes the final product. There are variations in this portion as well. If the customers are local (some of their customers are big Indonesian conglomerates), the finished packaging is sent to their customers' factories. If the customers are multinationals, it is sent to their subsidiaries in Indonesia. After the packaging is filled with their products, these multinational brands are then exported somewhere else, including to their home market, by these subsidiaries themselves. A large portion of these brands, however, is sold directly to retail within the national market. The executives I interviewed told me that this practice—selling the products where they are produced—is

a common strategy for giant multinational corporations, in an effort to minimize the risks and cut production costs. Obviously, it is a much more cost efficient option compared to producing these products in the countries where the multinationals are located and then exporting them to their markets abroad.

Export orders are deemed important and significant for these two companies. Although the share of exports in their production output is not as large as the domestic component, they assign special managers—whom I also interviewed—to deal with exports. Regardless of this fact, even though Java Film and Star Inc. do not *exclusively* engage in direct exports and their products are also consumed in Indonesia, as we shall see, the main customers who order these products include big multinationals and, due to that, they deal with a lot of issues in relation to flexible production driven by dominant multinational companies—even when the multinationals are represented by their subsidiaries. The operating procedures are the same in their production of packaging for multinationals, whether the goods are for export or for the local market. Their business deal with multinationals is key here, and *it is their relationship with their multinational clients that will be the focus of this chapter*. Regardless of the difference in the final destination of their production output, these companies are still subject to the same processes that characterize systemic rationalization and flexible production. They are third-party subcontractors that supply to multinationals, while they also have their own suppliers—both national- and foreign-based. In this sense, they take the role of dependent companies within labor-value chains.

In this chapter, I use the case studies of these companies to illustrate the processes that occur within these chains. These case studies, of course, are not meant to serve as a

generalization, but rather a complementary analysis that can help provide a concrete picture of what actually happens at factory plants where the commodities are produced. While there are already plenty of academic analyses as well as journalistic reports on how factories in the global South are run and how it affects their workers, through this study, I present the viewpoint of management from the dependent companies to examine their relationship with multinational customers, as well as with their workforce—amidst the processes of systemic rationalization and flexible production that govern this relationship. Their views give us a window into their position within labor-value chains: as a representative of global South capital who, on the one hand, is subordinate to global North-based multinationals but, on the other hand, is exploitative of its own labor.

The discussion is divided into three sections. The first section examines how dominant, multinational companies control the technological knowledge in labor-value chains, depriving the dependent companies of their autonomy. The second section focuses on the issue of flexibility, especially in terms of the specific processes demanded by multinationals from their suppliers, while the third one examines how such processes enable various forms of control over labor and the labor process.

Control of Technology

Technology is a central component of present day labor-value chains. As discussed earlier, the development of technology, particularly information technology, allows production to be done outside the core companies but with control largely remaining held by these core, dominant companies. Both systemic rationalization theories and the discussion of flexible production reject the idea that the supposed decentralized production networks or supply chains offer a more egalitarian environment for small

firms. This, of course, holds true on the global level as well. Examples from Java Film and Star Inc. can illustrate this situation. As dependent suppliers, they lack control of many aspects, as we will see throughout the discussion in this chapter. One of the most important aspects is technology. Seen from a critical lens, even when the companies see technology as their way to excel in their respective industries, their business relationship with their customers, especially multinationals, suggests that, at the end of the day, the control over technology is still held by the latter. Thus, it would be very difficult for dependent companies to have significant autonomy in terms of their technological development and innovation.

Java Film and Star Inc. are not shoes or electronics factories depicted in various studies, journalistic reports, or campaigns about the devastating impact of globalized production on assembly workers, mostly women. Most of their executives differentiated their companies from those in "labor-intensive" industries and emphasized their technological and R&D (Research and Development) components. Inside their factories—except in very few segments of their production sites, where some form of assembly lines still exist (although they are nothing like what one would find in Foxconn plants, for example)—you would only find lines of machines working automatically, with a few workers here and there across the shop floors, and the majority of them are men.[14]

[14] Workers on the shop floor in both companies are mostly men, except in some segments of production where the labor intensity is higher—the "finishing" segment at Java Film and the "bag-making" segment at Star Inc. The latter is particularly filled with women workers. This is a topic that I cannot discuss here—but it is worth noting that this gender composition of workers is based on gendered assumptions that underlie the division of labor. It is in line with the arguments of studies that focus on the gendered international division of labor, where workers in labor-intensive, export-oriented industries are overwhelmingly women due to the stereotypes regarding their "dexterity" and "docility" (see e.g., Fuentes and Ehrenreich 1983, Salzinger 2003). The executives I interviewed told me that the reason behind hiring mostly men was because their companies were considered heavy-industry, where jobs performed required "heavy-duty" tasks in needed of "men's strength." The claimed reason behind the hiring of mostly women in segments like bag-making was also ridden with gender stereotypes, in which women were deemed more "careful"

These machines are operated remotely from a room filled with computers. Of course, labor still holds a major role in these two companies, and as we shall see later, their labor process is subject to control and working conditions can be problematic. But seen from "outside," what comes to mind is the idea of high-tech, modern factories that are neat and clean. One Java Film executive even told me, "I can confidently say, we are the cleanest [factory] in Indonesia already… When our machines suppliers' technicians visited us from Germany, they said, 'Wow, you're really clean.'" At the Star Inc. plant, one can visit their R&D office and would find a modern laboratory equipped with high-tech tools.

The point here is not only that these factories can be considered exceptional in terms of their cleanliness—these two factories produce plain film or packaging materials for a lot of food companies, so it follows that hygiene is an important factor—but also that their top management claims that their companies excel in technology and R&D. In fact, both Java Film and Star Inc. see themselves as players in the niche market of their respective industries—a specialty that focuses on "high-end," "high-margin" products. In the case of Java Film, this means that, with very few exceptions (in cases where they produce low-end products "just to keep the relationship going with certain customers"), they do not produce what they call "commodity products" like plastic bags. They only produce specialized products, like plain plastic film that serves as material for cigarette packages or food products (such as snacks or tea boxes), or laminating material for magazine covers or smart phone boxes. These products are considered high-end due to at

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and able to "pay attention to details." These qualities were considered important by my interviewees because in the bag-making segment, workers have to work really carefully to avoid mistakes and minimize the risk of having the products returned by customers. Also, they had to pay attention to small things, such as making sure that there were no little bugs like mosquitos trapped in the bags they make. If there were even one mosquito stuck in one bag, the *whole* batch of products would be returned—creating a big loss in the form of waste.

least two reasons, according to the Java Film executives: either (1) their specifications cannot be easily produced by just any plastic company, or (2) even though the specifications are not that special, the products are designed specifically to fit well with their customers' machines. For Star Inc., "high-end" (or "middle-high") products are related to the complexities of the product materials. For example, packaging that is made out of aluminum foil—a material that apparently is difficult to handle.

For both of these companies, focusing their production on such high-end products is above all a strategy to survive the competition within their respective industries, by reducing the scope of their competition. Java Film executives often expressed their inability to compete with Chinese and Indian plastic manufacturers due to their scale. As one of them said, "A lot of the big Indian and Chinese manufacturers that are our competitors, they have a lot of lines, like 15, 16 machines, big ones. But they sell very basic film, like plastic bags….We don't compete on that. We try to have our own niche market. So niche market means…price is stable, doesn't fluctuate much. That's the kind of market we want." The case is similar for Star Inc., who "prefers" to compete with a few of the established converting companies who also produce middle-high products instead of competing with a bunch of other companies, big and small, who still produce low-end products such as candy wrappers. With this, Star Inc. does not have to worry about the emergence of many new smaller-size converting plants, since they do not consider them as threatening competitors.

When I talked to the executives in both companies, "innovation" seemed to be the buzzword. Because they played in the niche market, they told me, innovation and research became their focus. Some executives would say that "innovation is key," and

their emphasis on product diversification, where they produce various specialty film (for Java Film) or packaging materials (for Star Inc.), follows from this idea. Again, with the aim of reducing competition, a Java Film executive argued that they had to "make use of the technology and product development techniques" that they currently had so that they did not have to face competition from the big plastic manufacturers with giant plants. This notion was also entertained at Star Inc. as well. One executive expressed this in terms of being a leader in the converting industry: "We used to be a follower, but now we want to be a leader. That's why we must look for new innovations—new technology, the latest innovations, and top-of-the-line machinery." Some seemed more optimistic than others about this issue, but there was a consensus among the executives at the two companies that they were at least "forced" to be more "technology-minded" than other similar companies because they were playing in the niche market.

On the surface, this situation seems to correspond with the "thriving of small firms" idea that Harrison (1994) rejects: smaller size firms like Java Film and Star Inc. could excel because they focus on the niche market centered on technological development. But once we dig deeper, things are not as they seem to be. As I elaborated further on the issue of technology and R&D, it became clear that the executives themselves were aware that they had very limited autonomy and control in technology, among other problems. There are of course some kinds of "innovative" application of technology in both companies. At Star Inc., for example, they try to apply the most efficient printing techniques that in general create better results for their products. But the technology itself came from other more developed companies in the industries, often from core capitalist countries—which was then learned and adopted by Star Inc.

technicians. At Java Film, they try to excel, for example, in their choosing of the perfect materials, including in terms of using better additives (materials that are not the main raw materials such as resin) that can increase the quality of their products. They also made small "innovations" such as creating materials for window envelopes that do not require adhesives.

But most of the time, for these two companies, what is considered "innovation" is often nothing more than meeting a customer's need, namely, finding a product mix that is suitable for what is asked by the customer. For example, a packaging product that is designated for liquid shampoo whose shelf life is five years is different than a packaging product that is designated for a food product whose shelf life is only six months. In addition, they need to think about the climate—what kind of material that is suitable for storing goods in a humid Indonesian climate, or that is suitable for the climate of the countries they ship their goods to, in the case of exports. At Star Inc., for example, they often have to "develop" (read: copy) a material composition that is new to them in order to correctly cater to the specification given by a customer. They have to test this new product in their laboratory and everything else before giving it to the customer to test it in their machines. For example, not long before the interviews, Star Inc. had to "develop" a packaging for cooking oil that had to pass the drop test of two meters. They had to find the optimal composition for this packaging, based on specifications given by their customer—how many microns should be applied for the thickness, and what is the ratio of the raw materials (how much nylon and how much low-density polyethylene should be used)? These are common practices at Star Inc.

Sometimes, there is room for "suggestions," where Java Film and Star Inc.'s R&D departments would suggest several product developments to their customers. One interesting example is the use of oxo-biodegradable materials. Java Film was able to adopt this technology from outside and then suggested it to some multinational customers that produced packaged snacks such as potato chips—whose packaging was not yet biodegradable. The customers refused the suggestion, citing that the price was too high, as well as the lack of guarantee of safe storage practices. As told by a Java Film executive: "Customers don't want to pay a higher price for that one. And then the storage condition, Indonesia is quite different. Direct exposure to sunlight. When you have a biodegradable film, it will deteriorate after some [exposure] to sunlight and oxygen. So it's difficult, since the supply chain management in Indonesia is still chaotic."

Customers often do, however, ask for "suggestions" when it comes to cost reduction. Multinational customers are good at this. And sometimes this phenomenon is conflated with the idea of "innovation"—perhaps influenced by the rhetoric of the customers themselves, in which they push their dependent suppliers to "innovate" to accommodate their need to cut costs. One common request from multinationals is for Java Film and Star Inc. to provide materials that are as thin as possible that can still work for their specifications and do not reduce their quality by much. An example was given by a member of Star Inc. marketing team: "[a Europe-based multinational customer] is very eager to ask us to innovate—what kinds of cost cutting can you give us? Every year they invite us to attend their [innovation seminar]. We have to come up with ideas, to contribute to the development of product specifications, either ones that are initiated by

them or by us. [We have to tell them] oh, we have a new machine now, we can do this or that now. They suggest that we update them every three months."

For the executives of dependent suppliers whose companies lack control of technology, sometimes this "order" to "innovate" is translated into an opportunity to learn. What is important, in their minds, is that their companies have access to the know-hows of multinationals and use them to their own advantage. This was illustrated in this example about yet another Europe-based multinational customer of Star Inc. It is common for multinational customers to ask Java Film and Star Inc. to reduce the thickness of their materials—such as by reducing the microns or the layers—in a quest for cost reduction:

> They told us to come and meet them. They said, "We want to make this packaging product." Let's say, it used to be 12 microns [in thickness], now they wanted it to be 8 microns only. And then, they asked us to share, "How much can you save? How much savings can you offer if you used such-and-such materials?" It was to the point that they called the supplier of that 8-microns material to come meet us so that Star Inc. could buy from them. If then our factory produces too much waste, they would tell us to come again. They demanded that we fix the problem…. But packaging like that, there's a lot of development surrounding it. That's why, actually, one of the benefits of having multinationals as customers is that they always create trends, they have innovations. And since we are already their preferred supplier, we will be the one who will be given the opportunity, before others, to [learn from them]. We must grab this opportunity.

This "encouragement" to "innovate" from customers like this often creates conflicts and misunderstanding within Java Film and Star Inc. management. When marketing relays such a message to the R&D team, the former expects the latter to engage in groundbreaking innovation. As expressed by another executive at Star Inc.: "This is where the marketing team misunderstands. They demand that our R&D develop a material that is, say, better than that of our competitors. That's difficult for us. We do

not have the facility to manipulate materials. What we can do is merely changing one material with another—from another supplier, I mean." But even plastic manufacturers like Java Film have very limited abilities to innovate groundbreaking materials. They, too, just like Star Inc., are occupied by the demands given by their own customers, especially multinational ones. A Java Film executive told me, "[multinationals] often request to us, 'Can you make this and that?'…. Well, they have better technology, so what they already know, we don't, that's why they give us a lot of requests. For the local customers, it's the other way around… we can say to them, 'Why don't we change it this way, isn't it better?'"

