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VIRTUOUS CIRCLES? HUMAN CAPITAL FORMATION, ECONOMIC DEVELOPMENT AND THE MULTINATIONAL ENTERPRISE

by

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PREFACE

This paper is one of five presented at a meeting on FDI, human capital and education in developing countries held in Paris in mid-December 2001. They examine the links between FDI and human capital development, notably the interaction between the host country's policies affecting multinational enterprises (MNEs), its educational and training system, and the education and training activities of MNEs. The five papers are: 1) by Ethan Kapstein situating this issue in the broader context of current debates on globalisation, growth and poverty; 2) by Matthew Slaughter looking at the implications of FDI for skill demand and supply; 3) by Dirk Willem te Velde examining the interaction between FDI promotion policy and human capital; 4) by Bryan Ritchie reviewing the relationship between domestic policy, FDI and human capital in East Asia; and 5) by Magnus Blomström and Ari Kokko reviewing the literature on human capital spillovers for the purposes of defining a new research agenda.

Over the last ten years, globalisation has become a contentious issue. Much of the debate has focused on the role of capital inflows and FDI. There is substantial evidence that short-term capital flows, and portfolio capital in particular, increase the susceptibility of developing countries to financial crises, while FDI appears to be more stable and less subject to reversal and rapid outflows. Over the last decade an increasing number of emerging market economies have opened their countries to FDI, and have made attracting FDI an integral component of their development strategies. In Latin America alone, for example, net FDI flows climbed from \$18 billion in 1990 to more than \$85 billion in 1999.

At the same time, the composition of FDI has changed. The majority of FDI from OECD countries to developing countries now goes into services, rather than manufacturing and natural resource production. This change of composition has been accompanied by a change in purpose. As a result, FDI is now more likely to finance a large initial surge in capital goods imports, bringing advanced technology, know-how and organisational techniques. Is, however, FDI causing a race to the bottom as countries compete to attract investors, or to a race to the top as governments recognise the need for an educated workforce? Is it contributing to greater income inequality by increasing the demand for skilled labour, or to an increase in opportunities for workers at all income levels?

The possibility that FDI is contributing to widening wage and income inequalities has revealed an important but relatively unexplored link with human capital and human capital policy, education and training. In this context, and building upon research that the OECD Development Centre has done on globalisation, the Centre's meeting was organised to examine the links between FDI and human capital development. It

particularly examined the three-way interaction between the host country's incentives to attract FDI and its policies affecting MNEs, its educational and training system, and the MNEs education and training activities.

The general conclusion that can be drawn from these papers is that MNEs can and do generate substantial human capital spillovers in developing countries and that appropriate policies can maximise these. For instance, training policies are essential to creating positive synergies with MNEs but must be seen as not FDI-specific — they are necessary for the competitiveness of all enterprises. At this point very little is known about the training activities that MNEs are actually engaged in, and to what extent local employees and managers of MNEs subsequently work in domestic firms, or start new firms themselves.

Further research is needed on the relationship between human capital and FDI, that could be extremely fruitful for both policy makers and MNEs. In particular, we need to know more about the transmission mechanisms and the ways in which policies can support them. These five Technical Papers, each of them written by eminent specialists, provide a sound basis for further work which can enhance development potential in very practical ways.

Jorge Braga de Macedo
President
OECD Development Centre
29 July 2002

Technical Paper No. 191, *Virtuous Circles? Human Capital Formation, Economic Development and the Multinational Enterprise*, by Ethan B. Kapstein, August 2002.

Technical Paper No. 192, *Skill Upgrading in Developing Countries: Has Inward Foreign Direct Investment Played a Role?*, by Matthew J. Slaughter, August 2002.

Technical Paper No. 193, *Government Policies for Inward Foreign Direct Investment in Developing Countries: Implications for Human Capital Formation and Income Inequality*, by Dirk Willem te Velde, August 2002.

Technical Paper No. 194, *Foreign Direct Investment and Intellectual Capital Formation in Southeast Asia*, by Bryan K. Ritchie, August 2002.

