

## **Capitalist Crisis in the “Age of Global Value Chains”**

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### **Abstract**

In this article, we analyze the strategies, surprises, and sidesteps in the World Bank’s 2020 World Development Report, *Trading for Development in the Age of Global Value Chains*. Strategically, the Report promotes an expansion of neoliberal globalization couched in the language of global value chains (GVC). Curiously detached from the broader academic literature on GVCs in international trade, it promotes a sequentialist vision of GVC upgrading that evokes the stagism of classic modernization theory. The authors sidestep glaring issues, such as China’s pivotal role in the landscape of global trade, and are largely silent on others, including the climate crisis. Importantly, the Report acknowledges negative distributional trends associated with the rise of GVCs, including the excessive benefits reaped by “superstar firms” and the now well-documented decline in labor’s income share. These observations are not reflected in the document’s policy section, however. Instead, the Bank rehearses a familiar litany of prescriptions, with the threat of nationalist populism and rising protectionism providing a new bottle for this old wine. Drawing on a range of literature including UNCTAD’s recent Trade and Development Report, we highlight not only the limits of the Bank’s continued adherence to neoliberal orthodoxy but also the necessary starting points for any meaningful discussion of the merits, limits and future of global value chains.

## Introduction

As the World Bank's flagship publication, the World Development Report (WDR) is central to the institution's self-conception as a 'knowledge bank.' This has been true since 1978, when Bank president Robert McNamara first proposed an annual report as a way to establish the institution's intellectual leadership in the development field. Dedicated each year to a specific theme, the WDRs aim not to present novel findings, but rather to mobilize existing research in ways that help to motivate the Bank's policy agenda and legitimate its ongoing work (Fine et al. 2016).

Over time, the critiques of these Reports have become nearly as routine as the annual publication of the document itself. This pattern of critical engagement holds true across a range of yearly thematic foci, from the 2008 WDR on agriculture (McMichael 2009) to the promotion of behavioral economics in the 2015 Report (Klein 2017) to the 2019 discussion of digitalization and the changing nature of work (Meagher 2019). Geographers will be only too familiar with the sub-disciplinary debate surrounding the 2009 WDR on "reshaping economic geography" (Peck and Sheppard 2010). While the bulk of such critiques centers on the Bank's inadequate treatment of the topic at hand, most acknowledge, directly or indirectly, that the WDR's weaknesses are a product of its conflicted status. The Report is "both a research-based document and a political document, in the sense that as the Bank's flagship its message must reflect back the ideological preferences of key constituencies and not offend them too much, but the message must also be backed by empirical evidence and made to look 'technical'" (Wade 2002: 220; also Prugl 2017).

While the dual nature of the WDR as both a political document and a research document is a constant feature of its production, what does change is the context within which it is produced. In this sense, the 2020 WDR, *Trading for Development in the Age of Global Value Chains*, is very much a product of its time. Indeed, one might argue that a WDR devoted to this topic is overdue, as global value chains (GVCs) have been in vogue for well over a decade. In retrospect, the 2010s might be seen as the high water mark of interest in GVCs on the part of international financial institutions and multilateral development banks (Neilson 2014; Werner, Bair and Fernandez 2014). Perhaps the clearest manifestation of this surging GVC policy tide is the Trade in Value-Added (TiVA) database. Jointly launched by the WTO and OECD in 2012, this project uses national input-output tables to measure trade in value-added. Such a measure addresses the 'double counting' problem inherent in traditional trade data, which report the gross value of trade flows, including the value of imported inputs, as opposed to the value that is added in the exporting country. Yet TiVA is as much an epistemological exercise as a methodological one. What is critical about the trade in value-added measure is that it gives GVCs a statistical footprint, and in so doing, makes them legible as objects of trade policy. While proponents of liberalization have long argued that imports fuel exports, the TiVA database appears to provide empirical support for this claim, thereby reinvigorating calls for greater openness and deeper integration.

Yet even as international institutions have redoubled their efforts to demonstrate the centrality of GVCs to global trade, the pace of global economic integration that TiVA seeks to illuminate had, in fact, slowed several years prior to the launch of the database. The Global Financial Crisis and subsequent economic slump marked the end of what had been a dramatic proliferation of GVCs. As the WDR 2020 itself acknowledges, GVCs peaked in 2008 at 52% of global trade (2020: Figure 0.1). The GVC share of global trade subsequently stagnated, even before the onset of the COVID-19 crisis. The pandemic, in turn, has fueled concerns about global sourcing, as governments become fearful that far-flung supply

chains will limit their access to medical supplies like personal protective equipment. While the 2020 WDR was written prior to the dual health and economic crises unleashed by COVID-19, the threat to the status quo posed by an increasingly aggressive populist nationalism was already clear.

It is in this context of stagnant GVC growth, rising protectionism, and heightened anxiety that the Bank seeks to reassert the enduring relationship between trade and development in the “age of global value chains.” Declaring the “age of” anything implies a widely recognized, universal phenomenon, generally associated with planetary epochs (e.g., “the ice age” and more recently the Anthropocene) and political periods (e.g., “the age of Imperialism”). The weightiness of the phrase projects the politically fraught character of a document that, on the one hand, strains to celebrate and defend the worldwide reorganization of production through hyperspecialization, while simultaneously sounding the alarm on the numerous threats to this achievement, on the other. In short, the report’s title aptly captures the Bank’s efforts to consolidate the idea that global value chains are a necessary, if threatened, infrastructure that must be preserved, improved upon, and expanded if the achievements of globalization are to endure. Given this scenario, an analysis of the Bank’s latest agenda-setting document is more than simply an academic exercise; it offers a window into how the Bank understands the cracks in its hegemony as well as its efforts to seal them up.

In what follows we explore how the WDR selectively engages but mostly elide critiques of GVC development, organizing our analysis into three main sections. In “Strategies” we focus on the methodological approach that underlies the Report’s narrative. In particular, we look closely at how the authors instrumentalize GVCs to create a typology that arrays national economies in a sequential trajectory. This exercise conflates the firm’s location in a value chain with the country’s location in a stagist development process, thereby updating 20th century modernization theory for the 21st century global economy. In “Surprises,” we focus on the Report’s discussion of the dark side of GVCs, including the link it acknowledges between market concentration, intensified global competition, and declining returns to labor. Despite these flirtations with a more critical tone, the subsequent policy discussion largely retreats to the safety of orthodoxy, as we show in the next section, “Sidesteps and Silences.” Here, we review the Report’s inadequate treatment of key issues, including platforms and competition policy, the generalizability of China’s development trajectory, the environmental implications of GVCs, and the conceptualization of GVC governance. We conclude by asking what an alternative, clear-eyed narrative might look like, one in which global value chains are not the naturalized landscape of the global economy, but rather analytical tools for understanding the role of fragmented production networks and international trade in driving uneven development.