Multinationals may well be a "role model" for dependent suppliers who can only wish that they could achieve such status, especially in terms of research and development. Even when people from the R&D or production departments are willing to engage in efforts to contribute to meaningful innovations, their attempts are often halted by the executives from other departments—especially those who focus on the flexibility of the company, such as the marketing or finance departments. As a Star Inc. executive said, it is actually possible to make an effort, "but the problem is, are we willing to spend the money? Research needs funding…. If we look at multinationals, they always have a budget for their R&D, and it's huge." Another Star Inc. executive concludes, at least for a while, their company "would still be a follower," because the technology they have, "it all came from outside!" The best thing they can do, according to another Star Inc. executive, is to copy this technology: "The knowledge is there, it's being shared. You cannot say that you can build your own without the help of the U.S. or [Europe], because basically they are everywhere now. They can develop the technology, but you can buy

this technology. This is what China has been doing. They developed it, China copied it…. So it's up to us to grab those resources and make use of them."

Such a cheery tone, however, hides an important concern by many of the executives: a fear that they are really dependent on the dominant companies that feed them. Although not everyone shared this feeling, there was a term that was well-known among the executives I interviewed: *seamstress*. There were conversations going on among them that expressed the fear that they were merely tailoring in accordance with specifications given by their customers without having any significant agency or autonomy. The relationship between them and their multinational costumers in particular is clearly not equal. This was expressed succinctly by one of Star Inc. executives: "The way I see it, as a converting company, when we deal with multinationals, it feels that we're just a seamstress. That's what we are." In Indonesian, the word "seamstress" (*tukang jahit*) denotes a person who accepts various orders from people at his or her house or little shop. Unlike a distinguished, skilled tailor, a seamstress often accepts menial jobs such as fixing pants that are too big, sewing buttons to a shirt, etc. This is how they see themselves as companies. They have to accept any orders from powerful customers who dictate to them what to do in the process.

All of the examples above illustrate the fate of dependent companies. As downstream suppliers of dominant companies—often multinationals—they do not have the capacity to engage in meaningful innovations that can allow them to "catch up" in the intricate web of labor-value chains. The knowledge, the know-how, is tightly controlled by dominant companies through various means, including steering the way research and development is done within dependent firms. The dream of Java Film and Star Inc. to

become leaders may well remain a dream. The technology they have is mostly technology given to them by their customers—the introduction to new materials for certain product specifications; the application of certain processes in accordance with customers' needs; the manipulation of product mixes to accommodate cost reduction imperatives of their customers; and so on. Core multinational companies—with their top-notch facilities and first-hand access to innovative technologies in their first-world headquarters—are most likely to remain at the top of the hierarchies. Their "global reach"—borrowing the term used by radical scholars Richard Barnet and Ronald Müller (1974)—enables them to also control where their technological knowledge goes and how it should be applied. As expressed by a Star Inc. executive: "Multinationals usually are ahead in terms of technology because they are world-wide in scope. What the world is doing, they would be the first at the scene to understand it, compared to [us] local companies. That's the difference. Their technology is much advanced. But that forces us to keep improving our own technology, our R&D."

The problem is, as implied above, such efforts by dependent suppliers to improve their technological knowledge or autonomy is often aborted by the constant demands of multinational customers to do things in ways that cater to their needs, and only to their needs. Systemic rationalization has allowed dominant companies to transfer their responsibilities in most aspects of production to their dependent suppliers. In terms of technology, as we saw above, the imperative to cut costs is given to their suppliers through various requests. But as we shall see below, technology is not the only means in which dominant companies try to sustain and enhance control in labor-value chains. Flexible production has given birth to a myriad of "rational mechanisms" that

systematically allow dominant companies to govern these chains. These companies are not merely a seamstress in the sense of their lack of control of technology, but also in other areas.

Demanded Flexibility

Indonesia: Where Production Happens and the Market Is Targeted

Flexibility is one of the major characteristics in today's labor-value chains. And one form of flexibility, as Harrison (1994) points out, is functional flexibility, where dominant companies within the chains adopt new technologies and other means that allow them to engage in rapid product design or changes in the instruments of production. This "necessity" to engage in flexible production is often driven by the "fluctuating and changing" demands of the market (Altmann and Deiß 1998:140). In the context of monopoly capitalism, such "demands" drive oligopolistic dominant companies, such as Europe or U.S.-based multinationals, to compete among each other in product innovations and marketing strategies aimed at capturing increased market share.

In some cases, the targeted market is the one in which production occurs. Nike, for example, not only relocated their production to China, but it also took advantage of the market potential of the most populated country in the world. As Walter LaFeber (1999:107) writes: "For if cheap labor provided large profit margins, 1.5 billion Chinese consumers could provide net profits beyond imagination." Indonesia—the fourth most populated country with more than 250 million people and growing—is another case of this. Not only is their workforce targeted, but through their subsidiaries in Indonesia, multinationals compete against each other to capture this targeted market. Expressed

through the views of Java Film and Star Inc. executives based on the orders that came from customers, the market situation seems quite optimistic for the flexible packaging business. Many of my interviewees cited a high growth in packaged goods consumption in Indonesia as a reason for the booming of their current business and their optimism for the near future. One Java Film executive that holds a high position in the management hierarchy expressed this clearly—citing information gained from a Europe-based giant multinational client with hundreds of brands around the world, he said: "I think, you know, this country [Indonesia] is booming. At a ridiculous rate. FMCG growth, [our multinational customer] told me, it's 30% year to year. From the past three years to the next ten years, it's crazy you know, 30%." The same interviewee also cited the increased capacity of their top local conglomerate customer as a positive indicator that business is doing well.

When I later interviewed management executives of Star Inc. in 2015, the market story was not quite as optimistic, with some personnel citing a slowdown in demand in the Indonesian market in the last six months (see *Tempo* 2015)—quite a strange anomaly, according to them, and it happened across industries, including automobile, textile, and FMCG industries—a pattern that affected their customers as well. One executive argued that it was largely influenced by the devaluation of the Indonesian rupiah. What they did not cite is the fact that Indonesia's economic growth as a whole has, in fact, as shown in an OECD (2015:2) report in the same year, "moderated in recent years, reflecting weaker international demand and slow investment growth" (see also BBC Indonesia 2014). Most importantly, average wage growth "has been slow," as an Asian Development Bank review (in Allen 2016) shows, "rising at less than 2 percent a year in real terms over the

last five years." Not to mention the annual per capital income of merely US $9,300 in purchasing power parity terms, and a rising Gini coefficient in the last decade (OECD 2015).

But this bad news on the macro level did not seem to significantly affect Star Inc. The factors that influence it may vary, including a big strike that occurred at their main competitor's plant—forcing these competitor's customers to go to Star Inc. instead. Or, as one executive who knows the company's financial situation well stated, Star Inc. is "not widely affected" by slowdowns because of their customers profile: "Our top twenty customers are at the top in their business. These customers, most of their products are the top brands in Indonesia." Although it's not clear if the same characteristics can be applied to Java Film, the fact that some of the company's major customers are cigarette companies—both local and multinational companies that cater to both local and foreign markets, including one of the biggest player in the industry, a leading U.S.-based cigarette company who, in the last decade or so has acquired one of the major Indonesian cigarette companies—means that a small slowdown in growth in other products can be somewhat offset by relatively stable demand for cigarettes, according to one Java Film executive who constantly monitored the Purchasing Managers Index.

This "faith" in the promising pattern of FMCG growth rate was also cited as the reason for the companies' expansion. During my interviews, both Java Film and Star Inc. were undergoing expansion—while Java Film was adding a production line in their factory, Star Inc. was building an additional factory complex altogether. As expressed by another Java Film executive: "Why do we expand? Because there are needs to do so. Of course, before the expansion, our marketing team has researched it. They saw that the

converting industry, the packaged food industry—their growth has never slowed down. Just look at [one of our top local customers], we can monitor them. Every time they added their machines, we knew. [These big customers] alone have taken a lot of our [production] capacity… If their capacity increased, of course we need to increase ours as well."

Java Film is not the only firm within the supply chain that studies its market. What is more interesting is how the dominant companies at the end of the chains, such as multinationals, study their targeted markets like Indonesia. Companies that sell daily care products such as soap or shampoo, for example, or that sell food such as coffee or snacks, adjust the size and packaging of their products in accordance to market preferences. This knowledge seems to be well-known across management teams at Star Inc. They told me that that a large segment of Indonesian consumers show a pattern of "unique" behaviors—one particular characteristic, according to some of my interviewees, is that their lower purchasing power leads to needing to buy in small quantities. As a Star Inc. executive puts it:

> Indonesia is still relatively poor. So, in the advanced countries, it is probably difficult to find shampoo packaged in small sachet bags. You cannot buy one sachet of shampoo, or a sachet of seasoning for cooking. They prefer buying in bottles, which are actually cheaper [considering what you get for the price]. I can use the whole bottle of shampoo for a month. But here, buying in bottles is often considered too expensive. So they buy only one sachet. It is actually in the end more expensive, but since they have limited amount of money to spend, they can only buy it that way. Who is benefitting from this behavior? Well, indirectly, packaging suppliers like us.

Whether or not the success of these kinds of small packaging in Indonesia is indeed caused by socioeconomic status of Indonesian consumers, the above quote implies that this kind of flexibility in product design was sought after by dominant companies

because selling products in small packages is deemed more profitable (at the expense of customers because they are more costly). So at the end of the day, such buying behaviors are indeed beneficial for suppliers like Star Inc. who, due to that, experience an increase in orders from dominant companies—local and multinational—who compete to capture the market with such distinctive characteristics. As a result, not only do dominant companies produce hundreds of brands, but also various varieties within the same brand. In Indonesia, you can have many types of SKU (Stock Keeping Unit) of, say, a particular anti-dandruff shampoo brand. The bottles will be mostly sold in the grocery stores, but the sachets will be sold in *warung*, or tiny stores in the neighborhoods that sell everything from salt and sugar to daily care products.

The question is how this "good for business" strategy is actually implemented in labor-value chains, and what the consequences are for companies like Star Inc. to be the executor of such production processes. As suggested by its scholars, systemic rationalization enables dominant companies to shift the dynamic demands of the markets "in a flexible manner and within increasingly tighter schedules to the dependent companies and segments of the production chain" (Altmann and Deiß 1998:140). In other words, the responsibility to engage in such flexible processes is transferred to the suppliers (see Sauer, et.al. 1992)—namely, the dependent companies in the global South, like Java Film or Star Inc. As we will see in the next sections, not only does such rationalization affect the organization of work within dependent firms—including problems created by their "flexible approach" in production processes—but also the labor process that is embedded in this organization of work.

"We Offer Higher Flexibility": What Dependent Suppliers Must Do to Survive

One of the main points that Java Film sells to their customers is that they always aim to provide quality products and excellent service to meet customers' needs. They call this "market oriented." This idea of being "market oriented" has aspects of flexible production—including the company's willingness to engage in "flexible approaches" in dealing with customers' demands. At Star Inc., flexibility is even more pronounced. It is indeed one of the main selling points they offer to their customers. All of the Star Inc. executives I interviewed were fully rehearsed in this understanding, and the idea of flexibility seemed to govern their organization of work as a whole.

Flexibility can mean several things for these companies, but some of its common aspects include the ability to deliver on demands and to anticipate a certain amount of increase or decrease in shipping, as well as a willingness to accept rush orders. A Star Inc. executive who often deals directly with customers told me: "For example, the regular lead time is 30 days. So, after we receive our purchasing order, say, today, we will deliver the goods 30 days from now. But for certain cases, we can help make it faster, less than 30 days." This often means that the production team needs to halt whatever projects they are doing on some of their machines and change the settings to accommodate the new order. After this rush order is done, they need to go back and continue the disrupted process. All of these aspects will be discussed in the next subsection.

What needs to be noted here is the fact that flexibility seems to be a "strategy" undertaken by Java Film and Star Inc. to survive amidst competition from both other converting companies in Indonesia and those located in neighboring countries. Sometimes the competition is about who can offer lower prices, especially from other

countries—but companies like Star Inc. seem to worry more about competing with strong competitors on the national level, because they target the same big customers. Especially with their claimed focus on playing within the niche market by producing high-end products, Star Inc. worries more about the competitors in the same league who can offer good quality products. One of them is an established multinational in the converting industry, Sun Printing (also a pseudonym). Once a "role model" to follow, Sun Printing has now become more of a rival of almost equal quality, according to Star Inc. executives I interviewed. In the converting industry, it is a common practice that flexible packaging companies like Star Inc. do not serve as single suppliers to their customers. Customers prefer having multiple ones, in particular for safety reasons, in case one of their suppliers cannot deliver their shipment on time. But competition among dependent suppliers is still present and alive, especially in terms of being able to take the lion share of customers' orders.