Technical Paper No. 195, *FDI and Human Capital: A Research Agenda*, by Magnus Blomström and Ari Kokko, August 2002.

RÉSUMÉ

Au cours des dernières années, chercheurs et décideurs ont insisté sur le rôle de la formation du capital humain dans le développement économique. En créant du capital humain, les pays deviennent plus attractifs pour l'investissement privé, qu'il soit national ou étranger. Et cet investissement apporte croissance et prospérité.

Les données empiriques à l'appui de cette théorie sont toutefois ambiguës. Bien que l'investissement direct étranger se soit fortement accru dans nombre de pays depuis les années 80, son effet sur la croissance n'est pas très bien établi. Pourquoi ?

Ce Document technique met en évidence des orientations d'économie politique susceptibles d'éloigner les pays d'une croissance durable. En particulier, dans les pays qui n'ont pas un marché bien développé des capitaux et de l'éducation, beaucoup d'individus qualifiés ne trouvent pas les compétences de base dont ils ont besoin pour participer pleinement au développement économique national. A mesure que les sociétés se clivent, elles deviennent plus conflictuelles ; ces conflits ralentissent la croissance, quel que soit le niveau de l'investissement direct étranger.

SUMMARY

In recent years, academics and policy makers have emphasised the role of human capital formation in economic development. By creating human capital, countries become more attractive to private investment, both domestic and foreign. And through such investment, countries grow and prosper.

Yet the empirical evidence in support of this theory remains elusive. While foreign direct investment (FDI) has multiplied in many countries around the world since the 1980s, its effects on growth are uncertain. Why is that the case?

In this paper I argue that political economy pathways exist that may lead countries away from sustained growth. In countries that lack well-developed capital and education markets, many otherwise qualified citizens may be denied the basic skills they need in order to contribute fully to the nation's economic development. As societies become divided, they become more conflicted, and this conflict dampens growth, irrespective of the level of foreign direct investment.

I. INTRODUCTION

“...the primary determinant of a country’s standard of living is how well it succeeds in developing and utilising the skills, knowledge, health and habits of its population”.

Gary S. Becker, 1994

Since the early 1990s, an increasing number of emerging market economies have welcomed foreign direct investment in the hope of stimulating development and growth. In Latin America alone, net FDI flows climbed from \$18 billion in 1990 to more than \$85 billion in 1999. The firms making these investments at present constitute over 13 per cent of manufacturing employment in Brazil and more than 17 per cent in Latin America. In central and eastern Europe, foreign direct investment has risen from negligible levels in the early 1990s to nearly \$20 billion in 1999, with countries in that region also relying heavily on FDI as a stimulus for growth. In Asia the numbers are most staggering of all, with FDI flows climbing from \$60 billion in 1990 to \$120 billion in 2000; today, FDI makes up more than 10 per cent of the region’s gross fixed capital formation (UNCTAD, 2001).

But what have been the effects of this tidal surge of FDI on economic development? Has it buoyed economic growth prospects, or submerged them? Surprisingly, there is no established consensus. Despite the success of many developing countries in attracting FDI over the past ten years, economists and public officials continue to debate its effects on long-term economic growth. For example, former Inter-American Development Bank (IADB) economist Ricardo Hausmann has asserted that the share of FDI in capital inflows is “not a measure of anything good happening in the economy” (Hausmann, 2000).

In neo-classical development theory, with its emphasis on capital accumulation, there is less controversy over the contribution of FDI to host-country growth. From a macroeconomic standpoint, the Keynesian identity reminds us that domestic investment depends on the level of savings. Since developing countries tend to lack the domestic savings required to fund their various investment projects, they must rely on foreign savings. This can come in the form of foreign aid, bank loans, or direct investment. By importing foreign capital, developing countries loosen the resource constraints on their investment and growth, and therefore FDI should be welcomed.