## **I. Strategies**

As is typical for WDRs, the 2020 Report is characterized by an exceedingly eclectic assemblage of data points. Brief references to specific cases are strewn throughout the Report as evidence of a positive association between GVCs and an outcome of interest without any stated logic of case selection. Beyond these anecdotal accounts of success, the Report’s central claim—that GVC integration is beneficial for economic development—rests largely on a series of “event studies” that purport to establish the returns to GVC upgrading. These studies begin by classifying countries into a hierarchical typology of “GVC groups,” and then asking which countries have successfully transitioned from a lower to a higher stratum within this typology. Having identified this set of GVC “upgraders,” the authors estimate a series of regressions to quantify the cumulative effect of these transitions on four outcomes:

economic growth, wages, income inequality and CO<sub>2</sub> emissions. The key empirical claim is that transitioning from a “lower” to a “higher” stratum brings beneficial outcomes. However and as elaborated below, this evidence is almost entirely without merit because the effort to classify countries according to their “stage” in GVC development is flawed (see box 1.3 on pp. 22-23), as is the execution of event studies in the Report (see box 3.2 on p 75).

The WDR’s typology classifies countries into one of four groups according to their mode of GVC participation: (1) commodities, (2) limited manufacturing, (3) advanced manufacturing and services; and, (4) innovative activities. Operationally, the authors use a sequential procedure involving a series of variables to demarcate the boundaries between categories (see Table 1). They begin by defining “commodity” countries as the set for which the ratio of domestic manufacturing value added (VA) in exports to total VA in exports is less than 60% AND backward manufacturing (the percentage of exports that rely on imported components) is less than a benchmark percentage, which varies by size (ranging from less than 20% for small countries to less than 7.5% for large countries, as shown in Table 1). These are the “commodity” countries regardless of their values on any of the other variables in Table 1. In the second step, the authors consider only the remaining unclassified countries and identify the set for which intellectual property receipts and R&D intensity are at or above similar benchmark percentages of GDP, again varying by size. These are the “innovative activities” countries regardless of their values on the other variables in Table 1. The third step considers the remaining unclassified countries in order to identify the set for which the share of manufacturing and business services in total domestic value added in exports is greater than or equal to 80% AND backward manufacturing meets or exceeds the set benchmarks for the country’s respective size category. These are the “advanced manufacturing and services” countries. In the final stage, the remaining countries are classified as “limited manufacturing” countries regardless of their value on any single variable in Table 1.

The outcome of this typological exercise is a set of country groups representing GVC types, with the resulting array bearing an uncanny resemblance to traditional modernization theory. Instead of individual countries passing through Rostow’s five stages of economic growth, countries occupy one of four strata on an upgrading trajectory. At the bottom of this hierarchy are commodity countries whose role in the global economy centers on exports of raw materials, while at the top are countries engaged in innovative activities, such as design and R&D. Countries in the middle two rungs occupy intermediate positions on this stylized value chain, with those in the “advanced manufacturing and services” group located somewhere on the upward sloping part of the “GVC smile curve” and the (residual) “limited manufacturing” countries placed along the flatter, bottom part of the curve (see Cattaneo et al. 2013). A country cannot be assigned to more than one location in this classificatory scheme, although many of the countries defined as “innovative” are likely also engaged in “advanced manufacturing and services,” for example.

Table 1: GVC Typologies by Variable Levels

	<i>Manufacturing Share of Total Domestic V.A. in Exports*</i>				<i>Primary Share of Total Domestic V.A. in Exports**</i>	<i>Share of Manufacturing &amp; Business Services in Total Domestic V.A. in Exports***</i>		<i>Intellectual Property Receipts/GDP</i>		<i>R&amp;D Intensity</i>	
	All	Small <sup>†</sup>	Medium <sup>†</sup>	Large <sup>†</sup>	All	All	Small <sup>†</sup>	Medium/Large <sup>†</sup>	Small <sup>†</sup>	Medium/Large <sup>†</sup>	
<b>Commodities</b>	<60%	< 20%	< 10%	< 7.5%		N/A	N/A	N/A	N/A	N/A	
Low Participation					<20%						
Limited Commodities					>20% to <40%						
High Commodities					>40%						
<b>Limited Manufacturing</b>	N/A	N/A	N/A	N/A	N/A	N/A	<.15%	<.1%	<1.5%	<1%	

<b>Advanced Manufacturing and Services</b>	N/A	>30%	>20%	>15%	N/A	>80%	<.15%	<.1%	<1.5%	<1%
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<b>Innovative</b>	N/A	N/A	N/A	N/A	N/A	N/A	>/.15%	>/.1%	>/.1.5%	>/.1%
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Notes

\*They do not explain how this is measured. We assume they used two series from UNCTAD-Eora GVC Database. The numerator is the sum of domestic value added in exports across the industries in the manufacturing sector. The denominator is the value by the total domestic value added in exports. Only the latter is readily available from the UNCTAD-Eora GVC Database.

FVAE is "Foreign Value Added in Exports" according to the UNCTAD-Eora GVC Database

\*\* They do not explain how this is measured. We assume they use two series from UNCTAD-Eora GVC Database. The numerator is the sum of domestic value added in exports across the industries in the primary sector. The denominator is total domestic value added in exports. Only the latter is readily available from the UNCTAD-Eora GVC Database.

\*\*\* They do not explain how this is measured. We assume they used two series from UNCTAD-Eora GVC Database: The numerator is the sum of domestic value added in exports across the industries in the manufacturing and business services sectors. The denominator is the total domestic value added in exports. Only the latter is readily available from the UNCTAD-Eora Database, and they give no indication of what industries reside in the "business services" sector.

†"Size" is not defined.