Sun Printing is well known for its exceptional quality, but they are also infamous among their customers, according to the Star Inc. executives, for their rigidity. Due to their established system of production, Sun Printing requires all customers to follow their rules. For example, there is no exception to the delivery time—everything has to be done in accordance to their Standard Operating Procedure (SOP). The Star Inc. executives I interviewed seemed to agree on one thing: that Sun Printing could survive with such a rigid system because they are a big multinational that already has bargaining power and a strong basis of customers, many of whom being from the same country in which this company is based. Star Inc. would not be able to experience the same fate, according to its executives, even when the quality of their products are now up to par with that of Sun

Printing. Star Inc. has no choice other than to offer flexibility. As voiced by one executive: "[Flexibility] cannot be eliminated. I don't think so. If we want to grow big, considering the scale that we're in now, we do need to sell flexibility. That's a challenge." Another executive emphasized the competition aspect: "We are trying to be a 'strategic supplier,' one who can be relied on by our customers. Flexibility leads us to opportunities, so that what can't be gained by our competitors can be our gain.... Whatever our competitors cannot supply due to unreasonable time constraints, we must be able to take over."

Similar reasons were given by the executives at Java Film. One of their biggest national competitors, Techno Plastic (also a pseudonym) is not as flexible as them. If customers ask for a rush delivery, or faster than what was originally agreed upon, Java Film is willing to accommodate it. "We are market-oriented," said one of the executives. "We are flexible in meeting our customers' needs. Meaning, if they want us to deliver the product faster, we can do that, as long as they inform us in advance. Techno Plastic, not so much. Because to accommodate such changes, the machine settings need to be reset, and they're not willing to do that. At Java Film, we can manage such a thing. That's why we're great. Or so I heard."

This strategy to open up opportunities, however, is not applicable to every single customer. I later learned that the more "high-class" the customer is, the more flexible these companies can be. There is a consensus among executives, both at Java Film and at Star Inc., that high-class customers consist of basically two groups: (1) big local conglomerates who are leaders in their markets, and (2) multinational companies. Each group has its own benefits for these companies—the former may be higher in numbers

than the latter, but multinationals give orders in big volumes. In addition, the owners of some companies that belong to the first group are friends with the owners of Java Film and Star Inc., and that automatically gives them some privileges. But in one way or another, these two groups are considered high-class because they offer mainly these factors: high profit margins and stable volumes.

What is interesting is that, even though both are considered high-class, the way business is done with the privileged local customers is not the same as with the multinationals. This is where the characteristics of labor-value chains can be seen clearly. While giant local customers may have more leeway, say, in getting a rush order done due to their owners' personal connection to the bosses at Java Film or Star Inc., or solely because they have established a good relationship with the company due to their stable flows of repeat orders, the way multinationals exert control and push for flexibility are done through systemic rationalization. In this context, the power relations are clearly unequal—the processes involved in systemic rationalization, as we shall see in the next subsection, are reflected through the ability of multinationals to exert control over their dependent suppliers. And hardly any executives expressed eagerness in dealing with multinationals. On the contrary, many of the interviewees expressed their preference to deal with local customers instead of multinationals. The question is, then, what is the most irresistible benefit of having multinationals as customers—other than big volumes that some executives cited as one of the main reasons why multinationals are considered as desired customers?

One answer is, of course, the more high-class customers you get, the better. But behind this obvious reason is another factor that may be a little bit subtle: multinationals,

according to these executives, are an important source of some kind of a "guarantee seal." Once you can gain a trust of a (giant) multinational company with worldwide operations and engage in business with them, you will gain a name in the industry. A Java Film executive called this "brand equity"—he said, "Let's say, I supply to this customer A, which is a well known [multinational]. And we can take that as brand equity as well. Then we can take it as a referral: We have supplied to customer A." Another Java Film executive gave a specific example about how difficult it was to win the heart of a leading U.S.-based cigarette multinational company in an effort to be their supplier—an effort that was worth it in the end since the multinational had since become their regular customer: "It was not easy to get them, two years. Tests, trials, all of that, almost two years. But once we got in, [we're set], because they do not easily change their supplier…. I heard from people at the marketing department that if our film is bad, [their production] would automatically be [disrupted]. I heard that [the machines in their cigarette factory] could wrap 600 packs of cigarettes in one minute. It means 10 packs in one second. Can you imagine the speed? If our film is bad, I'm sure all those cigarettes would become waste." The point here is that the cigarette multinational company would not risk changing their supplier if they were not sure about the quality of the film, along with its technical compatibility with their machines.

It seems that these executives took the benefit of having multinational customers seriously, and they believed that it had been proven to help boost their companies' business, especially in eliminating competitors and gaining stability in incoming orders. This view was expressed clearly by a Star Inc. executive, who also stated that the top twenty customers of Star Inc. are "probably the market leaders in their field":

> So, like last month, when we had a meeting with our creditors, I asked, "How are our competitors doing, and how do you compare us with our competitors, considering the economy slowdowns and the depreciation of the USD?" And they said, "You are different. We cannot compare you with your competitors." I asked, "Why?" "It's because of your customers profile." So, if you see like [the Europe-based giant multinational]—even though we have a slowdown, they continue doing their expansion. They have a budget of more than 8 trillion rupiah [approximately US$ 600 million] for 2010-15, and they haven't stopped doing this expansion. They have several factories in different areas in Indonesia, and [this multinational] is the #1 customer of Star Inc.

This prestige, however, comes with a high price. Many kinds of this "payment" can be seen throughout our discussion in this chapter—namely, through various demands that Java Film and Star Inc. have to meet in order to please their big multinational customers. Some executives were being "honest" and said that they would otherwise prefer local customers because often, their price is actually better. This is partly influenced by a form of bureaucratic control exercised in systemic rationalization processes called an open-cost system. It is common for multinationals to demand their potential suppliers to reveal their cost structure openly to them—often as a requirement for participating in a bid for orders. This enables multinationals to have access to the detailed structure of their potential suppliers' costs (including material costs, labor costs, compression costs, and expected profit). Sometimes "advertised" as a practice that can reinforce a clean and transparent business, this system allows multinationals to evaluate the costs according to their own price benchmark and control their suppliers' costs to reduce their own (see Altmann and Deiß 1998).

It is also not uncommon for them to apply an international benchmark for the price, as told by one Java Film executive: "Mostly a multinational would squeeze your price until the end. Because they have the bargaining power, you know. They have [the

information on] global purchasing and procurement, so they know which areas give them the best [price]. With that, then they know how to apply a benchmark…. So they will use the [lower] Indian price as a benchmark to get the [higher] Indonesian quality, for instance, or Chinese price to get our service." This can create challenges for the two companies, especially when they are pitted against competitors from the neighboring countries that can offer a much lower price. Even competition within the niche market itself can still be alarming at times. For Java Film, Thailand plastic manufacturers are tough competitors, while for Star Inc., it is the Malaysian companies: "Many of my customers import from Malaysia. And their price is indeed good. I don't know how they do it, to be honest. Their price doesn't even cover our total cost!"

Even the suppliers' profit margins are controlled. As a Star Inc. executive reveals, "So [these multinationals] just say, 'OK, your overhead costs should be this much, X percent. And this X percent should already contain your profit.' Yes, they can even go that far!...We can't fool them, say, oh, this material, for example, costs 20 cents, while it's actually 10. They would tell us to change our cost structure. How do they know? They compare it to the other suppliers' costs. That's how cunning they are!" As another Star Inc. executive puts it, "If they only gave you a 20 percent margin, well, that's how much you get: 20 percent." If multinationals feel like some costs, say, raw material costs, in the list are too high, they will, in the words of yet another Star Inc. executive, "help their suppliers improve," by suggesting "how to reduce our material costs." This may include technical suggestions about how to reduce waste, or suggestions about where to buy the materials—a suggestion that is often difficult to follow because Star Inc. already has regular suppliers.

There are also times when the kind of control exerted by multinationals is reduced to its simplest form. Highlighting the unequal bargaining power between them, a Star Inc. executive who deals a lot with customers explains how (local subsidiaries of) big multinationals often offer business opportunities accompanied by threats:

> They always threaten us, "Can you help us or not? If you can't [fulfill these demands], we'll go to someone else. And once we've done it, don't you dare beg us for orders!" I've been treated that way by them. Another time, they told me to come and challenged me, "You want this order? Two weeks completion—can you do that?" I said, "We can't, 'Maam." She was mad, saying, "I gave you the opportunity and you refused!"… Well, that's multinational for ya. If you take their offer, that's it, you have to serve them 'till death, and sacrifice your other customers… All their demands, we have to meet them. They act as if they're kings!

Precisely because multinationals are aware of the prestige gained by their suppliers when working with them, they play the game really well. They know that many will "line up" to get orders from them. On the contrary, suppliers like Java Film and Star Inc. have to abide by an unwritten rule that they cannot work with oligopolistic multinationals that are the competitors of their (also) oligopolistic multinational customers. One of Star Inc. customers is one of such multinationals. During my visit there, their toughest competitor, another multinational that was also a market leader, started to "knock on their door" for a business deal. But Star Inc. was hesitant to accept the offer, claiming that they "had to be careful" about it, since they feared the wrath of their current customer, whose share in their production output is too big to risk.

When I asked a Java Film executive who also expressed her concern about the pressure to succumb to their multinational customers' demands, why their company continued to succumb, she responded with a laugh, followed by a short answer: "Because the big fish always eats the small ones." On many occasions, this feast is hidden behind a

series of demands and rationalization processes that dependent suppliers like Star Inc. have to comply with in order to survive the competition on the "small fish" level. The next subsection will further elaborate these control mechanisms within labor-value chains.

Just In Time Delivery and Other Problems

In the previous chapter, I have addressed several means in which dominant firms control the dependent ones, including their suppliers—made possible by development in information technologies. Among them are delivery on demand systems, which is often referred to as the JIT (just in time) delivery system. Systemic rationalization processes also enable dominant companies to demand other aspects of flexible production, especially in terms of functional flexibility, including increased speed in the completion of purchase orders, an ability to accommodate rapid changes in product designs and varieties, and other aspects.

Although both local and multinational customers can demand these things from Java Film and Star Inc., examples given by their executives when it comes to this subject revolve around their multinational customers. Given the emphasis made by them above regarding the importance of multinationals for their business and their prestige, it is possible that they are more willing to accept such demands from their multinational customers. But the more probable reason is the fact that, unlike the more traditional relationship between these companies with their local customers, their relationship with multinational customers are more regulated through systemic rationalization—where practices like JIT delivery are integral to their business processes. Sometimes this understanding is expressed in more simple terms, where many executives see

multinationals as "very demanding" customers, if compared to their local counterparts. And the demand for flexible delivery takes a large share of their concern.

Delivery on demand systems or JIT is one of the core practices in lean production, and it is often associated with the Japanese management "mantra," *kaizen*, which can roughly be translated as "continuous improvement." The JIT system was originally developed by Toyota Motor Company, and thus is often referred to as the Toyota Production System. According to Japanese management guru Masaaki Imai (1997:xxv)—who popularized the term *kaizen* in management and wrote two books on the subject, *Kaizen* and *Gemba Kaizen*, as well as founded the Kaizen Institute—JIT is "a system designed to achieve the best possible quality, cost, and delivery of products and services by eliminating all kinds of *muda* [waste; non-value adding activities] in a company's internal processes and deliver products just-in-time to meet customers' requirements." Further, Imai (1997:8-9) states, JIT aims to achieve a "lean production system flexible enough to accommodate fluctuations in customer needs…. JIT dramatically reduces cost, delivers the product in time, and greatly enhances company profits."

Another way to put it, JIT is a way for dominant companies to put pressure on and transfer responsibility to dependent companies through a series of "just in time" delivery demands. It is an inventory strategy—as the online Investopedia website blatantly puts it—that "companies employ to increase efficiency and decrease waste by receiving goods only as they are needed in the production process, thereby reducing inventory costs. This method requires producers to forecast demand accurately." This often means that dependent suppliers, for example, must deal with the inventory problems, often resulting from missed forecasts, which their multinational customers try to avoid for themselves by

implementing this system. From the viewpoint of systemic rationalization theories, systems such as JIT "impact the working situations in upstream and downstream companies. In these areas hectic everyday manufacturing operations offer neither scope nor capacity to deal with such additional demands. In many instances this results in a considerable intensification of work and a concurrent extension of working hours" (Altmann and Deiß 1998:148). Concrete examples of this can be found at Java Film and Star Inc.

Forecasts are tricky to begin with, especially when dealing with FMCG (which, true to its name, involves "fast-moving" goods) and markets like Indonesia, according to my interviewees. A Java Film executive addressed this specific issue as one of the most difficult challenges in his company: "The biggest challenge, Indonesia, for me, is forecasting. We manufacture plastic. So I sell a lot of food packaging, liquid shampoo packaging. The tough part is getting forecasts. A lot of goods are sold on the street, on bicycles. Not like in the U.S., you can't actually ask your distributors to give you accurate figures of sales and so on. So we deal with fluctuations…meaning that today, this customer can have no order, tomorrow ten tons, and the next day a hundred tons."

But the problems created by the JIT delivery system are not always created by missed forecasts. Sometimes, delivery on demands is done solely to help dominant companies save inventory costs. This was expressed by another Java Film executive, who explained that they had to accommodate customers' demand of flexible delivery because many companies already adopted this system in order to "save as much inventory cost as possible." He continued: "So, some customers would say, 'OK, I'll order 200 tons from you, but I need you to ship it to me every other day.' We try to meet such needs."

The request is not always that simple, however, and Star Inc. knows this very well. Often, the JIT system is indeed set to transfer responsibilities of dealing with the consequence of missed forecasts to dependent companies.