More recently, economic models influenced by endogenous growth theory hypothesise that the relationship between FDI and growth would be essentially a function of technology and human capital. By transferring technology to the host country and developing local labour skills, for example, multinational enterprises (MNEs) generate

externalities with broad economic effects. Workers who are trained within MNEs may ultimately bring their skills and know-how to the domestic economy by changing jobs and working for domestic companies, or becoming entrepreneurs. The policy lesson here is that foreign direct investment has the potential to encourage human capital development and technology transfer, the latter of which is generally considered to be one of FDI's unambiguous benefits.

These models have become especially relevant given the recent emphasis on the "knowledge economy" and the fears expressed of a north-south "digital divide." Bilateral and multilateral donors alike have sought to encourage developing countries to deregulate and privatise their telecommunications markets, at least partly, in order to make them open to and attractive for foreign direct investment — investment that would presumably modernise their information infrastructure. This evolution towards the "e-economy" is also likely to increase demands for skilled workers, and perhaps as a consequence motivate developing country governments to invest more in education and training.

Other economists, however, have questioned whether FDI really creates dynamic growth gains for host countries. After all, it should be recalled that these gains are mainly due to such forces as competition and technological diffusion. But if the multinational enterprise displaces domestic sources of competition, markets may become more concentrated, and if its technology does not diffuse, then the firm's wider benefits may be limited (Richardson, 1980).

Further, concerns are being raised about the effects of FDI on income inequality within recipient countries, which mirrors the broader worldwide debate about the relationship between openness and income dispersion. This debate is relevant to the FDI-growth connection because of the political economy argument that inequality may be bad for growth. There is substantial evidence that the globalisation process of the last 15 years has contributed to widening wage differentials between skilled and unskilled labour (even if its precise contribution remains controversial), especially in middle-income countries in Latin America and elsewhere. The mechanism driving this outcome is not yet well understood, but may be due to skill-biased technological change or technology transfer. However, if accelerating FDI and the accompanying technology transfer are profiting only a skilled few and serve to widen inequality, then the gains these changes could bring become less compelling, and FDI itself could become the subject of political controversy.

After all, it must be emphasised that educational markets — especially at higher levels — in most developing countries are truly open only to those in the upper income quintiles. Those from lower income backgrounds do not have access to the financial markets that would make it possible for them to remain in school rather than go to work. As a consequence, the very economic and technological forces that could be driving countries towards a higher growth path could also be leading them towards a "winner takes all" outcome in which the rich become the main beneficiaries of greater international integration. The inequality thus produced may become a source of domestic social tensions, which could act to undermine growth.

Beyond these economic and political-economic arguments about the effects of FDI on domestic performance, however, are ideational claims about the MNE's influence.

Traditionally, these sorts of claims have been largely shaped by neo-Marxian logic, in which the MNE, as the vanguard of international capital, suppresses domestic social forces in order to extract monopoly rents. In order to do this most effectively, the MNE forges alliances with local elites, creating a political-economic structure that enriches the few and impoverishes the many. Yet one could counter this perspective with an alternative view that conceptualises the MNE as a transmission belt for the normative concerns of its home country. To the extent that the norms of opportunity and tolerance, for example, become central to home country discourse, they will become lodged within the firm's operating procedures as well, providing a liberalising force within the societies of the host countries where they operate.

There are thus contradictory forces at work that need some untangling if we are to understand fully the influence of FDI on development and growth in emerging market economies. On the one hand, by carrying out investment projects, transferring technology and developing human capital, FDI (and the MNEs which bring it) is a potentially significant contributor to growth; and, at the same time, to the extent that human capital attracts FDI, host countries may become more motivated to invest in education and training, which would further spur the growth process. Yet on the other hand, to the extent that FDI and technology transfer promote inequality, these growth gains may be undermined.

The purpose of this paper is to outline some of the recent arguments that economists have made with respect to the relationship between FDI, human capital formation, and growth within emerging market economies. The paper is motivated by research in both development economics and political economy, and by evidence of what World Bank economist Lant Pritchett has called "divergence big time" among developing country growth rates.

