Journal of International Commerce, Economics and Policy
Vol. 3, No. 1 (2012) 1240007 (17 pages)

DOI: 10.1142/S1793993312400078

POLICIES FOR GLOBALIZATION AND DEVELOPMENT: FOUR EXAMPLES

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This paper addresses the role of policy in the relationship between globalization and development by considering four examples: trade-related capacity building, standards for multinational enterprises, medical brain drain, and access to medicines. The paper demonstrates that, despite concerns about policy space, there is some room for improving the way that globalisation processes contribute to development and poverty alleviation. None of the policies considered constitutes a fix-all but rather can make some marginal changes that could be significant in the long run.

Keywords: Globalization; international trade; multinational enterprises; brain drain; access to medicines.

JEL Classification: F19, F22, F23

1. Introduction

A persistent question in the overlapping fields of international economics and development economics is whether globalization can help reduce levels of poverty. The papers in this special issue have addressed this question from a number of perspectives: trade, finance, migration, aid and ideas. One additional realm that is also important is policy. Operating at global, regional, national and local levels, policies of various kinds help to determine the ways in which globalization processes affect poor people. Despite claims that globalization reduces the "policy space" for developing countries, there is still a significant realm in which policies do matter for poverty outcomes. It is important that these policies be exploited wherever possible to help to ensure that globalization processes help poor people.

Goldin and Reinert (2012) provide a relatively detailed set of policy suggestions to better leverage globalization for development and poverty alleviation, arranging their suggestions by five areas: trade, capital flows, aid, migration and ideas. In this last paper of the Special Issue, we attempt to complement Goldin and Reinert's efforts by

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focusing on four policy areas: *trade-related capacity building*, *standards for multinational enterprises*, *medical brain drain*, and *access to medicines*. Our purpose in addressing each of these is to demonstrate that there is indeed at least some room for improving the way that globalization processes contribute to development and poverty alleviation. None of these policy areas constitutes a fix-all but rather can make some marginal changes that could be significant in the long run.

2. Trade-Related Capacity Building

Market access for developing country exports is an important step in allowing for poverty-reducing international trade. However, increases in market access must be combined with efforts to promote export *capacity* in low- and middle-income countries.[1] Most discussions of aid and trade view these globalization dimensions as substitutes for one another, with trade being the favoured of the two. However, it is important to appreciate the potential complementary relationship between aid and trade in the form of what is sometimes called "aid for trade." Indeed, trade policy experts now recognize that, without such assistance, developing countries will not be able to exploit the market access that is available to them (see, especially Brenton *et al.*, 2009).

In the past, efforts to relax trade capacity constraints occurred under what was known as *trade-related technical assistance.* However, more recent appreciation of capacity constraints has motivated a change of focus to what is now known as *trade-related capacity building.* There is also a recognition that trade-related capacity building relies, at least to some extent, on outside assistance, making this an issue of foreign aid. Hallaert and Munro (2009) identified four areas where trade-related capacity building can help support a positive relationship between trade and development: increasing trade, diversifying exports, maximizing export-sector linkages with the rest of the economy, and increasing adjustment capacities. Each of these has the potential to help poor people.

We are going to focus first on the *low-income* and *lower-middle income* countries for which trade-related capacity building is most crucial. One basic measure of trade-related capacity is *days to export*, provided by the World Bank's World Development Indicators beginning in 2006. Days to export can be interpreted as one kind of "micro-institution" as identified by Johnson *et al.* (2010).[2] The rank-order correlation between days to export and manufactured exports as a percent of GDP in 2006 for these

[1] Market access challenges facing developing countries include tariffs and tariff peaks, agricultural subsidies, standards and regulations, rules of origin and security checks.