Over the period 1990-2015, 35 countries progressed to higher strata: 14 from the commodities to the limited manufacturing group; 11 from limited manufacturing to advanced manufacturing and services, and 10 from advanced manufacturing and services to innovative activities. Focusing on this set of countries, the authors then conduct event studies, which are econometric techniques to identify the impact of a discrete event on some continuous outcome (e.g. economic growth). There are four key “findings” from these studies. First, the Report claims that all of the transitions promote growth, with the first transition (from commodities to limited manufacturing) yielding the highest cumulative returns. Second, the Report claims all transitions increase wages (with some delay), with the first transition again yielding the highest cumulative return. Third, the transitions from commodities to limited manufacturing and from limited to advanced manufacturing reduce inequality, while the third transition (from advanced manufacturing to innovative activities) increases inequality. Finally, the Report claims that the first transition increases CO<sub>2</sub> emissions, while the second and third decrease them.

Beyond the problems we identify with their measurement of GVC “stage,” these event studies do not provide reliable evidence of anything. The typical event study begins by identifying a baseline rate of change on the continuous outcome that would have occurred in the absence of an event. The second step compares that baseline to what actually happened after the event, with the difference between these being attributed to the event (Bowman 1983). Clearly, the first step is critical for this methodology to yield meaningful results. However, the authors skip this step entirely. Instead, they simply estimate regressions in which one of four dependent variables (economic growth, wages, income inequality or CO<sub>2</sub> emissions) is regressed on a series of dummy variables equal to 1 in every year after a transition from either (1) “commodities” to “limited manufacturing,” (2) “limited manufacturing” to “advanced manufacturing,” or (3) “advanced manufacturing” to “innovative activities” along with time and country fixed effects. Thus, it is impossible to differentiate change in the four outcomes owing to the event from that owing to some other contemporaneous process.

Even if the authors had estimated a baseline rate of change, it would still be impossible to attribute the difference between this baseline rate and the post-transition rate to the observed transitions because their models neither control for (observable) alternative explanations for their outcomes of interest nor consider the (perhaps unobservable) processes by which countries *select* into their GVC strata. For example, the authors discuss correlates of strata membership in Box 2.7 (p. 57). Here they show that political stability (non-linearly), FDI and “logistics performance” increase while “backward integration” (non-linearly), tariff rates, and days to import decrease from the lowest to the highest GVC stratum. Any of these variables could explain both an “upward transition” and changes in the dependent variables of interest. Additionally, variables they do not consider, such as regime type or the quality of institutions could also explain both phenomena. From a policy perspective, this is significant insofar as favorable entrance into GVCs may be more likely if governments pursue institutional reforms rather than lowering trade barriers per se.

Moreover, while the event studies aim to identify the positive *effect* of successful transitions, the entire exercise is premised on the assumption that GVC integration is the *cause* of these transitions. Scant evidence is provided for this claim, however. One of the countries that transitioned from commodities to limited manufacturing, South Africa, had a sizeable manufacturing sector as early as the mid-

twentieth century (see, for example, Martin 1990). Among those that transitioned to advanced manufacturing and services are several post-socialist countries that joined the European Union over this period (Mahutga and Jorgenson 2016). This set also includes China, whose experience with GVCs is unlikely to be replicable by other developing nations--a point we return to below. Finally, some of the countries having made the final transition from advanced manufacturing and services to innovative activities either did so before GVCs became an entrenched organizational model worldwide (Ireland, Italy, Spain) or with significant help from a strong interventionist/developmental state (Singapore, South Korea) (see Evans 1995; Biggart and Guillen 1999). Thus, the coefficients in these event studies suffer from significant selection bias.

Beyond these flaws, the empirical literature gives ample reason for skepticism about the findings derived from this analysis. For example, studies that use more defensible research designs find that countries with firms in more subordinate GVC positions have lower wages and wage growth (Heintz 2006; Mahutga 2014; Zi 2020); that economic growth increases CO<sub>2</sub> emissions rather than decreases it (Jorgenson and Clark 2012) and that GVC integration increases national income inequality (Mahutga and Jorgenson 2016; Costinot, Vogel and Wang 2012). The only finding from their event studies that comports with the literature is that transitioning to innovating activities increases national income inequality (Alderson and Nielsen 2002; Mahutga, Kwon and Roberts 2017; Wood 1994).

This brings us to a more general observation, which is that the conceptualization and operationalization of global value chains in the WDR 2020 fails to incorporate insights from the large interdisciplinary literature on GVCs that has developed over the last several decades. Consider the variables listed in Table 1 that the authors used to classify countries into the GVC group. The key measure of GVC trade behavior (“backward integration”) ranks countries high if they have a large amount of foreign value added in exports. This would misclassify (or underestimate the degree of GVC participation of) two types of countries that have been studied extensively by scholars of GVCs and GPNs: first, those with many firms using a “full package” model that relies less on imported components. For example, countries that develop textile manufacturing as well as garment assembly or auto parts manufacturing as well as vehicle assembly, may have relatively low “foreign value added in exports” even though firms in these countries play a key role in global value chains for apparel and autos (Bair and Gereffi 2001; Sturgeon, Van Biesebroeck and Gereffi 2008). Second, countries that are home to many lead firms that engage in zero manufacturing, and instead offshore all of the manufacturing functions, will also score relatively low on this indicator, since while these countries import a lot of goods containing foreign value-added, these goods are consumed domestically rather than re-exported.

Indeed, much of GVC and GPN research focuses on these types of relationships among lead and supplier firms (Gereffi, Humphry and Sturgeon 2005; Sturgeon and Van Biesebroeck 2009; Dedrick et al. 2010; Mahutga 2012). This is because as an analytic framework the global value chain centers inter-firm networks; the key insight of the literature is precisely that to understand the geography of global production and the dynamics of international trade, we need to look closely at how firms govern exchanges within and across organizational boundaries. The idea that integration into GVCs can create opportunities for development is based on the premise that relationships among firms matter, and that some relationships are more likely to create opportunities for development than others. How one ‘aggregates up’ from the upgrading trajectories of firms to the development experiences of national



economies has long been a vexing problem for scholars working in this field (Bair 2005; Coe and Yeung 2015; Mahutga 2019). The WDR 2020, however, does not aim to solve this problem. Rather, it simply projects on to *countries* a framework that was designed to analyze the position of *firms*, resulting in a global economy-cum-value chain where the links are not stages in a production process but rather strata in a sequential development pathway. In this fashion, GVCs become constitutive of the development process, making their preservation paramount even as the Bank gestures towards their shortcomings.