In the second section of the paper, I review some of the evidence concerning the role of the MNE as an engine of human capital formation, supplementing the skills developed within the domestic educational and training system. In the third part, I reverse the causality and see what effects human capital formation has on attracting FDI to particular markets. The political economy channels associated with the relationship between FDI and growth are explored in the fourth section, followed by some concluding remarks.

II. FDI AND HUMAN CAPITAL FORMATION

Within the field of development economics, the relationship between FDI and human capital has become a topic of growing interest. This is largely thanks to endogenous growth theory, which privileges human capital in the development process. Noorbakhsh *et al.* (2001) point out that “FDI is not only a source of finance and employment. For developing country governments, FDI can also be a medium for acquiring skills, technology, organisational and managerial practices and access to markets”.

This relationship between FDI, and thus the MNE, and human capital formation is hardly a new topic within development economics, and it’s worth emphasising that it has long been contested. As Peter Enderwick (1985) stated more than fifteen years ago, “the impact of MNEs on employment and income...has been a topic of considerable debate for the past two decades”. The MNE will have both direct and indirect employment and income effects within the developing countries where they do business, but the precise impact will be a function of several different variables, both dependent on and independent of firm strategy. Factors within the firm will include the capital/labour mix that is adopted and the division between home (expatriate) and host country labour. Factors outside the firm may include fiscal policies that encourage (or discourage) employment, the presence (or absence) of labour unions, and other features of the labour market.

Endogenous growth theory posits that national policies with respect to human capital investment play a determinative role in economic development. But in many countries the quantity and quality of education may be insufficient to promote such investment in a meaningful way. In these cases, an interesting question is whether firms might take that role upon themselves, which becomes a particularly relevant question in light of all the contemporary discussion over “corporate social responsibility”. While that debate has focused mainly on environmental and labour-rights issues, perhaps it would be very useful to also focus on skills training. *Specifically, governments might seek to exploit FDI as a vehicle for promoting human capital formation.* As many skills are learned on-the-job, the role of the firm as educator may be significant, yet few empirical studies of this role have been carried out.

MNEs make a positive contribution to human capital formation through their educational and training programmes, and through the transfer of specific skills that are required for particular functions. It should be emphasised that the knowledge base required to perform these skills may be in short supply or even non-existent in some developing countries. From the perspective of economic development, this “skills transfer” may be no less important than the sort of “technology transfer” that is embodied

in a firm's physical capital. Indeed, international agencies, particularly UNCTAD (2001), have called upon multinational enterprises to deepen their training programmes in order to "promote linkages" with the domestic economy.

Further, the effects of these internal training programmes go beyond the firm itself. As UNCTAD (1999) has asserted, training by a multinational enterprise confers "an externality on domestic firms through staff turnover" and as such should "be encouraged through appropriate policies..." Enderwick (1985) identified two pathways by which these externalities could be generated. First, "MNEs may add directly to a nation's stock of human capital by providing training for employees who would not have received such training in the absence of foreign investment. Secondly, the presence of MNEs offering comparatively sophisticated employment opportunities may stimulate potential employees to invest in general training and education in an attempt to avail themselves of these opportunities".

To be sure, the degree of spillover will depend largely on how much job training is firm-specific. Enderwick (1985) found that "the most specific forms of training are typically those provided for technicians. Training in quality control and maintenance functions tends to be firm specific and is generally provided internally. The limited spillover potential of this type of training is reinforced by the high concentration of expatriates in senior engineering and technical positions within LDCs. This preference undoubtedly results from appropriability considerations where the use of expatriates serves to protect MNE technological advantages and slow down the diffusion of technology within the host nation. The potential for positive training externalities is much higher in the case of production workers and managerial staff".