[2] Johnson *et al.* (2010) noted that micro-institutions can vary independently of macro-institutional variables: "While there is a presumption that macro and micro institutions should broadly co-move, there can clearly be exceptions. One possibility is that macro and micro institutions could be measuring distinct functions that institutions perform. For example, while broad institutions such as the judiciary will determine the protection of property rights and enforcement of contracts, the costs of doing business measured at the micro-level could relate to ease of acquiring specific licenses, which could be the domain of other institutions/authorities" (p. 141). See also Redding and Venables (2004).

countries is −0.395 with a p-value of 0.0020.[3] For 2009, there are fewer observations, but the rank-order correlation is −0.574 with a *p*-value of 0.0001.[4] These results suggest that there is a statistically significant, negative relationship between these two variables and that, therefore, there is room for trade-related capacity building to have an effect. Indeed, days-to-export in 2006 ranged from 17 to 102 for the low-income and lower-middle income countries. In 2009, the range was from 10 to 102. The room for improvement here is vast.

It is also likely that, along with micro-institutional factors, informational factors are at play in export capacity. Even basic knowledge of export possibilities is often lacking in developing countries, and supplying this information to potential exporters is a basic public good. Although crude, we assess informational factors in the form of informational access as measured by *mobile phone subscriptions* per 100 people in low-income and lower-middle-income countries.[5] The rank-order correlation between mobile phone subscriptions and manufactured exports as a percent of GDP in 2006 for these countries is 0.444 with a *p*-value of 0.0006.[6] For 2008, there are again fewer observations, but the rank-order correlation coefficient is 0.395 with a *p*-value of 0.00495.[7] These results suggest that there is a statistically significant, positive relationship between these two variables and that, therefore, there is again room for trade-related capacity building to have an effect. Indeed, mobile phone subscriptions per 100 people in 2006 ranged from less than 1 to over 100 for the low-income and lower-middle income countries. In 2008, the range was 2 to over 100.

These non-parametric indicators are not models of manufactures exports. But they are indicative of improvements that can potentially be made in the subset of developing countries where export capacity is of most concern, namely low-income and lower-middle income countries. Micro-institutional and informational factors are also not the complete set of relevant factors, but draw our attention to possible improvements. The question is, then, what can be done to improve trade-related capacity building outcomes. In recent years, work such as that of Brenton *et al.* (2009) has contributed much to our understanding of the relevant agenda.

There are a number of efforts underway in the area of trade-related capacity building. One is the Integrated Framework or Enhanced Integrated Framework (EIP). Another is a cooperative effort between the Organization for Economic Cooperation and Development (OECD) and the World Trade Organization (WTO) focused on developing the Doha Development Agenda Trade Capacity Building Database. As

[3] This is calculated using the Pearson rank-order correlation coefficient, which corrects for rank-order ties. Given missing data, the degrees of freedom are 57.
[4] Here the degrees of freedom are reduced to 39.
[5] This can also be interpreted, as in Goldin and Reinert (2010), as reflecting access to ideas in general. These authors state: "Access to ideas is a key issue for the effective deployment of knowledge in globalization processes" (p. 335).
[6] This is again calculated using the Pearson rank-order correlation coefficient, which corrects for rank-order ties. Given missing data, the degrees of freedom are 54.
[7] At the time of this writing, data on mobile phone subscriptions is not available for 2009. Given missing data, the degrees of freedom are 47.

reported in Hoekman *et al.* (2010), spending on "aid for trade" is also on the rise. These worthwhile activities provide much needed support for the trade and development agenda. To take advantage of increased opportunities, substantial improvements in market access have to be linked to significant investments in capacity building. The combination of the two is vital. Market access without capacity to benefit undermines the growth and poverty potential of trade reform. And, conversely, if countries have the capacity to compete but are prevented from doing so by unfair trading rules, they too, cannot realize their potential.

Countries can be supported in building the "behind the border" hardware, such as infrastructure (including ports, roads, airports, equipment, and transport), and software, such as customs and marketing and market intelligence capacity. Translating these improvements in trade capacity into widespread employment and growth opportunities requires addressing broader countrywide constraints. In particular, improvements in the investment climate, including in the legal and judicial system, in the regulatory environment, and in the overall levels of education and health of the population may be necessary. Firms also require reliable electricity, water supply, and other infrastructure. This is particularly the case for small firms and family enterprises, which cannot afford their own generators or other basic infrastructure to take advantage of new opportunities. As emphasized by Brenton *et al.* (2009), infrastructure elements also include service inputs such as telecommunications, transport and logistics, finance and security. We therefore need to think of trade-related infrastructure in both its traditional and business service components.