The issues include how the management of Star Inc. has to deal with the "buffering" problem. Due to the delivery on demand procedure, suppliers like Star Inc. have to implement a buffering policy—which means that they have to get their finished goods ready and store them in their warehouses, to be sent only when their customers need them. Not only do these goods have to be shipped whenever the customers command them, but the supplier also has to be ready to accommodate any sudden increase or decrease in product demands missed by the initial forecasts given by these customers. At Star Inc., they created a policy to accommodate up to 20 percent increase or decrease of their top customers' needs. As told by a Star Inc. executive who was involved in production planning:

> OK, for example, we have these two big [Europe-based] multinational customers. One of them put a big order for the packaging of this seasoning brand [let's call it B]. When I just joined the company, there were pressing issues—they said that the customer was screaming at us so many times, and that we were struggling with the time requirements needed to send B. Once, the customer made a mistake in their planning and finally came to us for help, and we helped them by shipping the goods on a Sunday! I was told that they at least appreciated it. Our marketing team always reminds us that, "We have agreed that we need to buffer up to 20 percent." But the order for B is humongous. The amount needed to supply B in a month is almost equivalent to one warehouse. On the one hand, [it's a problem to anticipate a 20 percent increase] by storing all of the goods there. It's impossible. But on the other hand, we also must be ready to anticipate a decrease by 20 percent out of what they promised us to take in the following month. It's like that.

Storing the finished goods is not the only problem created by the JIT procedure. Flexibility in delivery and the responsibility to anticipate missed forecasts also affects the

other end of production: planning for the purchase and storing of raw materials. As a Star Inc. executive who deals with suppliers for their materials explains, the readjustments of delivery have a significant impact on the situation at the purchasing end:

> Forecasts can also miss. Even after the purchasing order was finalized. For example, a customer had a three-month purchasing order, 10000 [rolls] in September, 20000 in October, 30000 in November. The planning department has calculated, right? And we have received that calculation. But in the process, the customer can say, "Oh, our warehouse is full for September," and they only want to receive 8000. It means that we have a surplus of 2000 rolls. The planning department will forward this info to [the purchasing department]. And we need to readjust. Or say in September the customer asks us to deliver 15000 instead of 10000. We need to readjust as well. That's how we work. But sometimes the materials we purchase are already on their way. If they are imported, we cannot cancel… Or [for domestic suppliers], even after we tried to be adamant about postponing the shipping, they are not willing to do it. Like it or not, our storage will have to accommodate them.

The issue above also shows that companies like Star Inc. do not only deal with their customers, but also with their suppliers. But unlike multinationals who can exert pressure on and make unreasonable demands of *their* suppliers, dependent companies cannot do the same thing to the upstream companies who supply their materials. To an extent, Star Inc.'s notable growth has gained them some status in front of their material suppliers, but it is not comparable to that of multinationals who are their customers. Constrained by various factors such as limited availability of certain materials and the domestic monopoly of certain industries that produce the needed materials, Star Inc. is quite powerless. Moreover, unlike the multinational customers who can demand flexibility from Star Inc., the U.S.-based multinationals that become Star Inc.'s suppliers are often inflexible in their business. Perhaps, according to the same executive quoted above, "because their bureaucracy is already so structured and organized." If there are options

available, Star Inc. prefers to buy their imported materials from other companies, like South Korea. But more often than not, there are no other options.

In general, both Java Film and Star Inc. executives—especially those who deal directly with production and planning—prefer more limited forms of flexibility, precisely because they create problems, and are often at odds with the production goals of increased productivity and efficiency, including the decrease in waste. Sauer, et.al. (1992:49) argue, "The 'new type of rationalization' pursues contradictory goals: the increase of flexibility in company administration and manufacturing processes in order better to fulfill constantly changing market requirements with respect to quality and quantity, and the achievement of a more cost-effective production system under conditions of fiercer competition." In a sense, then, flexible production provides contradictory processes for these two companies. On the one hand, they have to offer flexibility to meet the "needs" of their customers and to get ahead of their competitors, which will result in greater profit. On the other hand, as firms, the imperative of capital accumulation forces them to increase productivity and efficiency through cost reduction strategies and other means. Flexible production, however, often results in inefficient and wasteful production. Let us examine this contradiction first.

Both Java Film and Star Inc. have limited capacities in their production, and they have to work with this limitation to accommodate a variety of products ordered by their customers. When they offer flexibility to their customers, these varieties become more complex and they create challenges for production. People from the production and planning department would say that they prefer "long-run" orders—that is, when they can run one article in their machines for a long time, without interruption, until it is finished,

and this requires only one-time preparation (where they set the machines, and so on) at the beginning of each process. This kind of production process would enable production teams to easily ensure higher efficiencies and the reduction of waste. But such an ideal process is difficult to achieve. Due to the functional flexibility demanded by their customers, they often have to interrupt production processes to fulfill rush orders due to fluctuating market demands that their customers aim to meet. Concrete examples will help illustrate this problem.

One of the simplest examples is given by a Java Film executive, who explained that long-run orders are hard to come by because many customers demand just in time delivery. When a customer, say, demands Java Film to ship products only twice a week, they have to divide the production several times into smaller orders, even though the product was ordered in a large quantity. Otherwise, they would not be able to use the machines for other orders from other customers. This creates problems because it requires the production department to engage in multiple programming changes for their machines, among others—which is bad for efficiency and risks the increase of waste. Sometimes Java Film sales department is able to sell the wasted film for a cheaper price to other companies, but that alone does not serve as a sufficient remedy for the waste issue.

Another example was provided by a Star Inc. executive. Multinationals—according to my interviewees—often engage in a product variation strategy in an effort to capture the dynamic (both domestic and export) market demands and defeat their competitors (also other big multinationals). This is where they create several types (or SKUs) of packages for a certain product. Sometimes the SKUs are in the form of

different designs. For example, a juice drink brand marketed for kids has a few variations of packaging with cartoon characters on it: Spiderman, Elsa from the movie Frozen, Beauty and the Beast, etc. But more often, the product is also packed in different sizes—each with its own design variations as well. Let's go back to product B, the packaging for a seasoning brand owned by a European multinational who is one of the main customers of Star Inc. This brand has multiple SKUs, each with a different volume: 7 grams, 20 grams, and so on. The 7 grams one is packaged as a simple sachet, where you can throw it away once it is used, while the 20 grams one is packaged in a standing pouch and designed for multiple uses. Star Inc. then has to apply a different product design for each SKU, and each SKU has to be manufactured separately.

This practice illustrates what Baran and Sweezy call the interpenetration of the sales effort and production process. They note that sales efforts such as product variations mentioned here no longer serve as a mere addition to production under monopoly capitalism—instead, they now reach back into the process of production; they "increasingly invade factory and shop, dictating what is to be produced according to criteria laid down by the sales department and its consultants and advisers in the advertising industries." This interpenetration has made the two processes (sales efforts and production) so indistinguishable to an extent that it causes a "profound change in what constitutes socially necessary cost of production as well as in the nature of the social product itself" (Baran and Sweezy 1966:130-31). For the supplier who actually makes the products, the product variations strategy requires a high degree of flexibility on their part.

Multinational customers who deploy such a strategy can demand flexible production depending on what is highly demanded in the market. So, rather than sticking with what was agreed in the SOP and expressed in their purchase order, this customer can change their order in the middle of production. If the customer sees that the Spiderman packaging sells more dearly one month, they would ask Star Inc. to send only the Spiderman the following month—regardless of what the original order was. Or, in the case of brand B, as explained by the executive: "If all of a sudden, say, because of certain promotional periods [that increase market demands], [one SKU is needed more than the others], this customer would suddenly change their plans. 'This week I need you to send me the 20 grams one instead of the 7 grams one.' If you're a rigid supplier, you would definitely say no, because it would disrupt the whole production process… They have to reprint stuff, everything. Most converting companies would refuse to do this, because it would create inefficiencies and plenty of waste."

Though this executive claimed that Star Inc. started to try limiting these kinds of orders, they still could not get away from it. And this got on their nerves, as management had to face conflicts every time. Weekly meetings become inter-departmental "battlegrounds," where different teams would argue back and forth about which orders needed to be prioritized, and which orders could be postponed, and how much disruption could be tolerated on the shop floor. While the marketing department would push for flexibility to get more orders from their top customers, people in production and other departments would try to resist this trend because their efficiencies suffer. At the same time, both flexibility and efficiencies are demanded by the company's owners. The same executive quoted above expressed this concern: "We have yet to formulate good

management policies on how to do this…. Now, everything seems vague. Production teams would say, 'We've told you that we are pressured to reduce the variant waste by such-and-such amount!' But the other party [marketing teams] faces pressures to increase [sales]. So what would you do?" From what I gathered from the interviews, the winner seemed to be flexibility. As a member of production team told me, "We sometimes have to make sacrifices, meaning, we allow the waste to be high, because we have to cut the ongoing production of a certain product in order to fit in a different product."

The important question now becomes: who bears the burden of such a contradiction in systemic rationalization processes? Surely the executives I interviewed had to deal with the customers and all the chaotic consequences of their demands for flexibility, but in the end, the ones who deal directly with production are the direct producers of the commodities these companies make: workers. In the following discussion, I will examine how the mechanisms described above influence the organization of work that creates control over the labor process.

Management and Control over the Labor Process

Even though Java Film and Star Inc. do not fit the stereotypical image of factories in the global South, the issues of labor and the labor process are still central to their production. Out of approximately 800 employees of Java Film and 1500 of Star Inc., a majority of them work on the shop floors. Certain segments of their production are more "labor-intensive" than others, with the majority of shop floor workers placed in the finishing area at Java Film and in the "bag-making" area at Star Inc. And although the rest of the segments are mainly computerized (automatic), labor still plays an important role. In both plants, the responsibility for monitoring machines, checking defects, and

other related processes, is held by workers. Sometimes these tasks are done manually. As an example, when I observed the Java Film plant, I saw that a worker had to stand still next to a running machine to make sure that the product did not have any stains or other defects in it. This worker had to immediately notify others if he saw any defects.

Even though the executives of both companies would prefer to see their companies as "high-tech" oriented, or even refer to them as "capital-intensive," they could not dismiss the fact that labor and the labor process were issues that kept showing up again and again. This was especially prominent among the executives in the human resource and production departments, because they were the ones who managed labor on a daily basis. And when it came to the discussion of wages and unions, our conversations sometimes became heated. When I visited Java Film in 2012, they were in the middle of bargaining with the labor unions with minimum wage as the main issue discussed at the table—then, the provincial government just issued an increase in the minimum wage, but vagueness related to categories of wages based on types of industry, among with other factors in relation to this increase, led to a series of tough bargaining sessions. In addition, protests were many in the industrial complex where they were located. At a Japanese automobile factory nearby, production was disrupted for about a week due to a labor strike. Combined with threats to protest by their own workers and a suspected "infiltration" by a militant labor union at their own plant made the management nervous. Although they never exposed their "dirty laundry" in the management meetings I attended then, during those meetings, the issue of productivity and efficiency was discussed a lot, partly in an effort to offset the inevitable rising labor cost.

When I visited Star Inc. in 2015, the management was also a little bit nervous. Their main competitor, Sun Printing, experienced a major strike at their plant—a strike that led them to terminate employment of more than a thousand workers and caused their production to halt. Star Inc. was afraid that the same thing would happen to them, for good reasons. The main factor that caused the strike was a regulation on overtime imposed by a standardized rule applied by Sun Printing's multinational customers—some of them were also the customers of Star Inc. Although this rule was already issued by the Indonesian government since 2003 through federal labor laws,[15] only then did it become a major problem, since the biggest multinationals, through a third-party evaluation system called URSA (Understanding the Responsible Sourcing Audit), required their suppliers to comply with the overtime rule. If not, suppliers would not pass the audit and the business between them and their multinational customers would be terminated. The rule states that workers can only work overtime as many as three hours a day, fourteen hours a week. Sun Printing workers were not happy about it, because overtime work gave them more earnings. And before the rule was imposed, the way work was organized at plants such as Sun Printing and Star Inc. often depended on their workers' overtime labor, especially when rush orders were involved.

There might be more to the cause of the strike, but that alone forced Star Inc. management to reorganize their incentive system in a way that would compensate the loss from the "new" overtime rule. Workers would still get the same amount of earnings through the new incentive system without having to work overtime—but forced to work more efficiently and productively. At a glance, this case seems like a regular strategy by

[15] See *Labor Regulations No. 13,* 2003, article 78 section 1(b) [*Undang-Undang Republik Indonesia No. 13 Tahun 2003 Tentang Ketenagakerjaan,* Pasal 78 Ayat 1(b)].

the company's management to fix things and avoid further problems, but if we look closely, what happened here is an example of how management organizes work to extract surplus value from their workers, driven by systemic rationalization processes imposed by their multinational customers.

One characteristic of systemic rationalization is the use of evaluation criteria that dominant companies impose on their dependent suppliers (Altmann and Deiß 1998). In global supply chains, such certifications bear many names, each with its own claimed measurements aimed at evaluating suppliers' compliance with rules regarding safe working conditions, hygienic environments (especially for food-related industries), wages and overtime, whistleblower protections, etc. Among them are URSA (as mentioned above), the many versions of International Standardization for Organization (ISO 9001, ISO 14001, ISO 18001, ISO FSSC 22000), and Sedex. Both Java Film and Star Inc. had to undergo several of these audits in their attempt to get big multinational customers. The audits were done by a third-party who would then issue the certificates and report it to their prospective customers, or publish the reports that could be accessed by prospective customers. While certifications like this certainly impact workers positively in some areas, the reason behind such certifications is not always workers' wellbeing. One can argue that this is a form of bureaucratic control as proposed by Edwards (1978), where the labor process is subject to the firm's law rather than direct supervisor's control. In this case, however, the scope is global, where the firm's law itself is affected by international regulations that become an integral part of production networks led by multinationals.