This mirrors the earlier finding by Richman and Copen (1972) that "few US subsidiaries had made strong efforts to develop internal management" and companies even lacked "an identifiable strategy to provide on-the-job development in the managerial area". One suspects that this has changed dramatically since the time of that study, though up-to-date research on the topic is in short supply. It is also interesting to note that, at the time of Richman and Copen's study at least, "Few...American companies provided any help with the purchase of books, the payment of tuition, or the provision of scholarships to employees. Literacy or other general educational programs were rarely furnished". Largely due to changing norms about corporate social responsibility where firms do business, it is likely that firms are now providing greater incentives for personal development than they did in the past.

Yet a recent review by UNCTAD (1999) suggests that perhaps not so much has changed after all. It therefore cautions us about the limits of over-reliance on FDI for skill development and transfer. UNCTAD claims that firms "use the technologies that are appropriate to local education levels and train mainly to create efficient operators of such technologies (for example, simple assembly). They do not generally invest in the more difficult and long-term process of creating new skills needed for more advanced technological tasks. *The upgrading of the general skill level and the provision of high level specialised technical manpower is something that host countries need to do themselves*" (italics added).

But the issue of skill development is likely to be more complex than this quote from UNCTAD suggests. After all, technology is not static, and to the extent that firms upgrade their operations they must upgrade their employees' skills as well. Indeed, "lifetime learning" has become a commonplace principle within every workplace, if only because of the firm's rapidly changing technological needs.

Further, firms will invest in training, at least in theory, to the point where the marginal costs of training equal the marginal benefits. Presumably, the great benefit that firms will gain from training their workers is to be found in the productivity gains this will bring. Looked at from that perspective, one could imagine that the incentives to encourage, if not provide, "upskilling" would be significant. As O'Connor and Lunati (1999) state, "While low basic education levels of workers may raise firms' training costs somewhat, they do not appear to prevent effective introduction of these innovations. Sustained improvements in productivity require not only adequate investment in worker training but also financial incentives linked to enhanced job responsibility and performance".

Empirical tests of these various propositions regarding the relationship between FDI and human capital formation are in short supply. As O'Connor and Lunati (1999) report, "thus far there have been very few studies of technology-skill complementarities in developing countries". Some interesting work, however, has been done in the context of the expansion of the European Union to Greece, Portugal, and Spain during the 1970s and 1980s (Casado, 2000). In these cases, international firms made significant investments in skill development, as the educational system had not prepared workers adequately for the level of industrial competition they would now face. It is noteworthy that these investments were made across the entire skill-set, from entry, assembly line workers to managing directors. In return, the firms were able to rely on the local knowledge that these employees brought to the workplace.

Recent research, however, also provides caution about the role of FDI as an *engine* of human capital formation. The empirical evidence suggests that firms are attracted to regions where educational investment is already high. At the same time, the lack of human capital may deter foreign direct investment.

Despite the need for developing countries to invest in education and training, it may be that the local educational system is simply unsuited or unable to provide the sorts of skills that multinational enterprises which are considering a foreign direct investment seek. According to an early study by Richman and Copen (1972) of firm performance in India, there is a strong correlation "between the proportion of Western-trained (and this includes formal education) local nationals employed by firms, both foreign and indigenous, and the firms' relative economic success. Those with the highest proportions of US-trained managers and specialists have generally been the most successful in their sectors". Richman and Copen also found that multinational (specifically American) firms devote considerably more resources to training than do indigenous firms. Still, they assert that the "training leaves much to be desired". It would be interesting to update these findings to see whether Western training of local employees of multinational enterprises is still a significant determinant of commercial success.

In sum, while there is at least anecdotal evidence in support of the theory that FDI contributes to economic growth of emerging economies *via* human capital formation, its overall educational (much less economic impact) remains difficult to quantify and controversial. For one thing, in most countries FDI still accounts for only a small share of GNP and total employment, and so (with the exception of a handful of countries) its impact on national educational and economic performance is unlikely to be great. For another, to the extent that FDI increases wage disparities it may undermine its contribution to growth, as we will discuss in a later section of the paper.