With regard to evolving standards and regulations, assistance to help farmers meet requirements (particularly those of the European Union) is not adequate. An additional problem is that the standards are applied in a discriminatory fashion and require specialized skills and equipment beyond the capability of most of the low-income countries. If developing countries are to face increases in standards and regulations in rich-country markets, they need to be assisted with capacity building in the areas where standards are applied.[8] Jaffee and Masakure (2005) presented evidences that some Kenyan fresh-produce firms have been able to respond positively to increased standards and that these "gains have included an improvement in industry reputation, enhanced sales margins, and an improved capacity to chart future investment and marketing plans" (p. 331). Maertens and Swinnen (2008) presented similar evidence for Senegal. However, due to management constraints and lack of access to credit, not all Kenyan fresh-produce firms have been able to successfully upgrade. Consequently, food standards remain a difficult issue that must be addressed.

Although often overlooked, the capacity to engage and negotiate in bilateral, regional, and multilateral trade is a key requirement for a more equitable globalization. The negotiating playing field is highly uneven. Further effort should be made to improve the capacity of developing countries, particularly the smaller and poorer

[8] For empirical evidence on this the role of capacity building in standards, see Kim and Reinert (2009).

countries, to enter into negotiations on an informed and equitable basis. Too often, whether in bilateral trade agreements or in Geneva at the WTO, teams of highly qualified and seasoned trade civil servants and expert consultants from one of the richest countries confront a handful of junior, relatively unqualified civil servants from one of the poorer countries. These imbalances must be addressed.

In the WTO, the increasing complexity and breadth of the negotiations — many of which take place simultaneously, especially during the crucial final days of negotiations — make it all but impossible for the majority of developing countries to even attend all the sessions, let alone negotiate on a fully informed and capable basis. To help developing countries engage more effectively in trade negotiations, efforts need to be made both to prevent the overload of the negotiations across an ever-widening span of issues and to support developing country trade-policy staff in data gathering, understanding complex texts, analyzing the implications of different options, and negotiating with other WTO members.

One small but important step in assisting developing countries' representation in some aspects of the WTO is the Advisor Center on WTO Law (ACWL). Founded in 2001, the purpose of the ACWL is to provide assistance to developing countries on WTO legal matters, particularly dispute settlement. Evidence presented in Brown (2009) suggests that it has made a difference, although not for all developing countries. As such, its efforts should be supported and expanded if possible.

3. Standards for Multinational Enterprises (MNEs)

Institutions governing international trade and international finance exist in the form of the WTO and the International Monetary Fund (IMF). No such counterpart exists in the realm of international production.[9] Most of the existing framework on standards with regard to foreign direct investment (FDI) addresses policies of host countries towards multinational enterprises (MNEs) and is geared towards protecting investors and ensuring limited interference. These standards have been codified into bilateral investment treaties (BITs), defined by the United Nations Conference on Trade and Development (UNCTAD) as "agreements between two countries for the reciprocal encouragement, promotion and protection of investments in each other's territories by companies based in either country."[10] BITs have grown rapidly over time, from approximately 400 in 1990 to approximately 2600 in 2008. As noted by Anderson (2009–2010), "the substance of post-World War II bilateral investment treaties has not changed substantially over time, and they still omit many rights of and

[9] For example, Anderson (2009–2010) stated that "although international trade law developed and matured, multilateral foreign direct investment law stagnated" (p. 2).

[10] UNCTAD also reported that: "Treaties typically cover the following areas: scope and definition of investment, admission and establishment, national treatment, most-favored-nation treatment, fair and equitable treatment, compensation in the event of expropriation or damage to the investment, guarantees of free transfers of funds, and dispute settlement mechanisms, both state-state and investor-state."

protections for individuals and communities in host countries" (p. 13). This is a significant shortcoming of current institutional arrangements in the realm of international production.

The question arises as to how to promote standards as they apply to MNE behaviour rather than to host country policies. Here we focus on the OECD Guidelines for Multinational Enterprises (Guidelines). These were developed in 1976, with changes introduced in subsequent years. The current version dates to 2000, but the OECD has recently launched an effort to re-evaluate and update the guidelines. Despite some limitations, the Guidelines hold out some promise as an emerging institutional framework.