## II. Surprises

In his foreword to the 2020 WDR, David Malpass, the President of the World Bank Group, describes the Report as an attempt to answer the following question: “Do GVCs still offer developing countries a clear path to progress?” Regular readers of the WDR will not be surprised to learn that the answer is yes: “developing countries can achieve better outcomes by pursuing market-oriented reforms specific to their stage of development” (p. xi). Nevertheless, the very posing of the query implies an awareness of the model’s waning allure, even as the Report seeks to reaffirm its continued relevance. In this sense, the foreword aptly captures the tone of the 2020 WDR, which doubles down on GVC integration and upgrading as the path to development while also acknowledging a growing sense of skepticism about the merits of this approach.

These acknowledgments are concentrated primarily in the Report’s third chapter, “Consequences for Development.” Here, the authors not only reproduce findings from a Pew survey showing deep and widespread antipathy towards globalization among swathes of global public opinion, but more surprisingly, they validate these sentiments by linking them to distributive patterns. In a striking section titled “Distribution of gains”, the Report’s authors attribute “public discontent” with globalization to a “widespread rise in firms’ profits” since the 1980s. The Report cites research drawing on data from 134 countries, subsequently published as De Loecker et al (2020), that found “the average global mark-up increased by 46% between 1980 and 2016, with the largest increases accruing to the largest firms in Europe and North America and across a broad range of economic sectors” (p. 83).

Where do these mark-ups come from? In part, they come from the reduced costs that GVCs make possible. As the Report observes, while lead firms are able to lower costs by purchasing inputs or goods from developing-country suppliers, they “are likely to only partly pass on” these savings to consumers (p. 84). The ability of lead firms to exploit this differential between their cost and the consumer’s price at retail has fueled a trend of growing market concentration in key sectors, enabling the rise of ‘superstar firms’: “The implications of GVCs for the emergence of superstar firms huge in scale, high in market power, and large in profit rates are exacerbated by the disproportionate bargaining power that these large lead firms may have over their suppliers” (p. 85). In other words, rising profits at the top of the supply chain do not simply reflect the providential bounty provided to importing firms by virtue of developing countries’ “natural” comparative advantage in abundant, low cost labor or resources; rather, the conclusion is that “supplier firms in developing countries are getting squeezed” (Ibid). The connection between the downward price pressure experienced by suppliers and the increased profits enjoyed by lead firms is clear, despite the Report’s awkward and passive locution: “The risk that firms from developing countries experience limited profits after becoming suppliers for global firms mirrors the rise in profits in developed countries” (Ibid).

The 2020 WDR strikes a related note in the discussion of firm-level upgrading, acknowledging that GVCs may trap firms “in dead-end tasks with few opportunities to innovate, upgrade and diversify” (p. 68).

Such traps are particularly likely to occur when wage suppression becomes central to competitive strategy:

Although low wage traps are not inherent to GVCs, the globalized and footloose nature of GVC production in some sectors may make them more likely, particularly where lead firms in GVCs use international production cost comparisons to maintain pricing pressure on suppliers in developing countries. Moreover, because GVCs can emerge as enclaves or dominant sectors in developing country economies, there is a risk that employers take advantage of monopsony and political power in labor bargaining (pp. 198-199).

This observation circles back to the problem of the supplier squeeze, as employers in developing countries (though not only) adopt varied tactics, including outright repression of worker organizing, in search of cost competitiveness. Grappling with the relationship between local labor conditions and global value chains, the Report argues that “many of the specific features of poor working conditions (particularly around workplace safety) are less a feature of GVCs themselves than of the labor markets in countries to which GVC activities are outsourced” (p. 200). Of course, this distinction belies the fact that low-wage production sites become incorporated into GVCs precisely *because* of these “local labor market features.” But, at least according to the stagist theory of development via GVCs, firms in these regions should experience upgrading over time, allowing labor costs to become a less important determinant of their competitiveness. It is here that the Bank appears to break with orthodoxy, suggesting that “GVCs may also exacerbate the problems of poor working conditions by creating incentives for GVC-linked suppliers in developing countries” to keep costs low (Ibid).<sup>1</sup> In other words, lead firms seek to leverage their market power over a global supply base by exerting downward pressure on supplier prices, and this persistent cost pressure frustrates the efforts of many developing countries to move up the value chain.

Having acknowledged the maldistribution of gains between supplier firms (primarily in developing countries) and importing firms (primarily in developed countries), the authors turn their attention to the distributive implications for intra-country inequality, asking how the growing market power of superstar firms affects the relationship between capital and labor: “The share of income accruing to workers—or how much of a country’s GDP accrues to labor through wages as opposed to physical capital and profits—is the other side of the markup phenomenon: profits are rising, but labor’s share of income is falling” (p. 86, also figure 3.17). This discussion of distributional outcomes resonates with much of the critical GVC literature published between 2005 and 2015 on the power of lead firms to exert buyer-power in ways that counteract the much touted ‘gains from globalization’ (Palpacuer 2008; Milberg and Winkler 2011; Baud and Durand 2012; Anner et al 2013). Why have these insights been neglected until now? Why is the 2020 WDR willing to offer a more critical assessment of distributive dynamics in GVCs? One possibility, supported by the Report’s references, is that articles published in mainstream international economics journals and National Bureau of Economic Research (NBER) papers have started to identify both the concentrated market power of superstar firms and labor’s declining income share (Autor et al 2017; De Loecker et al. 2020; Dao et al. 2017). The Bank simply cannot hide from these findings in its diagnosis, not least as a lead WDR author is Pol Antràs, Professor of Economics at Harvard and Director of the International Trade and Organization Working Group at NBER.

The Report's (albeit brief) discussion of spatial disparities is another surprise worth mentioning. Here, the Report echoes much geographic scholarship that finds that "economic integration across national borders is associated with greater spatial concentration within national borders" (p. 87; see e.g., Kelly 2013, Smith 2015). GVCs are not national phenomena but instead networked links that incorporate particular cities and regions into these circuits; the returns to these activities are also spatially concentrated given the larger neoliberal regulatory framework that has eroded inter-regional transfers and welfare programs where they existed. "Rather than being distributed equally across and within countries," the authors confirm, "the gains have been concentrated, accruing to specific firms, workers and locations" (p. 83).