First, as a part of the outsourcing process, transferring production to dependent suppliers in the global South does not merely gain multinationals lower unit labor costs,

but it also serves as a means to transfer responsibilities and criticisms of possible labor violations to such suppliers (see Foster and McChesney 2012; Smith 2016). Through the application of these international certifications, multinationals can have their ammunition ready: audits have been done, and these suppliers are supposed to comply with the rules; thus, if there are violations, the responsibility is on the suppliers, not on them. Second, for the suppliers themselves, the wellbeing of workers is not the main reason why they bother to get these certifications—whose process, according to my interviewees, is really complicated and takes a lot of their time. As implied above, without these certifications, these suppliers would not be able to do business with the big multinational corporations. As Braverman (1998[1974]:25) writes, "the humanization of work" has never been the focus of management—who is "habituated of carrying the labor processes in a setting of social antagonism and…has never known it to be otherwise"—instead, it is always about costs and controls.

Third, as systemic rationalization theories show, such evaluation criteria imposed by dominant companies are one of the strategies aimed at increasing the overall productivity of the entire production chain. They are a means for dominant companies to force their dependent suppliers to reevaluate and, if necessary, change their organization of work in ways that are deemed more productive and efficient. But as I explained in the previous chapter, productivity is not the main goal—lower unit labor costs is. Through the enforcement of more productive and efficient ways to work, multinationals aim for a reduction in production costs by their suppliers. With the open costing system discussed above, suppliers have very little room to mark-up their costs—this ability to easily

control suppliers' costs and profits means that, when suppliers' costs are lower, their selling price is lower too.

During my interviews period in 2013 at Java Film, not long after they passed an audit for yet another international certification, a big banner was displayed in front of the factory. It read: "Safe and Healthy Work Is a Mandatory Condition for an Increase in Productivity and Efficiency." This saying, although it appears as a mere slogan, actually reflects what such certifications mean for capital within labor-value chains. When an organization of work is very structured and everybody follows the rules—say, in the name of work safety or a healthy environment—it leads to an increase in productivity and efficiency, and productive and efficient work leads to a reduction in production costs. Accidents, for example, create distractions at the shop floor. As this executive explains:

> We had this one accident in 2011. Until today, that employee can't work at his previous position. We had to move him to an administrative position. That was after a year of [sick leave]. So, how productive is he in his current position? Two years, zero. His productivity is zero… Until today he has back problems, and that really interferes with his productivity. Not to mention the employee who, due to his own carelessness, fell in the elevator… luckily it was not bad. But we lost another person. And what does that mean for HR? HR needs to ask the other employees to do overtime, or find new employees, right? Obviously, safety matters for productivity. And then health issues. Well, if we have a lot of employees who are sick, even with proper medical notes… Say an employee calls in sick—either the productivity at his section [within his department] will go down, or we need to hire a replacement.

Moreover, the imposed rule about overtime, for example, is not merely a means to make sure that workers do not overwork (and, as the case of Sun Printing suggests, when overwork pay is given, workers prefer to do overtime so that their earnings would increase), but to make sure that they work more productively and efficiently. If we refer to Marx's law of value, when the possibility of lengthening of the working day, as part of

the capitalist's effort to increase absolute surplus value, has become more limited, the options are to increase absolute surplus value elsewhere, i.e., through increasing the intensity of labor—in which non-productive "pores" in the working day are minimized—and to increase relative surplus value through increasing the productiveness of labor, which is "the quantity of products yielded by the same quantity of labor in a given time" (Gartman 1978:102). As a Java Film executive told me, "We are trying a lot of things right now—revitalizations, relocations [of work], so that productivity can be increased, so that our overtime rate would not be like in 2012. Our target is that overtime should be reduced by a minimum of 30 percent."

Star Inc.'s reorganization of their incentive system mentioned above can also illustrate this point. The reduction of the amount of overtime hours led their management to create a "better" system in which work could be carried out more productively—and this created an impact on the labor process. The incentive system is applied for workers who were below the supervisor level. Production workers get full incentives, while non-production workers get less. But within each of these segments, incentives are distributed evenly to the workers there. The evaluation that becomes the basis of how much incentives are earned by workers is based on three criteria: production output, variant waste, and returns (how much goods are returned by customers due to defects). All three are related to productivity and efficiency. Production output is connected to the speed of workers. This "technical control" (Edwards 1978) of the labor process by the mechanism of machines is applied to large segments of Star Inc. plant and influences the production flow as a whole. But the simplest one to understand is the process in printing division. There, the machine has to be set up to the highest speed to get maximum productivity. If

they do not set the output level this high, and if they work slowly instead to obtain their output, then productivity will not be high.

This criterion is related to the second one, variant waste. Variant waste means the difference between the projected ("allowed") waste and the actual waste produced. Interestingly, this factor also influences output. If your goal is only to reduce waste, then your productivity can also slow down. For example, they can set the machine to the lower speed just to reduce the waste. So, in this case, workers are expected to juggle the speed of their work and the attention to waste reduction. As Braverman (1998[1974]:134) writes, "Machinery offers to management the opportunity to do by wholly mechanical means that which it had previously attempted to do by organizational and disciplinary means." For Braverman, what is worth noting is that machines can be controlled and paced in accordance to "centralized decisions" by management stationed in the office—suggesting that control can be removed from the site of production. In this case, machines were also a means to control the labor process away from the shop floor, but its execution is mediated by the incentive system, designed by management to direct the labor process in ways that can increase production output and minimize waste at the same time. In addition, workers also have to make sure that defects can be minimized, since the "returns" criterion is measured by this aspect. On the one hand, workers can get more earnings with the incentive system. But on the other hand, their labor process is a subject to an invisible control, namely, the possibility of losing their extra earnings. For management, this system allows them to avoid conflicts due to the loss of overtime earnings, as well as receive a "bonus"—the productivity and efficiency increase expected by their customers.

However, aside from the influence of certification systems on the organization of work, the contradiction that was born out of the demands for flexibility and for increasing productivity does in the end affect workers and their labor process. The bureaucratic control imposed by multinationals is just one means among others. What cannot be "controlled" by management, such as waste and other productivity aspects that are lost due to the changing order priorities demanded by customers in their pursuit of flexibility, as well as the increase in the minimum wage, is offset by a relentless effort to increase productivity and efficiencies in other areas. As someone from the Java Film human resource department said, with the recent increase in minimum wage, "it naturally follows that the challenge is how to increase employee's productivity. What we don't want to happen is that this wage increase is not accompanied by an increase in productivity—or that the productivity goes down instead!" A similar sentiment was expressed by Star Inc. executives, such as this: "If [workers] want to be paid more, I need to know how high is their labor productivity, per hour. It needs to be measured first." Although many of my interviewees recognized the fact that wages should increase following inflation and other factors, in the end, these increases were never "free."

Also in a continuous effort to cut costs, Java Film tried to maintain the practice of hiring subcontractors for certain positions (such as security and cleaning service)—a kind of numerical flexibility (Harrison 1994)—although during that period, there were pressures from labor unions, as a part of their ongoing bargaining, to hire these subcontractors as permanent employees. And the company had already started hiring subcontractors as their employees. The increase in labor cost was thus inevitable, and they had to comply, even though they also tried to push down the increase during the

bargaining with the labor unions. Although some of their executives denied that this wage increase mattered for them (since they are not "labor intensive" and that labor costs only make up a fraction of their total costs), others expressed their concerns. Especially for the human resource department, this was quite a big deal, since certain segments of production—namely, the "finishing" segments—still need many workers.

This was further influenced by their multinational customers' refusal to consider buying at a higher price in accordance with the rising labor cost. When asked whether Java Film could increase their selling price due to the increase in minimum wage in 2013, one of their executives told me that sometimes they could, since the open-costing system allowed them to incorporate such increases in their calculation of total cost. "But a lot of times," he said, "such increases cannot be passed on to the clients, to be honest with you. It's not easy. Especially multinationals, they would say, 'Yes, true, wages have gone up, but your efficiencies need to be increased as well!' So they would try to offset it that way. It's up to negotiating. Different results per customer." Thus, the means to increase productivity was directed towards tightening the control of the labor process instead.

These means include different forms of control. During my interviews at Java Film, they were just beginning to develop a performance-based incentive system based on new Key Performance Indicators (KPI), aimed at creating "continuous improvement" or *kaizen*. During that period, their executives were all about *kaizen*, since they were actively pursuing Japanese customers. These customers flew from Japan directly to visit the factory and demanded they make changes, including installing an air shower, and inspected minor details to suggest improvements. In his second book on *kaizen*, Imai (1997:13) stresses the importance of managers' involvement on the shop floor (or what

he calls *gemba* or "where real action occurs"). One of the main arguments that Imai (1997:13) offers is that, once managers are reluctant to be involved in *gemba* affairs, "management has lost control of the workplace." Taking inspiration from the concept of *kaizen*, Java Film executives created specific measurements of their workers' performance that include discipline factors, such as how many sick leaves, days when workers arrive late (measured in minutes), absence without notice, warning letters received, and so on. Each department would also set their own measurements of workers' performance, based on their own indicators. But examples given include the volume of product returns, operation performance, as well as customer complaints. Similar to Star Inc.'s incentive system, this is a way for management to control the labor process—discipline through the promise of rewards.

Other strategies take many kinds, from reconfiguring their work-shifts schedules (such as eliminating "long-shifts" to reduce overtime) to reinforcing discipline to cutting energy use in the office space. Reducing overtime was done despite the risk of labor unrest. I was told that workers were already expressing their dissatisfactions then, but the management refused to back down and instead use the issue of overtime as a bargaining chip. One executive told me: "I just told [the workers], 'I'll be blunt with you. You want this much increase [in wages], OK, fine, but I will eliminate all your overtime!' I *would* take that measure. If necessary, I will change the three work-shifts to four, so there won't be any overtime. 'Very sorry,' I said."

Since Java Film management could not really do much with the rest of the segments—which are computerized and only require a small amount of manual labor—they focused instead on these "finishing" segments. Manual labor is still applied in these

segments because it is still difficult to mechanize the tasks. Why is it difficult? A Java Film executive tried to explain: "Because each customer has different requests. Some ask for such-and-such size, the product has to be this way, one roll of plastic has to be this long, even up to the requirement of how hard the bundling should be, and a lot of other things. That makes it difficult to mechanize. So in the end, we still require a lot of labor." This difficulty of managing labor seemed to be perceived as a persistent problem, both at Java Film and Star Inc. The top executives at the factories were trying to design a more "cost-effective" system that would reduce errors in production and thus reduce unnecessary rework or double handling activities. Often, then, mechanization is preferable whenever it is possible. During that time, efforts were taken to reduce the number of workers in every task, such as implementing new machines that can automatically detect errors.

When asked whether they would prefer robots or robotic equipment than human labor, many interviewees said "yes" without hesitation. This reflects a global pattern of automation, where manufacturers in North America and Western Europe see the move to the use of robots and other automated systems as a viable option to "reduce labor costs, enhance quality control, and improve throughput" (AlixPartners 2017:3). There are some areas in which mechanization has been applied at both Java Film and Star Inc. At Star Inc. in particular, there were already talks within management circles to implement a new warehouse system, equipped with robotic components. A Star Inc. executive told me, "We've done it several times—laying off employees because we adopted new technology. What was done manually before, it is now automated." These executives argued that, with robots, the quality is more consistent, the errors can be minimized or

eliminated altogether, the productivity is higher, and waste can be detected early. Citing another executive from another company, one interviewee said, “And machines never complain.”

However, some also expressed that the human role in their production processes cannot be eliminated. They still need human decisions and labor in operating the system, even on the lowest level at the plant. This is in line with what systemic rationalization scholars argue to begin with—that “the development of system technology did not aim for total automation since a system of this size and complexity would demand the presence of several operators” (von Behr, et. al. 1992:164). But the importance of human role especially remains important in the company’s pursuit of flexibility. As expressed by another Star Inc. executive, “If all is done by an automated system, we won’t be able to continue being flexible. If the order was given today and then, with 30-days lead time, [if there are changes in delivery time or order priority], in the end we will need a human being to intervene so an exception to the system can be authorized.” And considering how flexible their company tries to be, he said, “it is likely that our exceptions exceed the normal, ongoing setting.”

For other executives, the consideration is related to the ability to invest in expensive technology. If the implemented technology is not too expensive, such as the automatic reject system in the “bag-making” segment on the shop floor, it is likely that management would do it. But unlike North American or European manufacturers who are eager to invest in such technology (AlixPartners 2017), companies with weaker capital do not have an equivalent ability to execute their plans whenever they please, even if they want to do so. Thus, if the investment is deemed too expensive, they would think twice:

"We've been talking about this, putting robots in the warehouse—how many people can they cut? …. How much is the cost? And I want to compare to the investment cost, is it beneficial or not? I want to know whether, if our labor, at this moment and for the next five or ten years, would not be as expensive, as it is in the U.S. or in China, would it be really beneficial for me to invest in technology? So I need to know, I need to see first. Because if I look at our labor cost now and compare it to our investment cost of having this, you know, huge investment, it's not that [good]."