The 1976 version of the Guidelines originally appeared as an annex to the OECD's Declaration on International Investment and Multinational Enterprises and consisted of nine chapters. This version of the Guidelines did not apply outside of OECD countries and were limited to the standards of the countries in which MNEs operated. Further, due to pressure from OECD member countries and the MNEs themselves, the Guidelines were explicitly *non-binding*.[11] These qualities limited the relevance of the Guidelines in their original form.

The 2000 revision of Guidelines proved to be very important. The 2000 version covered human rights, local capacity building, labour relations, health and the environment, corporate governance and science and technology. They are summarised in the Appendix. An assessment of the 2000 revisions by Murray (2001), for example, noted that the guidelines formed a useful complement to the core labor standards of the International Labor Organization (ILO) and could serve as a point of reference for groups concerned with MNE behavior. There was also an increased emphasis on standards of conduct, closer connections to international law, and an increased global focus. The Guidelines currently apply to the 34 OECD member countries. However, additional countries have agreed to adhere to the Guidelines, bringing the total number of adhering countries to 42.[12] This, plus endorsements by the Group of 8 (G-8) countries and the United Nations Secretary General's Special Representative on Business and Human Rights have contributed to the evolving global reach and relevance of the Guidelines.

While the 2000 Guidelines are still not binding, two developments have contributed to their applicability. First, the Guidelines have an implementation mechanism known as National Contact Points (NCPs). The NCPs have proved to be useful for labor organizations, businesses and non-governmental organizations (NGOs) to become involved in processes related to the Guidelines.[13] For example, the OECD (2010) reported that more than 200 cases have been referred through NCP process with 160 of these having been accepted for consideration. The NCP process can be a foundation for future dispute settlement processes in the area of MNE behavior.

[11] See Murray (2001) who referred to the 1976 GME as "abstentionist."
[12] These include Argentina, Brazil, Egypt, Estonia, Latvia, Lithuania, Peru and Romania.
[13] See, for example, Bowman (2006) on potential indigenous use of the NCP.

Second, in 2006, the OECD adopted a Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones. This relates to a point made some time ago by Murray (2001). Other global guidelines such as the core labor standards of the International Labor Organization (ILO) assume a modicum of governance on the part of states who have signed on to the standards. But in reality, many MNEs operate in environments where governance structures are quite weak, so the Guidelines are an important supplement to ILO standards. The OECD (2010) reported that a number of NCPs are promoting the Risk Awareness Tool.

At the time of this writing, the OECD has launched an effort to re-evaluate and update the guidelines. The terms of reference for the update suggest that, while not of the order of the 2000 revision, useful extensions are under consideration. These include: elaboration of the guidelines on human rights; guidance on the application of the guidelines to supply chains (global production networks); revisiting the disclosure chapter in light of the 2004 OECD Principles of Corporate Governance; elaboration of the chapter on bribery; and the relationship between the Guidelines of the Extractive Industry Transparency Initiative. The consultation process has taken on board written submissions from a variety of stakeholders as well as a variety of OECD bodies.

The United Nations Special Representative on Human Rights and Transnational Corporations (2010) submitted suggestions to the OECD concerning the update of the Guidelines. These suggested that human rights be given a stand-alone chapter within the Guidelines, that human rights due diligence be an operational principle, that operational-level grievance mechanisms be developed (i.e., through the NCPs), and that ways be explored to give more weight to NCP findings. All of these considerations suggest that the Guidelines are moving forward in appropriate ways and will be of increased relevance.

Ruggie (2008) pointed towards the presence of what he called "governance gaps" in the area of international business and their impact on global societies. Goldin and Reinert (2012) also recognize these gaps and called for binding, *de minimis* guidelines for MNE behavior, and Anderson (2009–2010) called for a "mandatory legal framework" in this area. These are probably first-best solutions that would address a number of criticisms leveled against the OECD Guidelines since 2000. That said, however, the imperfect Guidelines do provide a critical focus point for holding MNEs to account. They should be embraced to help ensure more positive outcomes in leveraging MNE activities for development. In order to enhance their role in ensuring better development outcomes, attention and capacity building should focus on enhancing the role of NCPs in the Guideline process.