Lest we presume that this analysis reflects the Bank's acceptance of economic geographers' critiques of its 2009 eponymous report, the WDR's assessment of poverty reduction erases the ramifications of these observations on uneven national development. The Report is at pains to associate GVCs with poverty reduction and "shared prosperity" (p. 80). Here, familiar rationales that correlate economic growth and poverty reduction prevail, including strategic reference to older Bank research from the early 2000s that made the (empirically weak) claim that countries that liberalized trade in the early stages of globalization benefitted from more poverty reduction than those that did not. This same set of work was subsequently chastised in the independent "Deaton Review" of World Bank research, which noted that the Bank promoted these findings "without recognizing their fragile and tentative nature" (Banerjee et al. 2006: 53). And with direct parallels with the WDR 2020, went on to state that

much of this line of research appears to have such deep flaws that, at present, the results cannot be regarded as remotely reliable, much as one might want to believe the results. There is a deeper problem here than simply a wrong assessment of provocative new research results. The problem is that in major Bank policy speeches and publications, it proselytized the new work without appropriate caveats on its reliability (Ibid).

Instead of recognizing the prior limitations of earlier Bank research, the WDR 2020 simply repackages these old assertions for "the age of GVCs" with the claim that increased country integration via GVCs is associated with poverty decline (p. 81, Figure 3.10). The authors focus on the same country cases (Mexico and Vietnam) as their analysis of uneven national development. When it comes to poverty reduction, however, the claims to the benefits of GVCs jump scale from local, unevenly accrued returns from value chain integration to GVCs as catalysts for national poverty reduction (pp. 81 and 88). The authors assert strong, generalized positive effects on income that "are likely to extend to everyone in society—if the welfare state works" (p. 81). But welfare policies, it turns out, are not what spread the gains. Instead, we learn that market forces distribute GVC returns. "GVC integration in certain regions... can give people the incentive to migrate within their country, which can be a powerful mechanism for reducing poverty," the authors claim (p. 81). If not the pull effect on migrant labor, then the other form of distribution is simply new demand generated by GVC employees, who seek more goods and services, "which will increase [employment?] opportunities for a broader and more diverse set of agents" (Ibid).

A final surprise is the Report's analysis of the global tax system and the relationship of GVCs within and to it—a question that is connected to the welfare state and whether or not it "works", as well as governments' capabilities to offer "place-based policies" to train or relocate people who are adversely

affected by “the economic forces that disproportionately benefit some areas” and not others (p. 88). Like other aspects of the WDR already highlighted, the analysis is both important and contradictory. On the one hand, the Bank recognizes that GVCs enhance “opportunities for tax avoidance by manipulating where value is recognized for tax purposes” and encourage competition among states to attract FDI through tax incentives. GVCs facilitate MNCs to use their corporate structure to “locate activities that generate high profits with relatively little input or ‘substance’” (p. 92), leading to increased mark-ups recorded in jurisdictions that do not necessarily reflect the location of substantive economic activity. Such reporting represents a strategy of value capture and its “geographical transfer” leveraged through market power (Baglioni et al. 2019; Hadjimichalis 1984). The Bank correctly points out that these practices and the specific challenges posed by the high mobility and contested valuation of intangibles “run counter to the principle of taxing activities where value is created” (pp. 92-93). Aside from being one of the few parts of the Report to directly engage the problem of “value” in GVCs – a vexed question in GVC analysis (Havice and Pickles 2019) – this frank account of the relationship between GVCs and “global wealth chains” (Seabrooke and Wigan 2017) opens up a number of questions to do with the Report’s underlying assumptions of “upgrading”, its stagist development model, and the distinction between value creation and value *capture*.

Rather than facing these dilemmas head-on by investigating the relationship between global value chains and global wealth chains (Quentin and Campling 2018), the Bank provides a range of policy options that center low-tax competition, such as reinvigorating Special Economic Zones (pp. 182-185). One important tax-related initiative, highlighted in the Report’s final chapter on ‘International Cooperation Beyond Trade’, is the OECD/G20 Inclusive Framework on the Base Erosion and Profit Sharing (BEPS) process (pp. 239-242). The BEPS process includes a number of tax reform proposals that deal precisely with the articulation of GVCs and the global tax system, but it is far from complete. Additionally, skeptics have raised a number of questions, including the degree to which the entire initiative is just a rubber-stamping exercise, and whether jurisdictions would have the resources to implement such reforms, were they actually adopted. In short, the Report surprises its audience with these brief discussions of maldistribution, labor’s squeeze, spatial inequality, and tax avoidance, but “reader beware”: these mentions are rhetorical at best (and disingenuous at worst). The remainder of the 2020 WDR ignores the implications of these findings for global development almost entirely.

### **Sidesteps and Silences**

In referring to sidesteps and silences, we mean to signal not only the inadequate treatment of issues that merited more extensive discussion in the Report, but also the Bank’s failure to sustain its own analytical narrative throughout the 2020 WDR. This failure creates a disjuncture between the Report’s diagnoses of various problems and its policy recommendations. In this section, we focus our discussion on four such disjunctures: market concentration and the digital economy, China and uneven development, GVCs and environment, and governance in GVCs. Our treatment of the first two issues benefits from juxtaposing the WDR 2020 with another flagship report focused on global value chains: UNCTAD’s 2018 *Trade and Development Report* (hereafter TDR). The 2018 TDR, titled *Power, Platforms, and the Free Trade Delusion*, examined many of the trends that the World Bank would acknowledge two years later in the 2020 WDR. But while the WDR largely minimizes the negative consequences of the ‘age of global value chains,’ the TDR presents market concentration, rising inequality, and declining investment as foreseeable trends that will not only continue but deepen in the absence of targeted policy interventions.

### *Digital platforms as facilitators of GVC participation*

The sixth chapter of the WDR focuses on the challenges and opportunities created by digitization and automation, with a focus on platform firms. The authors argue that these increasingly critical intermediaries “enable GVC participation... They reduce transaction costs and help verify the quality and reputation of suppliers and match them to potential foreign buyers” (p. 140). Portrayed as neutral transmitters of information, digital platforms “make it easier...to connect, but harder to compete” (p. 141). In part, this is because the strategies that platforms use to facilitate market entry, such as consumer ratings, “tend to favor concentration” (p. 141). Moreover, because platforms grow by exploiting network effects, the general problem of market concentration among lead firms is particularly acute in digital-intensive sectors, where markups have grown more rapidly than in other industries and superstar firms account “for a higher share of profits, which increasingly are (sic) unevenly divided” (p. 146). In short, the WDR frames digital platforms primarily as a trade-facilitating technology, albeit one that produces “uneven benefits (p. 144) and “new regulatory challenges” (p. 145).