So in the meantime, when manual labor is still involved, the management can only enforce stricter discipline or apply a more structured organization of work to the current workforce to better control the labor process and hence reduce the chance of human errors. A few of Star Inc. executives expressed their concerns about how difficult it was to enforce discipline on the shop floor. One of them, who was involved in the production team and helped develop the incentive system at Star Inc., told me that everybody should "do their best," down to the workers in the lowest position. Inspired by the concept of *gemba kaizen*, he emphasized the importance of management control on the shop floor. "It's not as simple as I say, of course," he said. "Even after being encouraged by the incentive system, there's no guarantee that they can work well. That's why we need management's presence. Every single deviation needs to be evaluated. If, at one point, there are employees who need to be reprimanded, or even given a warning letter—we have to do that to provide some deterrent effect." The same executive told me later in the interview that "discipline is the most important thing for Indonesia" and expressed his opinion about the virtue of military training as an instrument in shaping one's discipline habits.

Another Star Inc. executive told me the importance of implementing "awareness" to workers about the value they added to the company's products: "Whenever we have an employee gathering, we tell them, 'There's your stamp on this product.' Then we also relay our customers' complaints to our employees. 'See, if you don't work well, this is the result.' That way they can understand." This rhetoric is especially important for managers who lead production teams. As one of them said, they always told the workers on the shop floor that "added value originates from our department… If we talk about engineering, planning, or quality control, they're just supporting elements. The added value, the converter in a converting company, is located within production." This "awareness" about the importance of workers' labor in production—the value workers added to and embedded in the finished goods—ironically is used as an instrument of control with the illusion that workers perform skilled labor to produce these goods and are not in any way separated from the product of their labor. The line of reasoning here is that, since workers are the ones contributing to the production of these goods, they need to care more about the products—it does not matter that the these workers have almost no control over the direct production of use values, or that their labor has been degraded to an unskilled variety.

Other times, management applies the "home" rhetoric to pacify workers. As someone from the human resource team told me, "We make it clear to our workers, 'Remember, this is our *home*. The company where we work at is the paddy field whose soil we plow. We work together here to build…. If our business grows, if the results are good, we get our share [of this success].'" Similarly, this rhetoric provides an illusion that workers have shared ownership in the means of production, while in reality, workers lose

the control over their own labor once their employer buys their labor power. Also, this kind of rhetoric is a way to curb union activities at the plant. In an effort to push labor unions out, management at Star Inc. encourages their workers to see the company and its management as "a family" that they can turn to whenever there are problems. In 2015, Star Inc. had only one union, and it was the company's internal union that was only affiliated with, but was not a subsidiary of, an outside labor union independent of the company. The management was eager to keep things as they were. They wanted to avoid the problems and headaches that executives in companies like Java Film experienced (in 2013, Java Film had three unions) every time they had to deal with the "unruliness," as a Star Inc. executive called it, created by the presence of independent unions. But such "motivational" rhetoric does not always work, or does not work on its own. To keep things "safe," Star Inc. executives instructed their supervisors and superintendents—who led daily factory briefings at the beginning of each work-shift—to always watch out for rumors of gatherings or meetings organized by "infiltrating" unions. They also trained their supervisors and superintendents about what to do should such things happen.

More direct and simple forms of control like that are utilized not only in relation to pushing unions out, but also in the general process of production. Often, this use of simple control is justified by a stereotypical view of Indonesian workers, namely, that they are either lazy or intellectually challenged and thus difficult to manage. As a Star Inc. executive said, "You know, Indonesians. You always need to monitor them." A Java Film executive expressed the same concern. He even went as far as claiming that, on the level of machine operators, it was really hopeless. What you can do, he said, is to focus on improving the skills and disciplines of the supervisors: "If the supervisors are alright,

then the operators will be too." But at least, he continued, "Indonesians can still obey orders if you watch their back." David Gordon (1996:66) refers to this use of simple forms of control as "the stick strategy," where firms "exercise control with the armies of supervisory staff." Mockingly channeling management's voice, Gordon writes: "Can't trust your workers when left to their own devices? Peer over their shoulders. Watch behind their backs. Record their movements. Monitor them. Supervise them. Boss them. Above all else, don't leave them alone."

These simple forms of control complement the other forms of control discussed previously. Braverman (1998[1974]:62) writes that the labor process has been subject to control even before Taylorism prevailed. But Taylor "raised the concept of control to an entirely new plane when he asserted as an *absolute necessity for adequate management the dictation to the worker of the precise manner in which work is to be performed*." Even though Tayloristic work may not be as pervasive and omnipresent in the era of systemic rationalization, some forms remain—as illustrated in the discussion above. And at its core, Tayloristic organization of work "drastically reduced the skill and discretion of worker in the labor process" (Gartman 1979:199). On the shop floor at Java Film or Star Inc., workers who occupy low positions are not required to have meaningful skills. Any significant training that could actually increase skills is reserved for workers who are in certain strategic positions (see Wright and Lund 2003), especially ones that are groomed to be managers.[16] For the rest of the workforce, what they need is a capacity to obey and follow orders. This was expressed clearly by a Java Film executive: "[Machine]

[16] During my visit, Star Inc., for example, created a program in which they recruited new hires from top Indonesian universities who graduated at the top of their class. They were put on a special track and were subject to various training programs. Starting from the supervisor level, these hires would eventually fill management positions.

operators' work is repetitive: this, that, this, that. If we talk about skills… I think the skills needed to operate those machines are minimal. It's not like operators of the CNC machine [used in other types of manufacturing], who always need to have an updated knowledge of the software. Our machines just require repetitive tasks."

The work is "so simple" not merely because it is the nature of the job or the machine per se, as the executive above seems to imply, but because the organization of work has been structured in such a way that enables the deskilling to happen. "This is the pivot upon which all modern management turns," writes Braverman (1998[1974]:73-4): "the control over work through the control over the decisions that are made in the course of work." Taylorism and the practice of modern management revolves around the "dissociation of the labor process from the skills of the workers" through means such as "the separation of conception from execution" that, in turn, reflects the use of "monopoly over knowledge to control each step of the labor process and its mode of execution" (1998[1974]:78-82). In this context, the majority of workers on the shop floors—especially the "operators" or those who only operate the machines—are divorced from any knowledge regarding the technological know-hows of production. They merely execute, but are not involved in any conception of production itself—which is done in the management circle, at the offices, away from the shop floors.

The executives I interviewed possess the knowledge of the technology and have the power to control the extremely expensive machines—the same machines that "do not require any skills" from the workers who operate them on the shop floor. As they told me themselves, it took a lot of time and plenty of trial-and-error for them to figure out many things in relation to how the machines work and how to make them work well. What they

relayed to their workers were merely a list of strict procedures about what to do and, especially, what not to do—in order to avoid lost output caused by mistakes in the operation of the machines. Obviously, the machines are not so simple. It is the detachment of knowledge from the work performed by these operators that makes it meaningless. And it is the decisions controlled by management—influenced largely by the control exerted on them by their multinational customers—that enable the degradation of work to happen.

What Can Be Learned?

Since Java Film and Star Inc. do not represent the stereotype of global South factories that cater to multinationals, they actually reveal several interesting variations that can be found in globalized production. First, they can illustrate the classic role of dependent suppliers in labor-value chains due to their export-geared production—about 30 percent of their production output—for multinationals based in advanced economies such as the United States and Western Europe, where the commodities are consumed. Big multinationals, from U.S.-based food-related companies to a leading U.S.-based cigarette company, as well as Europe-based giant multinationals with brands in daily care products, all serve as "high-class" customers for both Java Film and Star Inc. in the exports segment. Second, in addition to this, an unknown percentage of their production is also geared towards exports, although they are exported by their multinational subsidiaries customers and not by these suppliers themselves. This characteristic shows that, even in cases where multinationals engage in direct foreign investment in Indonesia by building subsidiaries that export their goods to the countries in which they are

consumed, they still outsource their packaging-related production to outside suppliers like Java Film and Star Inc.

The third characteristic of production in these two companies, the one where they produce multinational brands for the local market—even though it does not quite fit the common case of global labor arbitrage—illustrates yet another form of participation by global South companies in labor-value chains. This is deemed much more effective as means to cut costs, rather than directly exporting their products to the targeted markets outside of where these multinationals are based. In this context, multinationals target huge markets like Indonesia, directly invest in the country and build their subsidiaries so that production can be done near to the market itself and, in the process, outsource parts of their production processes to third-party suppliers. Thus, even though it involves intra-firm trade relations by multinationals through their subsidiaries, it does not precisely illustrate "producer-driven" chains (see Gereffi 1994, Milberg and Winkler 2013)—which are solely characterized by foreign direct investment—because these chains also involve arm's length contracting practices in which multinational subsidiaries outsource the production of their packaging materials to third-party suppliers.

In all three of these characteristics, Java Film and Star Inc. serve the role of dependent companies in labor-value chains—driven by the search for low unit labor costs by global North capital that seeks to capture value from the global South labor, which is realized in the price of the commodities consumed both in the home market or in Indonesia. The price of these multinational goods sold in Indonesia may be lower than that in the global North, but this does not translate into lower profits for multinationals. Instead, with the interpenetration of the sales effort and production process, such as a

marketing strategy that involves many product diversifications of a specific item (including cases in which consumers have to pay a higher price by buying the product in tiny packages), it is very reasonable to assume that the profit rate is high. In either case, mechanisms of both systemic rationalization and flexibility are applied in all of these characteristics, and most importantly, there are *practices by multinationals that capture value at the end of the chain*, since a large share of profits (or the surplus value extracted from the exploitation of workers that make their products) that results from these practices goes to the multinationals in the global North. The search for low unit labor costs is the main drive behind the decision to move production outside of Western Europe, the United States, or Japan. And it is due to this attainment of low unit labor costs that such multinationals are able to reduce their total production costs.

We know from the interview results that these multinational corporations have—and indeed, control—the knowledge and technological know-how of flexible packaging in their area. My interviewers expressed that they were often genuinely surprised that their customers "actually knew better about packaging" than their own best experts. Through this kind of control, they maintain their monopoly over knowledge and use it to dictate and direct the production of their packaging materials in ways that are absolutely beneficial for them. It follows, then, that other than additional practical reasons, multinationals, even those who go as far as directly investing in the country through having their subsidiaries and factories there, are reluctant to deal with their own production of packaging *not* because they do not know how to do it, nor because they do not have the resources needed to execute it, but because they think that it helps them mark up their prime production costs—an effort to perpetuate and enhance their

oligopolistic power, as discussed in Chapter 2. In a way, there is an interesting and rather complicated combination of how surplus is extracted. For example, not only do multinationals perform extraction at their own subsidiaries' plants in the global South through the attainment of low unit labor costs, but also at their third-party suppliers' plants. And the latter involves arrangements that hide more aspects of the unequal capital-labor relations on the global scale—executed through systemic rationalization and flexible production mechanisms.

The main goal of such mechanisms that is clear throughout the case studies presented in this chapter is the *externalization of costs*—a process that is perhaps most clearly seen when companies like Java Film and Star Inc. produce packaging materials directly for exports to the multinationals' home countries. But whether geared towards export or the local market, multinationals outsource their production in an effort to externalize the costs resulting from flexible production to accommodate fluctuating market demands. This way, their profit rate is not at risk. As we learned from the case studies, Java Film and Star Inc. have to bear the responsibility for fulfilling flexibility that is problematic for productivity and efficiency measures. Multinationals do not want to place the totality of this burden on their own subsidiaries, since they still have to pay the price that way, so they transfer a large part of this burden to their suppliers. Waste management becomes a major issue in these two companies—both waste of products and waste of labor created from the customer demands of product variations and a flexible delivery system that requires them to buffer in cases where forecasts are missed or sales projections altered. This fact alone disrupts their productivity and efficiency to a high level that they have to constantly face conflicts within their own management circles, as

well as change their organization of work in ways that can offset the loss resulting from this wasteful production.

Materials and energy use make up the two highest components in their production costs—and the requirement to be flexible leads to a big waste in relation to these two factors. Many parts of the process of flexible production cannot be controlled; no matter how productive and efficient their planning is, in the face of flexibility demands, there would still be plenty of materials and energy wasted in the process. In the end, the main thing they can do is to control the labor process of their workers through a series of reorganizations of work that aims to cut costs in places that can still be manipulated by management—another responsibility that is transferred to them by their multinational customers, who make sure that they can avoid their own responsibility by requiring their suppliers pass third-party audits and international certifications. Then, the rest follows: the control over the labor process is enhanced in the era of systemic rationalization and flexible production. Confirming what the theories discussed in Chapter 3 suggest, the case studies presented here show that modern management has not been largely characterized by the elimination of alienation of labor, a trend towards professional and skilled work, or an extensive "humanization of work" in general, as authors like Robert Blaunder, Michael Piore, and Charles Sabel try to claim (see Zimbalist 1979; Altmann, Köhler, and Meil 1992). Tayloristic organization of work still prevails, and is even enhanced, especially in the periphery where production happens and the global reserve army of labor is large. This occurs within layers of unequal capital-labor relations in which dominant multinationals based in the global North can find numerous ways to exploit workers in the global South through the former's control over the dependent

companies where the latter is employed—often without direct involvement or visible traces.

CHAPTER V

CONCLUSION

THE IMPERIALIST WORLD ECONOMY:

LOOKING THROUGH THE EYES OF THE GLOBAL SOUTH

This chapter contains several paragraphs from Suwandi, Intan and John Bellamy Foster. 2016. "Multinational Corporations and the Globalization of Monopoly Capital: From the 1960s to the Present." *Monthly Review* 68(3):114-131.