4. Medical Brain Drain

High income countries increasingly reach out globally in their search for much needed professional skills, often offering new opportunities to skilled individuals in low-income and middle-income countries and depriving the latter of scarce skills. This

so-called "brain drain" has assumed a centrality in policy discussions and research on migration. Of particular importance is brain drain in health professionals, the so-called medical brain drain.

The selective admission of skilled health professionals offers great benefits to high-income host countries, particularly in the face of aging populations. Indeed, most observers (e.g., Martineau *et al.*, 2004) suggest that demand for health professional migrants shows no sign of slowing. The estimates of Mullan (2005) suggested that approximately one fourth of the physicians practicing in the US, the UK, Canada and Australia come from abroad, and that in some source countries (e.g., Jamaica, Haiti, Sri Lanka and Ghana), approximately one third of physicians are practicing abroad. Importantly, the region of the world with the highest emigration factor in Mullan's estimates is sub-Saharan Africa where many of the world's poor people reside.

The impact of medical brain drain on donor countries often alleged to be less clear but clearly involves the direct costs of the loss of skills. From a government perspective, education and training costs are not compensated for by the service of the lost health professionals or by their tax revenues. Donor countries also do not benefit directly from the impact of these skilled people on health outcomes. Of course, governments can influence the decisions of skilled health professionals through their role in shaping the overall working environment, but the most critical countries suffering from medical brain drain are often trying to address multiple and critical issues at the same time. Further, given the gaps in earning power and the attractions of cosmopolitan environments, this holding power can be severely limited.

Skeldon (2009) questioned the real consequences of medical brain drain.[14] With regard to the rural-urban issue, he suggested that, since the primary locus of poor people is in rural areas, the loss of medical professionals from urban areas is not crucial. However, evidence presented in Martineau *et al.* (2004) suggested that this is not always the case. This is because there is a cascade of desired positions for developing-country medical professionals in order of desirability from overseas to urban domestic to rural domestic, and vacancies due to emigration in urban areas can be filled via rural-urban migration of medical professionals. Consequently, it is not clear that Skeldon's claims are valid. The rural poor may indeed suffer due to medical brain drain. The fact that vacancy rates in health systems can reach one third (e.g., Malawi as measured in Record and Mohaddin, 2006) also suggests that there is indeed a negative impact.

[14] His analysis of the issue: "Raised question marks over whether the health sector is in some way exceptional and whether the migration constitutes a 'real' brain drain. Training is carried out overseas, though to a variable degree, health personnel are concentrated in the largest cities, and any exodus is unlikely to make an impact in the areas of greatest need. The identification of the migration of the skilled as a critical variable in the health of a population seems to oversimplify a complex situation at best and divert attention from the underlying causes of the malaise in the health sector at worst" (p. 15).

A 2004 British parliamentary investigation into migration and development concluded that "it is unfair, inefficient and incoherent for developed countries to provide aid to help developing countries to make progress… on health and education, whilst helping themselves to the nurses, doctors and teachers who have been trained in, and at the expense of, developing countries."[15] Drawing on the lessons provided by the British government, high income countries should commit to restricting their recruitment of essential skilled health professionals. To make such measures more effective, it is important that they also include private recruitment firms in binding commitments, as they otherwise are able to provide a backdoor to overseas recruitment. It must be recognized, however, that there are few incentives other than goodwill for high-income country governments and recruiters to pursue these actions with any seriousness.

Policy options on the source side are also necessary but are very difficult to develop and implement. These options include bonding systems, taxation, leveraging the diaspora, and two-tier training systems. We consider each in turn.