III. DOES HUMAN CAPITAL ATTRACT FDI?

Over the past decade developing countries around the world have opened their economies to foreign direct investment and, as noted earlier, there has been a surge of such investment to many developing regions. Governments have developed a number of policies aimed at attracting FDI, including the provision of subsidies and the creation of industrial parks and export zones. Still, most of the FDI heads to only a handful of countries, reminding us that openness is a necessary but insufficient inducement to investors who are contemplating market entry.

In making their location decisions, firms may weigh several alternative sites, and a host of political, economic and cultural factors, including economic and political stability, language, the level of income per capita, the natural resources that are available, and the quality of infrastructure. The most powerful attraction of a host country, however, may be found in its work force.

In considering the factors that make a country attractive to FDI, let us then turn to the proposition that human capital formation is a critical variable. Casual evidence from such countries as Singapore, Chinese Taipei and Korea would suggest that this must be the case, and indeed there have been a number of econometric tests in recent years seeking to highlight the key variables associated with FDI. As Noorbakhsh *et al.* (2001) have recently stated, “the hypothesis that human capital in host countries is a determinant of foreign investment in developing countries has been embodied in the theoretical literature”. In an effort to test the major factors that motivate FDI, Noorbakhsh *et al.* (2001) perform regressions using a large sample of developing countries. They find that human capital plays a significant role and this leads them to the policy recommendation that “developing countries [should] formulate policies that improve local skills and build up their human resource capabilities. This is necessary to raise not only the volume but also the quality and sophistication of the FDI that a country can attract”.

A study for the World Bank by Kamal Saggi (2000) reached similar policy conclusions. He found that: “Without adequate human capital or investments in R&D, spillovers from FDI will fail to materialise. This finding underscores the importance of countries’ policies toward education, accumulation of human capital, and R&D”.

In its *World Investment Report* (UNCTAD, 1999), the United Nations provides another supporting lesson. With regard to transnational corporations it states that: “Evidence also suggests that TNCs react to the availability of skills in host economies by raising technological content and upgrading their investments, in turn contributing to skill upgrading...the extent of training and collaboration is much higher in countries with advanced educational systems...” As a specific example, the UN cites the Penang Skills Development Center (PSDC) in Penang, Malaysia. The PSDC was launched by the

State and Federal Governments as a response to the nation's shortage of (semi) skilled workers. Co-operating with TNCs and local universities, the PSDC developed training programmes that catered to the local free trade zones and industrial parks. Between 1989-99, the PSDC provided training to some 40 000 participants.

These findings have been given robust cross-country support by Bende-Nabende and Slater (2000). Based on their data analysis, they argue that "governments need to pursue policies that lead to sustained output growth...For instance, investment in human capital builds a labour-force with the potential of improving productivity, while a good infrastructure facilitates the production and distribution of goods and services. *No wonder then that these two also act as determinants of FDI, a key component of private investment*" (italics added). At the same time, they assert that the rapid pace of technological change is making it more difficult for developing countries to provide their workforce with the needed educational investments.

The lack of human capital, in turn, may be a significant deterrent to would-be foreign investors. As early as 1990, Robert Lucas was arguing that the shortage of human capital discouraged foreign direct investment in developing countries. More recently, in a study of post-Communist transition economies, Juan Alcacer (2000) found that "the lack of senior managers" in Eastern Europe could be a major factor in "deterring FDI". This case is of particular interest given the presence of a rich pool of semi-skilled labour in these countries; indeed, FDI flows to the region have increased from negligible levels in the early 1990s to over \$20 billion at the present time. Despite that evidence, Alcacer seems to be arguing that FDI flows will only increase in the future to the extent that countries in this region develop their managerial talent.

If the hypothesis that human capital attracts investment is correct, then it would seem to follow that developing countries ought to adopt what the OECD has called "active labour market policies", in addition to high quality primary education. Active labour market policies provide workers with the sort of training that makes them attractive to a wide variety of sophisticated industries. As a result, it is hard to argue with the UN's conclusion that "governments need to ensure that labour markets are efficient, that the education and training system is able to meet emerging skill needs, and that firms invest in additional job-related training".