> Indeed, an important part of the modus operandi of imperialism is in the intellectual domain, where it promotes incorrect theories of trade and of unemployment combined with illogical methods of measuring poverty to show a decline when deprivation is actually on the rise.
>
> Utsa Patnaik and Prabhat Patnaik, *A Theory of Imperialism*

In his commentary to Indian economists Utsa Patnaik and Prabhat Patnaik's (2017) latest book, *A Theory of Imperialism*, David Harvey (2017:169-71) writes that the "historical draining of wealth from East to West for more than two centuries has…been largely reversed over the last thirty years." He also claims that it is useful heuristically to entertain the idea displayed by some authors—such as world system theorist Giovanni Arrighi—of abandoning the whole concept of imperialism "in favor of a more fluid understanding of competing and shifting hegemonies within the global state system." As mentioned in the first chapter of this dissertation, positions like Harvey's often rely on a superficial analysis of the growth of emerging economies, such as Taiwan, South Korea, the "BRIICS" countries, and particularly China. It may be true that these emerging

countries seek to respond to what Harvey refers to (following Baran and Sweezy) as the absorption of surplus capital "piling up in their home countries" by exporting capital abroad, even in the form of their own multinationals—thus gaining some degree of control over labor-value chains. It may also be true that China has been one of the major players in "the ongoing struggle for control over economic territory across the world (Ghosh 2017), such as some regions in Africa (see e.g., Albert 2017); or that Taiwanese and South Korean factory owners exploit Indonesian workers in their export-oriented production for Europe or U.S.-based multinationals. There are indeed some variations in such complex global power relations.

However, the argument that the "draining" of wealth has been "largely reversed" and that the concept of imperialism in its classic sense (particularly the notion of the exploitation of the core by the periphery) should be abandoned on this basis is not empirically or theoretically sound. To begin, the so-called "growth" of the emerging countries (outside China which is a special case) may not be as extravagant as some of authors claim it to be. *The Economist* reported in a 2014 article "The Headwinds Return" that the hype about emerging countries (excluding China) catching up to developed ones was "an aberration." Citing an IMF report, the article states that the current gap in economic growth between emerging and developed economies was at a mere 0.39 percent that year: "This would put off full convergence for more than 300 years—indistinguishable from never as far as today's societies are concerned." And as mentioned in the previous chapters, in the case of Indonesia (as one of the Is in BRIICS), economic growth has been slow in the last few years (*Tempo* 2015; BBC Indonesia 2014; OECD 2015), with the average real wage only increasing less than 2 percent a year (Allen 2016).

But what about the "growth miracle" of China—which has become the leading emerging economy in the world? Another Indian economist, Jayati Ghosh, is one of the authors who discuss this issue. She posits that, even though China is "the most significant source of manufactured goods imports for most countries" (if we recall from Chapter 2, they rank first in shares of jobs in global supply chains participation), there's a tendency to exaggerate the significance of China's growth, as well as that of other emerging countries (Ghosh 2015:156). This exaggeration, according to Ghosh, is partly because many analyses that compare cross-country incomes "are not based on nominal exchange rates, but rather on Purchasing Power Parity (PPP) exchange rates"—a measurement that has many problems, ranging from the assumption that the basket of goods is unchanging over time, the treatment of poverty of the large segment of wage earners as an "economic advantage," and many others (see also Smith 2016 for criticism of PPP). If we look at the nominal terms instead, even today, China only accounts for less than 9 percent of global output (in constant 2005 USD), and its per capita GDP is around 45 percent of the global average, "still many multiples below the average of the so-called 'developed' capitalist economies that form part of the imperialist core" (Ghosh 2015:156-57). This, of course does not necessarily negate the fact that these countries, especially China, do experience economic growth and are "emerging" to some degree—enough, as we shall see below, to create a backlash from advanced countries who try to halt their development as much as possible through various means, including multilateral agreements.

Nevertheless, what we need to examine is what really happens behind the euphoria of growth. The fact that China leads in the participation in global supply chains (or, to use our term, labor-value chains) should encourage us to rethink what it means in

relation to the larger context of global inequalities. This can be applied to other emerging countries as well, including the place where the two companies discussed in the previous chapter are located: Indonesia. Is it true that, as commentators like Harvey claim, the "draining" of the global South by the global North has been largely reversed? In their reply to this specific claim, the Patnaiks (2017:196) question whether Harvey is familiar with the concept of "drain"—a concept that, according to them, has been explained by many academics from the South but, with only some exceptions, ignored by the northern academia, including most present day Marxists.

They, however, quote Paul Baran's (1957) *The Political Economy of Growth* as the earliest, sharpest analysis of this phenomenon. "Drain" refers not only to the "direction of capital flows" but also to "the phenomenon of sucking out the surplus of an economy *without any quid pro quo*." During colonialism, this was realized in the form of taking out commodities for free from the colonies by the colonial power. In the present day, things have certainly changed. There are no (at least totally) *gratis* commodities simply taken from the periphery, and other extreme versions of "sucking out surplus" are no longer relevant. However, the Patnaiks emphasize that many mechanisms of sucking out the surplus from the global South by the global North remain alive—unequal exchange is one of them—and these imperialist practices are a continuation of the colonial heyday.

The concept of labor-value chains that I use throughout this dissertation is precisely a form of unequal exchange that can be considered one of the imperialist mechanisms that still remain in place today. Unequal exchange, or the exchange of more labor for less, is closely related to the export of capital made possible by the formation of

monopolies, which enables the capitalist centers to raise the rate of profit. Especially in the early emergence of monopolies (in the late nineteenth century), the export of capital allowed the establishment of the forms of production in the periphery, which, although modern (e.g., same production techniques), possessed the "advantage" of low wage-cost. And with this, unequal exchange occurred, indicating a "hidden transfer of value"—or "imperial rent"—on a global scale, rooted in the unequal power relations among nations, and fueled by the oligopolistic power of multinationals and their ability to control prices (see Foster and Holleman 2014).

As explained in Chapter 2, the mechanisms that occur within labor-value chains—including an application of systemic rationalization and flexible production—are an "exploitation of the wage differentials worldwide" (Foster and McChesney 2012:26), a quest by capital for valorization. The emphasis on efficiencies and higher productivity in capital's justification for engaging in arm's length contracting abroad is one of the keys here. Viewed in this way, we can associate the search for low unit labor costs that characterized labor-value chains with a quest by capital for valorization. The emphasis on efficiencies and higher productivity in capital's justification for engaging in arm's length contracting abroad is one of the keys here. As we have learned from the examples given in Chapter 4, multinationals have the power and ability to control the production processes of their dependent suppliers so that they can externalize costs that are needed to accommodate the "necessity" to take advantage of fluctuating market demands. It is obvious that multinationals are *not* internalizing transaction costs—instead, they are externalizing them, simply because they can. Their oligopolistic power allows them to do so.

Oligopolistic multinationals compete against each other to capture lush markets—at home and abroad—and to survive this monopolistic competition, they have to engage in flexible production, in such a way that it will not pose a danger to their profit rate. Hence, they place that responsibility on the dependent companies within labor-value chains whenever they can through various mechanisms, the main being: (1) the control of technological knowledge through which multinationals can demand suppliers to apply or not to apply certain materials or techniques—"transferred" to the latter only according to the former's needs—in an effort to cut production costs; (2) the application of demanding requirements, such as the ability of suppliers to deliver on demands or to accommodate fluctuating orders through the "buffering" policies; and (3) standardization of procedures, where multinationals can require a series of regulations in their dealing with suppliers that are often disguised as "fair business" practices such as international certifications or open-cost structures imposed upon their suppliers.

Further, as shown through the case studies, dependent companies within labor-value chains would "defer" the burden placed upon them by their customers to their workers through reorganizing work and enhancing the control over their labor process—since this is one among the very few places where they can still save their own profit margins through increasing productivity and efficiencies that are otherwise largely sacrificed in the fulfillment of their customers' demands. Here, we can see that the search for low unit labor costs is not merely an abstract imperative of capital. It is realized through concrete processes within labor-value chains, including at the point of production, where commodities are produced by workers, the direct producers. Through these mechanisms, oligopolistic multinationals—whether or not they are intermediated by

their subsidiaries (another practice of capital export that is also a form of unequal exchange)—can gain what they intended: to protect and increase their rate of profit.

These profits in the end are captured by multinationals and are often counted as the GDP (which is "essentially the sum of the 'value added' generated by each firm within the nation" of their home countries in the global North), a phenomenon that hides the exploitation that occurs in places where commodities are produced or assembled: "Labor's share of GDP within a country is not directly and simply related to the prevailing rate of exploitation in that country, since a large component of 'GDP' in the imperialist nations represents the proceeds of exploited labor" captured from abroad (Smith 2012:99). This is another factor that reflects the unequal exchange inherent in global labor-value chains—the process that is imperialistic in its characteristics even when used without the direct force of militarization or colonialism.

In the case of arm's length contracts, where, as mentioned previously, there is no visible profit flows from the global South suppliers to their Northern customers, the capturing of profits is especially hidden. To begin, Smith (2012) shows that we can see the problem by tracing profits generated by multinationals' goods, such as smart phones, T-shirts, and coffee. Let us take an iPod, for example. In 2006, the retail price of a 30Gb Apple iPod was $299. The total cost of production (that was performed entirely abroad) was $144.40 – meaning, the gross profit margin on the shipping price was 52 percent. The "gross profit" of $154.60 is divided among Apple, its retailers and distributors, and, by taxes, the government. But here is where the "magic" kicks in: this 52 percent of the final sale price is counted as value added in the United States and is added to U.S. Gross Domestic Product (GDP). This "accounting" does not make sense, since the production

was performed outside of the United States. Even though a large share of the jobs required to produce the iPod are located abroad (in this case China, where Foxconn factories are located), the total Chinese wage bill for iPod production was only $19 million, compared to the U.S. wage bill of $719 million. A major factor that contributes to this inequality is the fact that the "professional workers" category – those employed in the United States – captures more than two-thirds of the total U.S. wage bill. Moreover, citing Tony Norfield's study of Bangladesh-made H&M t-shirts sold in Germany, Smith (2012) explains that core citizens cannot only buy cheap commodities, but they also benefit from the profit that these commodities generate. A major part of revenue from the sales price goes to the state in taxes, as well as to a number of groups, including workers, executives, landlords, and businesses in core countries.

Further, this case illustrates what Smith (2012) calls the "GDP illusion." Standard data on GDP and trade flows exaggerate the global North's contribution to global wealth and, at the same time, decrease that of the global South. As seen from the examples above, when we buy say, a T-shirt, the country where it was produced receives in its GDP only a small proportion of the final sales price. Meanwhile, the larger part shows up in the GDP of the country where it is consumed. Such an approach leads to absurd "facts"—in poorer countries where production happens, i.e., countries that are actually making a greater contribution to global wealth, GDPs are much smaller than countries that are not productive. Why is this the case? Smith argues that the GDP and trade data only account for marketplace transactions. But nothing is produced in markets—coming back to Marx's argument, we should go instead to the hidden abode of production. Smith (2012:96) writes: "Values are created in production processes and captured in the markets

and have a prior and separate existence from the prices finally realized when they are sold."

The failure to take this into account leads to another fallacy: the conflation of value with price. In the framework of neoclassical economics, GDP is "essentially the sum of the 'value added' generated by each firm within a nation," where value added is defined as "the difference between the prices paid for all inputs and the prices received for all outputs." Hence, in this understanding, "the amount by which the price of outputs exceeds the price of inputs is automatically and exactly equal to the value that it has generated in its own production process, and cannot leak to other firms or be captured from them." Taking a Marxist approach, Smith rejects this "absurdity" and provides a counterargument: value added is really value captured. Meaning, "it measures the share of total economy-wide value added that is captured by a firm, and does not in any way correspond to the value created by the living labor employed within that individual firm." He also points out that mainstream economics fails to note that many firms that supposedly generate value added "are actually engaged in nonproduction activities such as finance and administration that produce no value at all" (Smith 2012:99). The GDP problem explains why the global South is underestimated in the dominant paradigms – its contribution to global wealth is overlooked. In the end, this means that, "Labor's share of GDP within a country is not directly and simply related to the prevailing rate of exploitation in that country, since a large component of 'GDP' in the imperialist nations represents the proceeds of exploited labor" captured from abroad (Smith 2012:100-01). Thus, it is important to rip the veil that hides this exploitation.

Mainstream measurements of national economic performance have also been questioned within environmental perspectives. Among them are the work of Herman Daly and John Cobb (1989), who provide a critique of GNP (Gross National Product) in their book *For the Common Good.* The discussion of the GDP illusion above, however, shows that there is a pressing need to develop such critique of dominant paradigms in a way that takes into account the global South perspective. To reveal the imperialist relations between the global North and the global South that is hidden in such economic measurements, we should at least start from an examination of how the global South's contribution to global wealth is ignored – and how this ignorance further conceals the labor exploitation that occurs in the hidden abode of production in the global South.

If we evaluate processes that happen in labor-value chains, it is clear that, contrary to what some authors (even on the left) claim, imperialism "has not really declined at all"; it has only "changed in form over the past half century," especially if we use "a more expansive notion of what constitutes 'economic territory'" (Ghosh 2017). Namely, the notion that is not only limited to land, natural resources, and labor, but also one that includes "the search for and effort to control new markets—defined by both physical location and type of economic process" (Ghosh 2017). This is illustrated well in the case studies presented in the previous chapter, where triad-based multinationals operating in Indonesia compete against each other to control the huge local market by engaging in production near to it and applying a myriad of marketing strategies—not only to capture the dynamic demands of that particular market, but also to create new wants.