Yet while the WDR gestures towards the increased risk of anti-competitive practices resulting from unchecked market concentration, particularly among platform firms, it simultaneously advocates for markedly anemic solutions to this problem. Chapter ten, for example, affirms the importance of “cooperation beyond trade,” including the importance of joint efforts that “enable countries to overcome jurisdictional and capacity constraints to combat anticompetitive practices” (p. 238). The bulk of this discussion emphasizes the limited ability of competition law in importing countries to address the practices of what the Report describes as “foreign cartels” and acknowledges the particular difficulties that developing country governments face in trying to protect consumers from anti-competitive behavior. The authors suggest that the home jurisdictions of multinationals could play a constructive role by ending national exemptions from competition law for anti-competitive practices abroad and allowing foreign consumers to challenge such practices in their courts. Such offers could “be part of a broader trade agreement obliging importing countries to liberalize and exporting countries to regulate” (p. 251). Absent from this discussion of competition policy, however, are measures that might address the routine problem of market concentration evidenced in the growing power of superstar firms—even though, just a few chapters earlier, the Report acknowledged that the increasing markups enjoyed by such firms raise concerns about anti-competitive behavior.

This, while the WDR acknowledges that “anticompetitive practices in international markets can affect the distribution of gains from participating in GVCs” (246) these practices are largely reduced to collusive behavior on the part of cartels. Moreover, the intractability of this problem is framed primarily as one of extra-territoriality, which would require regulatory cooperation to solve. In contrast, the authors of the TDR offer a more expansive view of the policy interventions needed to address the regulatory challenges posed by market concentration, particularly in digital-intensive sectors where network effects and economies of scale are especially pronounced: “[O]ne way of addressing rent-seeking strategies in a digital world would be to break up the large firms responsible for market concentration. An alternative would be to accept the tendency towards market concentration but regulate that tendency with a view to limiting a firm’s ability to exploit its dominance (UNCTAD 2018: VIII).”

Our point is that while the authors of the TDR and WDR are largely in agreement that market concentration is occurring in key sectors and that it may have anti-competitive effects, the policy

discussions that proceed from these shared observations is sharply different. Whereas UNCTAD's TDR draws a connection between market concentration and rent-seeking strategies, the World Bank's WDR opts for a more delimited conceptualization of anti-competitive behavior and eschews the terminology of "rent seeking strategies" to describe the prerogatives and practices of firms. In fact, this term appears only once in the 266 pages of the WDR, where rent seeking refers not to the activities of *corporations*, but rather to the effects of traditional industrial policy as applied by *governments*. The authors observe that while some countries have made good use of "tax incentives, subsidies and other protectionist measures designed to build domestic supply chains in targeted sectors," too often such instruments "have proven ineffective or have created efficiency-sapping distortions by contributing to rent seeking and misallocation of capital. They are also increasingly problematic in a GVC environment, where full supply chain development is not necessary and trade integration is paramount" (p. 175).

#### *China as a replicable development model*

Underlying this difference in tone around policy is a more fundamental divergence between UNCTAD and the World Bank regarding the continued viability of the GVC model for development, particularly when considering the trajectory and significance of China. Indeed, one of the more jarring "sidesteps" in the WDR is its treatment of China. As noted above, the sequential transition story presented by the Bank identifies China as a country that has moved from limited to advanced manufacturing, and thus places it in the same category with countries such as the Czech Republic, Poland, Romania and Turkey (e.g., pp. 21, 41, 48). The authors thus present China as one example, albeit an "intriguing" one (p. 45), of successful upgrading. They proceed to ask, "How did [China] defy the global decline in domestic content in exports, despite its deep engagement with GVCs?" (Ibid). The substitution of intermediate input imports with domestically manufactured ones, we are told, was driven by trade and foreign direct investment (pp. 44, 45), together with lower tariffs (p. 48). The sheer size of China's domestic market was also a factor, the authors explain, similar to the U.S. experience (pp. 46-7).

China's ability to increase backward linkages and create new lead firms is thus presented as a firm-level endeavor facilitated by liberalized investment and trade policies, unique perhaps but not singular: other countries, we are told, can do it too. For example, after recognizing that "large bargaining power imbalances may trap suppliers" such as Bangladesh and Cambodia in the "captive" apparel GVC, the Report notes that the China example shows "that industrialization may still be possible". It then attributes Chinese firms' upgrading in the smartphone industry to their "connectivity to international technology eco-systems" and their investment in marketing and design (p.75). Yet not once is the role of the Chinese state mentioned as an explanatory factor in this upgrading, despite its demonstrated centrality to the process (Shim and Shin 2016).

While the authors celebrate China's success in upgrading, they follow the World Bank playbook on the East Asian miracle (Wade 1996) in that they not only sideline discussion of the state, but also condemn the industrial policies that facilitated the country's structural transformation. With a muted exception for subsidies to green goods, the WDR opts for an all-out assault on Chinese protectionism in the form of subsidies and state-owned enterprises (SOEs). The WDR cannot ignore the reality that SOEs play an active and growing role in the economies of China and other emerging countries, integrating, forging and increasingly restructuring the value chains that link in and through these territories. But this reality is framed as competition-distorting and in need of WTO reforms (e.g., pp. 8, 187, 220, 228-9), since SOEs are unfairly "subsidized through soft loans, guarantees, and subsidies, among other things" (p. 228).

In stark contrast, the TDR offers a careful and systematic review of data and explicit recognition of China's status as an outlier, as well as the industrial policies, including support to SOEs, which have contributed to its position. The TDR's authors argue that "China's particular success in using GVCs has crucially relied on its capacity to claim and use policy space to actively leverage trade through targeted industrial and other policies aiming at raising domestic value added in manufacturing exports" (UNCTAD 2018: v). This is no secret. The Chinese state's position is clearly articulated in a series of 5-year plans and its *Made in China 2025* strategy for upgrading in manufacturing GVCs (Central Committee of the CCP 2016; State Council 2015), as well as in critical responses from Western firms and governments who seek to challenge China's rise as being "unfair" (European Chamber of Commerce in China 2017). As UNCTAD makes plain, China's development "has also relied on the ability of the Chinese authorities to develop independent financing mechanisms and acquire control over foreign assets, which are now being perceived by developed countries as a threat to their own business interests" (Ibid).