However, it must be emphasised that there may be trade-offs between ALMPs and training programmes, and more investment in primary and secondary education. In that case, difficult choices in education policy must be made, not only with respect to which levels should be emphasised but also in terms of who gets access to the system, especially at higher levels. After all, workers who do not possess basic education will be in no position to take advantage of secondary studies or of national, local, or enterprise-provided training programmes. Further, by emphasising training over education — that is, by favouring those with *some* education over those who have none — the political economy problems associated with rising levels of inequality may be compounded. It is to these political economy problems that we now turn.

IV. FDI AND THE POLITICAL ECONOMY OF HUMAN CAPITAL FORMATION

The long-run economic consequences of opening a country to trade and investment are, at least in theory, straightforward and uncontroversial: as a positive theory, international economics demonstrates that freeing trade and capital flows leads to an efficient allocation of a nation's (and ultimately the world's) scarce resources, resulting in more output and consumption than would be the case under protectionism. Openness *should* therefore produce dynamic growth gains.

From a political economy perspective, the case for openness can also be asserted. Mancur Olson, for example, famously posited that openness eroded the opportunities for rent-seeking among domestic elites and thus was growth-enhancing (he did not, in contrast, seem to take seriously the proposition that foreign investors, in combination with local elites, might also be successful in extracting rents, as Peter Evans famously argued in *Dependent Development*). For a variety of political and economic reasons, then, both policy makers and academic economists have considered greater openness a *sine qua non* of economic reform.

Yet also operating within the political economy framework, other scholars have connected openness (including foreign direct investment) to less desirable development prospects. Adrian Wood and Dani Rodrik are among those who have suggested that openness can promote inequality by rewarding those with skills; that inequality, in turn, may reduce growth prospects as those who are aggrieved seek redistribution either *via* legislative or other constitutional channels or, if they remain unsatisfied, through alternative and more radical means (i.e. political violence). This channel will be emphasised in what follows.

Economic theory unambiguously predicts that openness will produce both winners and losers. This allows us to examine the political economy of globalisation from a distributive standpoint and raises the possibility that trade and FDI are at least partly responsible for the surge in inequality observed in the 1980s and 1990s. For our purposes, what is of particular concern is the possible relationship between this increase in inequality and subsequent levels of economic growth (for a review of the relevant literature see Kapstein and Landa, 2001).

In particular, it appears that the relative demand for skilled labour is rising while the demand for unskilled labour continues to fall, increasing the wage gap between these two factors. The causes behind these shifts in demand and in factor returns are at the centre of the political economy debates over the role of globalisation, technological change and other forces in shaping labour market outcomes.

It comes as no surprise that trade and economic opening more generally could have distributive effects. There are three major bodies of economic theory that hypothesise a relationship between openness and inequality: the factor price equalisation (FPE) theorem arising out of the Hecksher-Ohlin-Samuelson (HOS) framework; skill-enhancing technology (SET) theories, which examine the effects of technological change (including technological change brought about by cross-national technology transfers) on factor returns; and kaleidoscopic comparative advantage theory, which examines the effects of economic interdependence on labour markets. Because of its direct relevance to the issues we are discussing here, I will emphasise the potential causal role played by SET.

Unlike the HOS framework, which focuses on the effects of trade on price movements, the SET analysis focuses on how cross-border transfers of SET may affect factor returns. One of the traditionally lauded effects of opening less developed economies to the world market has been the transfer to such countries of new and more efficient production technologies. However, they are likely to have a “skill bias”, disproportionately rewarding those who possess the skills necessary for using these technologies in production. The evidence from in-depth studies of South American and Southeast Asian countries suggests that technology transfers between North and South are indeed positively correlated with increased wage disparities among workers in the receiving country and with the decline in the relative wages of the unskilled. As technologies flow to the South, labour markets become increasingly segmented into winners and losers.