What multinationals must maintain above all is to keep this exploitative system of global appropriation going is monopoly control over finance and technology, backed by the imperial power of the states at the center of the system. Indeed, as Amin (1997) has explained, the control exercised at the center of the world economy is maintained by the five monopolies of finance, technology, the planet's resources, communications, and military power. Maintenance of these five monopolies requires the active role of states at the center. Today's "generalized monopoly capitalism," Amin (2015) argues, relies on the combined operations of the triad (United States and Canada, Western Europe, and Japan) to ensure the system runs smoothly—with Washington, as the hegemonic power, providing the main coordination. Financial, technological, and communications control at the center, supported by the military and geopolitical control exercised by the capitalist states, enables multinationals headquartered in the major imperial states to relocate production globally without fear of appropriation, allowing them to extract the lion's share of the value produced.[17]

Indeed, global capital makes sure that its dominance within labor-value chains is undeterred. As James O'Connor (1974:195-96) claims in *The Corporations and the State*, multinational monopolies pressured the U.S. government, the European powers, and the U.S.-dominated international agencies to "formulate and implement" political-economic policies which will create an 'attractive' investment climate abroad, in particular in the underexploited countries." Under the pretense of promoting economic development, imperialist powers were trying to integrate these "underdeveloped" countries "even more closely [into] the structure of world capitalism."[18] The giant corporations dominate U.S.

[17] This paragraph is taken from Suwandi and Foster (2016).
[18] Taken from Suwandi and Foster (2016).

policy and, as Baran and Sweezy (1966:201) argue, they want "monopolistic control of foreign sources of supply and foreign markets"—to achieve this, they need to find "not trading partners but 'allies' and clients willing to adjust their laws and policies to the requirements of American Big Business."

Examples are plenty. In the last twenty years or so, various treaties, agreements, and other regulations—whether global, regional, or bilateral in scope—have been "exploding." These are mechanisms used by global capital to impose "rules, regulations, and modes of behavior upon governments and their citizenry." In addition to the well-known agreements born out of the womb of Bretton Woods international organizations such as the International Monetary Fund (IMF) and World Bank, there have also been a series of treaties and agreements that are even more repressive in nature—making the policies issued by the IMF and World Bank "almost pale in significance." And what is more important is that "these rules operate even for countries that are not in the positions of debtor-supplicants to international financial institutions, and so they require all countries to restrict their policies in ways that are directly related to the possibilities of generating autonomous development in periphery countries" (Ghosh 2015:147).

Here are some examples of the multilateral ones that are relevant to our topic of labor-value chains: (1) the Agreement on Trade-Related Investment Measures (TRIMS), which was designed to "increase linkages between foreign investors and local manufacturers"; (2) the Agreement on Trade-Related Intellectual Property Rights (TRIPS) that aimed to protect the monopoly of knowledge by multinationals, but that also "restricts reverse engineering and other forms of imitative innovation that have historically been used for industrialization"; (3) the ongoing negotiations on Non-

Agricultural Market Access (NAMA) at the WTO that are based on cutting more tariffs in the global South countries, "which will further deprive them of a crucial policy instrument to support their infant industries" (Ghosh 2017).[19]

Many of these seem to be the means to perpetuate what Peter Evans (1979) refers to as "dependent development," a concept that is also tightly related to imperialism. As a system of accumulation, Evans (1979:37) argues, imperialism "ensures that any profit-making firm will tend to gravitate toward technology designed for center country social conditions and focus on low return, routine kinds of production in peripheral locations, but the interests of multinationals powerfully increase these tendencies." It is precisely these interests that drive the creation of treaties and agreements above, as a combined effort by multinationals, as the ones whose interests are protected, and global North states (especially the triad) where these multinationals are headquartered—whose goal is to make it difficult for the emerging countries to catch up so that they could also preserve their "old imperial powers." (Ghosh 2015:158). This is partly a response to the fact that the United States, the leader of these powers after the Second World War, has shown signs of being "significantly weaker both economically and politically" (Ghosh 2017).

[19] Core states like the United States often serve as major players in these treaties and agreements. In exceptional cases like what just happened under Trump administration, where the United States withdrew from the agreement (and thus very likely stopped it from happening due to the country's enormous power) that was "Obama's signature trade deal" (Baker 2017, BBC News 2017), the Trans-Pacific Partnership (TPP), the move was done not because the United States decided to fight against global inequalities. Instead, the decision to withdraw—put forward as a "commitment of the United States to free and fair trade" by the White House (see the brief statement issued on the Office of the United States Trade Representative at https://ustr.gov/)—is more likely a reactionary political response to the decline of the labor aristocracy that hurt the majority of the working class population in the United States. Indeed, what people refer to as "globalization" has largely benefitted northern global capital but not the majority of the working class in the global North. A new McKinsey report shows that, within the last decade, many people—mostly young individuals with low educational attainment and women, particularly single mothers—in global North countries have suffered from "worse economic outcomes," in which 65 to 70 percent of households in 25 advanced economies "were in segments of the income distribution whose real incomes were flat or had fallen" between 2005-2014 (quoted in Ghosh 2017).

Regionally, institutions such as the Asian Development Bank (ADB) also serve as tentacles of powerful global capital. Responding to a series of increases in minimum wage, ADB issued a report in 2005 that states that "labor regulations" are a "serious concern, more so than labor skills" that hinders Indonesia from improving its investment climate. Likewise, minimum wages also "weigh heavily on firm operations," according to the ADB (2005:10) report—a statement that echoes a World Bank report published ten years before, where the attempts of the Indonesian government to increase the minimum wage after the 1990s crises were met with criticisms that the policy would endanger Indonesia's competitiveness in the investment market (Agrawal 1995).

A recent ADB article by one of their economists, "Raising Indonesian Labor Productivity" (Allen 2016), shows that the institution has plenty of concerns about Indonesia—and although it mentions the stagnant real wage in the country, the main concern is not with this. Even though labor productivity has been "quite encouraging," with an average rise of 4.3 percent within the last five years, the economist writes, what is alarming is the fact that this increase in productivity seems to be "more related to slow job growth."[20] The assumption here being that people who work with "short term contracts" (which is more common in the job market, according to the article) must work harder to maintain their jobs and thus increase productivity for the "wrong" reasons. The "right" reason that the author expects is that productivity is high due to "efficiency gains."

[20] Productivity has indeed become a focus for the current Joko Widodo administration, another example of how the state caters to the interests of capital. It was listed as one of the nine priorities—known as "Nawa Cita"—that became the agenda of the administration, and was used as his presidential campaign "propaganda" in 2014: "We will increase people's productivity and competitiveness in the global market." It continues to list the planned agenda, focusing on areas such as infrastructure development (building and renovating roads, as well as building airports and industrial zones) to increasing investments through several means, emphasizing the need to create more investor-friendly regulations and bureaucracy (translated from Widodo and Kalla 2014).

Ensuring that productivity is due to efficiency gains is important because, as the author argues, "gains in labor productivity are essential for the economy as a whole to maintain competitiveness." Then, she gives three suggestions to improve efficiency gains: "a better linking of wages and productivity, an improved combination of flexibility for enterprises and security for workers, and the strengthening of systems and incentives for skills formations"—all are well related to the discussion of flexible production and systemic rationalization in the previous chapters. The suggestions here may seem benign; they even seem to be sympathetic toward workers since a better linking of wages and productivity, for example, means that wages need to rise when productivity also rises. The article even encourages stronger collective bargaining so that compliance with the minimum wage can be improved and pay gains from minimum wage increase can be "filtered through to all workers." Moreover, the author argues that the linking between wages and productivity would lead to "stable real unit labor costs and profit growth" which is good for employers (Allen 2015).

However, the issue here is not merely about compliance in paying minimum wages. Companies like Java Film and Star Inc. comply well, and they engage in collective bargaining with labor unions (although they complain about it). As discussed in this dissertation, increases in productivity are integral to the workings of labor-value chains, with the aim of keeping unit labor costs low. For global capital, unit labor costs indeed need to be stable—but stably low. That is why, as the case studies have shown, every time there is an increase in minimum wage, multinational clients would force their dependent suppliers to increase productivity and efficiencies, which boils down to increasing workers' productivity on the shop floor through a series of reorganizations of

work. Multinationals would even interfere directly. As expressed in my interviews, they would "summon" the executives from Java Film and Star Inc. whenever they saw high waste in production—ironically resulting from their unreasonable demands for flexibility—that may threaten an increase in selling price for their next purchase. One giant multinational client went as far as offering to hire for them a world-class management consulting firm, at the client's cost, to help their suppliers review their operations and find efficiencies in their business processes. What would be the benefit for the client? As the executive explained, "any savings that we could achieve in these efficiencies—it would translate into savings for them in terms of lower selling price."

The disconnect between productivity and income is a common case; it suggests that "productivity gains were either grabbed by employers or passed on in the form of lower prices to maintain competitiveness," writes Ghosh (2017). Contrary to what the ADB assumes, what happens in reality is *not* exactly that productivity is already high (due to low job growth) and then wages should catch up. Instead, it is the other way around: whenever there is an increase in wages (should we be so lucky), global capital personified in multinationals enforces additional increases in productivity, by any means necessary. And in the process, the "flexibility of enterprises" will be improved, but not the "security of workers"; and the "systems and incentives" will be strengthened, but merely for increasing control over the labor process instead of for "skills formation." But this issue aside, the point remains clear: institutions like the ADB emphasize the importance of productivity growth led by efficiency gains so that countries can remain competitive in labor-value chains—whether these gains are then captured by oligopolistic capital through exploitative means is not their concern. Unmasking such mainstream

discourse is important. The labor-value chains framework allows us to see the extraction of surplus, driven by capital accumulation, and hidden behind the dominant rhetoric of competitiveness, productivity, efficiency, flexibility, and the like. It enables us to properly examine the unequal capital-labor relations that characterize globalized production.

The world economy that we know now is, using Amin's (2013a:19) term, the "contemporary capitalism of generalized, financialized, and globalized monopolies," which today "tightly control all the systems of production." Apologists often frame the phenomena discussed in this dissertation as an inevitable, neutral outcome of "globalization"—but once we look closely and critically, it is clear that the present phase of globalization is none other than a new phase of imperialism, used by capital and its state instruments to put forward, in Amin's (2013b:15) words, a "set of demands by which they exert control over the productive systems of the periphery of global capitalism (the world beyond the partners of the Triad)."[21]

The labor-value chains framework helps us see this. It also helps us see the class struggle that occurs in "the hidden abode of production"—class struggle that remains alive throughout history: From the workers' fight to shorten the working day in Marx's era in England, to the threats of protests and strike that keep lurking behind factory plants in the 21st century Indonesia—which make their bosses, as well as their bosses' bosses (i.e., multinationals), nervous, no matter how much power they possess. In the end, workers are the direct producers of commodities. Even though they can be replaced by others from the industrial reserve army, workers' struggles always manage to present real and frightening threats for their bosses. As an elderly man whose son works in one of the

[21] This paragraph is taken from Suwandi and Foster (2016).

factory plants I studied said to me one afternoon, “Workers are the ones who make the goods for the company. If they all refuse to work, surely, the company would suffer. Can’t the company see that?” They surely can. And so does global capital who, as Hymer (1979:43) writes, “rules from the tops of skyscrapers” in the metropolis.

APPENDIX

SOME NOTES ON THE METHODOLOGY FOR THE CASE STUDIES

I collect data through observation and "key informants interviews" to examine how global South capital manages both its workers and relationship with multinational clients. The goal here is not to look for a statistically representative group of "samples," but to gain in-depth information from individuals who are knowledgeable of the examined issues and willing to share the information (Kumar, Stern, and Anderson 1993; Evans 1979). Although some traditional use of key informants technique in anthropology is often considered a form of unstructured interview, this technique has been developed into different forms, including the "focused use of key informants" where there are some structures to the interviews (in my case, semi-structured). Here, the interviewer is familiar with the information that will be sought from the interviewees and has a framework of questions with her while doing the interviews (Tremblay 1957). In addition to observations and interviews, I also analyze the companies' documents – ranging from brochures, videos, annual reports, and executives' presentation materials – given to me during my fieldwork.

I deliberately avoid mentioning specific information about the companies so that their identities can be protected. This includes their exact locations, the names and profiles of their customers as well as their competitors, and other characteristics that may risk their anonymity. I conducted the fieldwork in three steps: (1) a pilot study at Java Film in 2012, in which I attended several management meetings and observed the factory for the first time; (2) a series of semi-structured interviews of Java Film's top

management in 2013, along with more factory observations; (3) a series of semi-structured interviews of the top management at Star Inc. in 2015, along with factory observations. The interviews were done mostly in Indonesian, although some participants preferred to use a combination of Indonesian and English. Quotes displayed here are translated by me.

I interviewed fourteen Java Film executives and nineteen Star Inc. executives. All interviewees are quoted anonymously to protect their identities. Their specific job titles and other background information—such as age, years of working, education status—and other possible identifying attributes are not revealed in this report. I am using the information gained from the interviews in relation to the participants' knowledge, views, and experience as members of the company management—thus, their personal identities are largely irrelevant in this context. I am also trying to reveal as little information as possible about these companies' customers and competitors. All are referred to under pseudonyms as well. The little information I provide here, such as which country or region the corporation is based, is given because it is deemed necessary to the discussion.

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