UNCTAD also makes the important point – ignored by the WDR – that China's success is not independent of the prospects for other countries to do the same. The observation that China's position in value chains and the global economy more generally has implications for other countries in the global South is widely echoed and debated in the literature on international development. The WDR, as we have discussed, doubles down on its sequentialist trajectory, offering a staid almost naive prognostication: If China can do it, you (e.g., Bangladesh, Costa Rica, Vietnam, etc.) can too. The shift of labor-intensive manufacturing "to China and Vietnam, now (as wages rise in these countries) to Bangladesh, Cambodia and Ethiopia, reflects the importance of low-cost labor in this sector" (p. 163). Such observations are intended to buttress the Bank's conceptualization of upgrading trajectories as discrete, sequential developmental transitions along with its emphasis on factor endowments as a determinant of GVC access. But the policy literature suggests a far more complex interaction in which GVCs are both effects and drivers of uneven development (Horner and Nadvi 2018). Perhaps the most important policy debate of our current era is the impact of Chinese development on the fortunes of global South economies.

Working with the same Trade in Value Added OECD data, the UNCTAD authors offer a strikingly different, and to our minds a far more realistic, assessment of this question. Similar to the WDR, the TDR authors find that only a handful of countries increased the domestic value added of their exports from 1995 to 2014, and at levels far below that of China (2018: 45-47). The extant pattern for these countries was a decline in domestic manufacturing value added and an increase in the share of agriculture and extractive industry domestic value added of gross exports. While this outcome in part reflects the price spikes of the early 2000s commodity boom, the trend precedes and extends beyond it. The TDR authors conclude that "the rapid development of China (and more generally East and South-East Asia) has not triggered significant positive structural changes in the export structure of other developing regions; rather, it has intensified their role as providers of commodities" (ibid: 50). The authors foreground what so many other critical development scholars note: that upgrading is not a discrete process undertaken by firms or countries (Werner and Bair 2019). China's success is thus neither a replicable model nor an intriguing case, but rather *a new condition* of the world economy that shapes the prospects and strategies of other emerging economy firms and governments.

*GVC lead firms as positive environmental actors*

In our contemporary era of climate crisis and mass extinction in the biosphere, the WDR would have been remiss not to engage in an account of the relationship between GVCs and the environment. In Chapter five, 'Impact on the Environment', the WDR differentiates among 1) *scale effects* – the simple relation between growing GVC economic activity and increasing GHG emissions, pollution and waste – especially in 'limited manufacturing' GVCs (pp. 119-124); 2) the *composition effects* of how production is distributed across the planet via the cheapening of trade costs associated with GVCs, which the Bank sees as 'neutral' for the environment (pp. 119, 124-128); and, (3) *technique effects* associated with the speed-up of diffusion of environmental practices via GVCs and the reduction in environmental costs per unit of production for 'green goods,' from (decidedly niche) sustainable fashion to solar photovoltaic, wind turbine, and e-vehicle components (pp. 119, 128-131). The scale effects of GVCs are not insignificant and the Bank has little choice but to discuss these even as it remains silent on their profound implications. The rapid rise in GVCs in the 1990s saw significant increases in freight emissions as capacity surged, accounting for 2% of global CO2 emissions by 2016 (p. 121). The report recognizes the sheer catastrophe of a 'business as usual' scenario in freight transport, while remaining strangely hopeful that voluntary emissions targets set by the International Maritime Organization will be achieved, perhaps aided by increases in fuel pricing and excise taxes (p. 122).

Technique effects sit within the broader terrain of environmental governance and upgrading, wherein lead firms diffuse environmental improvements through their networks of suppliers (Ponte 2019). The Bank acknowledges some limits here: for example, lower-tier suppliers benefit far less from the diffusion of techniques and can be 'invisible' to lead firms (p. 130), with the result that environmental and other standards are often less comprehensively implemented. Although these limits manifest the power relations of chain governance, a consistent silence in the WDR (as we discuss below), their implications for policy are hardly considered. Much is made in the Report, as we have noted, of the garment and textile industry in Bangladesh. The Bank notes that garment production "has strained scarce land resources ...[and] consumes nearly twice as much water as the entire population of the capital, Dhaka, and ground-water levels are dropping at more than 2 metres a year" (p. 67). The Bank presumes that this scale effect will be ameliorated by firm governance (i.e., a technique effect). We learn that some lead buyers have "taken steps to reduce water waste and environmental damage" (Ibid). But given the environmental realities of the 'scale effects', in what ways will the initiative of these buyers genuinely transform the environmental harms associated with a country that now accounts for nearly seven percent of the world's apparel and footwear?

Indeed, the Report's consideration of the environmental implications of GVCs is perhaps its weakest area overall. Whereas with respect to labor's income share and the supplier squeeze, the WDR acknowledges the *negative* effects of superstar firms, on balance, the Bank presents these firms as *positive* actors that can implement sustainable practices for the environment. The authors argue that market concentration via these firms, for example, can lead to better managed common pool resources by eliminating messy coordination problems (p. 119). The Report proceeds to largely discount the notion that some lead firms may seek permissive regulatory environments (i.e., the "pollution haven hypothesis," see Levinson and Taylor 2008). Overall, by posing the environment purely as a thing that GVCs 'impact upon', the Bank (perhaps unsurprisingly) discounts that GVCs themselves are a product of, and are in relation with, the environment. Indeed, there is no point at which a GVC is *not* in articulation with the environment, from raw materials to energy, and from logistics to waste (Baglioni and Campling



2017). Thus, the scale, composition and technique effects produced by hyperspecialization in GVCs must be understood in their *totality*, as they influence and shape one another.

### *Governance as network coordination*

The sustainable practices that lead firms transmit or undermine through their supply chains is a specific manifestation of the general dynamic of governance, which enables lead firms to achieve control without ownership in multiple domains. Indeed, efforts to catalog and classify forms of GVC governance and to identify the determinants of these governance types constitute the core of the scholarly literature in this area precisely because prospects for leveraging GVC participation into desirable outcomes such as technology transfer vary across them. Theorizations of governance are understood as central to the utility of the GVC framework as an applied theory of development (Gereffi, Humphrey and Sturgeon 2005).