With this segmentation, political conflict may increase. The “losers” may turn to violent means of expression, which is likely to dampen investment and, in turn, growth. Further, as political violence increases, nations may have to spend more on domestic security, denying funds for education, infrastructure, or other government programmes. Inequality thereby generates instability, which in turn reduces economic performance.

The key to resolving this problem may lie in the *ability* of the unskilled to respond to these changes and new incentives. The development of capital markets and of opportunities for economic mobility more generally is critical in facilitating the response of the supply of labour to the demand-side incentives; where the opportunity to acquire new skills is highly constrained, the willingness to do so may prove inconsequential. By increasing the skill premium in the receiving economies, SET transfers make the constraints imposed by poor capital and education markets increasingly binding, preventing those who are motivated from borrowing the funds needed for education and training, or denying them those opportunities altogether. If this is true for most developing countries, the positive effects of economic openness (and especially FDI) on income distribution in the South have been swamped by the negative effects on that distribution owing to the combination of SET transfers on the one hand and woefully underdeveloped capital and education markets on the other.

In fact, the data on education spending in the developing world provides a mixed picture. While some East Asian countries have managed to increase the availability and quality of education, others, as in Latin America, have increased education spending but skew it towards those in the upper income quintiles by focusing mainly on higher education. In Africa, the richest households receive a disproportionate share of education

spending. Overall, education systems in developing countries do not seem to provide a vehicle for upward mobility, and therefore deny workers the skills that would enable them to enjoy the fruits of foreign direct investment. These problems of political economy, of distribution, will not be easily solved either domestically or through international aid programmes.

They do, however, point to a potentially useful role of the MNE. As noted above, states may have to make trade-offs between investment in basic education and in training facilities. MNEs, acting alone or in concert, could ease some of these constraints by investing in common training programmes where feasible. MNEs could also bolster the local educational system through grants, loans, and student internships. In such a way, the firm could augment any existing foreign aid programmes that are seeking to develop educational opportunities, especially for those workers in the lowest income quintiles. Further, by promoting such ideas as tolerance and opportunity, the MNE may have an important liberalising role that has been largely overlooked by development specialists.

V. CONCLUSIONS

In recent years, academics and policy makers have focused on the virtuous circle created by human capital formation in economic development. By creating human capital, countries become more attractive to private investment, both domestic and foreign. And through such investment, countries grow and prosper.

At the same time, that initial investment in human capital pays additional dividends, as the MNEs that engage in direct investment then create their own training programmes. These programmes further increase the skills of workers, and in turn generate an externality effect in that training may spill over into the domestic economy as workers leave to join local firms or become entrepreneurs themselves. Further, as the level of technical sophistication within MNEs increases, state-sponsored educational systems also make an effort to provide those employers with the workers they need. In short, the virtuous circle produced by human capital formation seems to expand over time.

Yet the empirical evidence seems to place this hopeful theory into question. While FDI has multiplied in many countries around the world since the 1980s, the effects on growth remain elusive. Why is that the case?

In this paper I have argued that it is the political economy pathways that may lead countries away from sustained growth. In countries which lack well-developed capital and education markets, many otherwise qualified citizens may be denied the basic skills they need in order to contribute fully to the nation's economic development. As societies become divided, they become more conflicted, and this conflict dampens growth.

Unfortunately, revealing a damaging political economy pathway is different from avoiding it. While it is easy to call for a deepening of the markets for education and capital, realising that objective is difficult since the elites who now benefit from the current political economic system will resist that very deepening. Overcoming the exigencies of domestic politics may be the key to ensuring that openness provides the domestic economy with its promised benefits.

But domestic actors who seek political and economic reform might find surprising support from the multinational enterprise. As both a demander and supplier of labour, the firm is in a unique position to influence educational outcomes in the markets where it does business. How it interacts with the local educational establishment will be largely a function of domestic political economic forces, but the firm's influence on issues ranging from curriculum to access should not be overlooked, especially if the MNE is prepared to invest some funds as well. Finally, it is as a provider of *ideas* about such concepts as tolerance and opportunity that the firm may have its greatest domestic impact.

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