Yet the WDR offers no recognition of diverse governance structures, failing even to reference the widely cited typology proposed by Gereffi et al (2005). Instead, the authors confuse the organizational form of the network—that is, repeated transactions between independent firms—with a specifically *relational* mode of governance. This is clearest in the Report’s glossary. Here, a relational GVC is defined as “a global value chain in which actors are engaged in long-term firm-to-firm relationships” (p. 266). The problem is that this description applies equally well to the other network types proposed in Gereffi et al’s theory of GVC governance. What is missing from this definition is precisely that feature which distinguishes relational value chains: the relatively equal distribution of power between parties to the exchange. This relative symmetry enables “a close dialogue between more or less equal partners, as opposed to the more unidirectional flow of information and control between unequal partners as in captive global value chains” or the codified transmission of information that makes explicit coordination less necessary in modular chains (Ibid).

This underspecified conceptualization of relational governance is especially problematic because the 2020 WDR is peppered with references to “relational value chains” and the positive opportunities and outcomes they provide. These include firm-level learning (p. 70), “higher and more stable prices for farmers” (p. 72), “easier access to finance, foreign machinery and training (p. 76), and “the transfer of clean technology and know-how” (p. 129). At the same time, the WDR acknowledges that this mode of network governance can have detrimental consequences, citing the relational nature of value chains as “a likely contributor to the international dispersion of the markups that GVCs generate” (p. 85). There is little discussion of *how* relational governance produces these outcomes, however, and consequently, it is unclear under what conditions it leads to positive rather than negative results. In short, what is missing from the 2020 WDR is not simply an elaboration of governance types, but a recognition that value chain governance is fundamentally a relation of power between capitals, which, in turn, affects that between capital and labor (and vice versa) (Selwyn 2007). This fundamental misrepresentation hampers meaningful policy recommendations suited to address differential power along the value chain.

### **Conclusion**

In the Preface to the 2020 WDR, former World Bank Chief Economist Pinelopi Koujianou Goldberg warns that globalization is at an inflection point, although “there is still time to reinvigorate growth, trade and GVCs” (p. xiv). As we have documented in our critique, the Bank’s efforts in the 2020 WDR are (at best) frustrating. While acknowledging significant shortcomings and limitations of GVCs to deliver widespread,

positive development outcomes, the 2020 WDR retreats to the well-worn policies of the post-Washington consensus. As is true of past Reports, it sidesteps a generation of research -- this time on GVCs and GPNs—in favor of presenting a stylized and inaccurate developmental narrative.<sup>2</sup> Claiming to show that positive outcomes result from country transitions through sequential stages of a GVC, the WDR forecloses any meaningful discussion of the evolving conditions for, and significant limits to, GVC integration. Of course, the legion of professional economists that work at and consult for the World Bank would surely be in a position to identify the same methodological problems that we set out above in the “Strategies” section of our critique. How, then, to explain the prominent inclusion of such a flawed analytical exercise in the Bank’s flagship publication? The obvious conclusion is that the WDR is once again more a political document than a research report.

As a primarily political document, the specter of protectionism justifies the disjunctures that we have identified in the 2020 WDR: recognition of superstar platform companies but wholesale denial of any need for robust anticompetitive policies that would regulate them; acknowledgement of China’s industrial policy and SOEs but a redoubling of a universal development narrative premised upon market liberalization; identification of GVCs as drivers of emissions and unsustainable practices but continued faith in the virtues of private governance to address the climate crisis; and finally, recognition of the effects of power along the chain while failing to acknowledge governance as more than benign or positive network exchange.<sup>3</sup> As a political document, then, it is difficult to assess the WDR as anything less than a willful miscomprehension of GVC dynamics and their effects. Ultimately, the Bank’s implicit position is that the hyperspecialization and efficiency (and exploitation of labor) generated in “the age of GVCs” has made better quality and cheaper goods available to more people, and that the improvements in material existence that these have brought is a reasonable price to pay for the current state of the planet and social inequality.

What might be done differently? We highlight the contributions of UNCTAD’s TDR to remind readers of the ideological battles being waged in the hallways of multilateral institutions. Like the TDR authors, we agree that GVC analysis offers not a model of development but rather an analytical tool to grasp the changing dynamics – limitations and constraints – of globalized capitalism. Given these transformations, academics can contribute to analyses and policy recommendations beyond the staid recommendations offered at the altar of paradigm maintenance by the Bank. This agenda has yet to be fully engaged by heterodox scholars, including ourselves, but for the first time in decades, creative policy solutions do appear to be on the table.

Even in a post-neoliberal era, international trade will remain necessary, if anything to ensure the equitable distribution of food and necessary materials for our various technologies. Here, we have the opportunity to consider what more just value chain and trade relationships would look like. In relation to the most urgent question of environmental decline, scholarship can do much to discount simple notions that reshoring GVC activities within the territories of specific nation-states will automatically *reduce* the threat of climate breakdown. Indeed, such a move is instead likely to *increase* emissions through capital intensification, intensify global processes of uneven development and result in productivity losses generated through the current levels of hyperspecialization in divisions of labor. Overall, global value chain analysis continues to offer a way forward for understanding the complexities of a new trade reality in the face of acute political economic and ecological limits. Beyond diagnosing the injustices of the arrangements that we analyze, the current conjuncture suggests the possibility for

normative approaches that break new ground on what constitutes socially and ecologically just global value chains.

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## Endnotes

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<sup>1</sup> Despite this critical analysis of the danger that GVCs may create “low-wage” traps for developing country suppliers, the WDR nevertheless encourages developing countries to embrace policies to boost their engagement with GVCs. The authors lament that “overvalued exchange rates and restrictive labor regulations raise the cost of labor, preventing labor abundant countries (sic) from taking advantage of their endowments” as the primary obstacle to more robust GVC participation (p. 5). Arguing that misguided policies inhibit this abundant factor from finding its price in Sub-Saharan Africa, they use Bangladesh as a positive foil despite the clear evidence of GVC-induced cost cutting with deadly consequences.

<sup>2</sup> Aside from its neglect of much GVC literature, the Report’s content betrays an inexplicable, and at times truly maddening, ignorance of phenomena about which there is a vast critical development literature. Take, for example, the observation that “firms report preference for female employees [in apparel and electronics assembly] because of the high levels of dexterity required” (p. 79; cf. Elson and Pearson 1981; Fernandez-Kelly 1983).

<sup>3</sup> Space precludes discussion of other significant neglected areas, including agriculture, which is given short shrift throughout the Report.