Bonding systems. Bonding systems involve a government restricting the emigration of publically-trained health professionals for some specified time period. For example, Skeldon (2008) reported that: "the Thai government introduced policies such as bonding medical graduates for three years, a system of recruiting medical students in rural areas specifically for home-town placement with financial and career inducements, and the exodus of the skilled declined" (p. 18). This clearly involves a restriction of liberty and may even prove to be impractical in many instances. However, this practice was common when developing countries first began to send their citizens abroad for education. Particularly in cases where source country governments are assisting in some way to help students secure education abroad in health areas, a service requirement that is not onerous appears to be reasonable.[16]

Taxation. Taxation schemes to address brain drain go back at least as far as the proposals of Bhagwati (1976). Taxation can potentially be placed directly on the emigrant or on the emigrant's remittances to family members. They can also be placed on the destination country via international agreements. The best solution is probably for destination-country governments to remit a portion of the income taxes paid by source-country-trained health professionals to the source-country government under an international agreement. If international agreements are not possible, source countries can begin to institute fees for medical training that can then be written off in proportion to years of service. Under this approach, Record and Mohaddin (2006) noted that health professionals "would then be able to choose to emigrate and pay off the fees through overseas earnings, or to work off the debt through public service" (p. 6). Provided that the tax rates and service requirements are not onerous, this approach would appear to be reasonable.

[15] United Kingdom, 2004, House of Commons, Migration and Development, paragraph 7.

[16] The oft-raised liberty issue was addressed by Eyal and Hurst (2008) who noted that "when political philosophers look at migration, they usually focus on migrants' rights in destination countries. But impoverished patients also have rights, including the right to access the medicines and the care they need" (p. 181). This insight must be recognized.

Alternatively, the right approach might not be to tax the individual. It is largely the state and society that benefit from the import of human capital that has not been paid for through the domestic education system. Consequently, one could advocate that the destination country government send to the origin country a grant for every person that it takes (depreciated over how long they have been out of the source country educational system) equivalent to some significant cost of the education for which origin country taxpayers have paid. In the case of entirely private education, paid for in full by the migrant, then there is no need for this. However, the more taxpayers in the origin country have paid, the greater should be the transfer. Under this scheme, if the individual should also contribute, then this would only be a fraction of the destination country payment.

Leveraging the diaspora. Some observers suggest that the best approach to managing medical brain drain is to leverage the diaspora. This can be done in a number of ways. First, it is possible to harness the skills of expatriate health professionals along the lines of the South African Network of Skills Abroad (SANSA). The primary purpose of SANSA is to gather information about expatriate South Africans in order to assess how their skills can be best matched to local needs.[17] Modes of contribution by expatriates relevant to medical brain drain might include participation in training programs, technology transfer activities and research result dissemination. Second, source countries can try to better harness the remittances of health professionals as suggested by Record and Mohaddin (2006). That said, in some countries, the remittances of health professionals appears to be low and there is little or no return migration (e.g., Mullan, 2005 and Kirigia *et al.*, 2006). Third, it might be possible to issue diaspora bonds in the area of health. Ketkar and Ratha (2010) discussed the diaspora bond possibility in general terms, but noted that earmarking the proceeds of bond issues to specific projects would be a selling point. It would not be difficult to imagine potential health-related earmarks that might enhance the role of diaspora bonds.[18]

Two-tier systems. It is now inescapable that developing countries suffering from significant outflows of health professionals will be required to pursue two-tier health professional training programs. This involves the introduction of basic training programs that fall short of international standards but can nevertheless have a positive impact on health outcomes. It should be noted that this is not a first-best policy. Rather, it is suggested here as necessary given the apparent failure of other efforts to stem the tide of medical brain drain. In fact, two-tier training is already a reality in some countries.[19] For example, in Malawi, a "clinical officer" program supports the country's antiretroviral campaign. More generally, Dovlo (2004)

[17] SANSA is a joint project of the South African National Research Foundation and Department of Science and Technology. See http://sansa.nrf.ac.za and Kaplan (1997) for further information.

[18] Ketkar and Ratha (2010), for example, presented a list of 25 developing countries that appear to be potential candidates to issue diaspora bonds. They also stated: "As many as eleven countries are currently believed to be thinking about this financing vehicle. These include Ethiopia, Ghana, Grenada, Jamaica, Liberia, Morocco, Nepal, Philippines, Rwanda, Sierra Leone, and Sri Lanka" (pp. 258–259). A number of these countries also have significant medical brain drain issues.

[19] Sees Dovlo (2004), Record and Mohaddin (2006) and Skeldon (2006).

identified this practice as taking place in Ghana, Kenya, Malawi, Mozambique, South Africa and Tanzania under various rubrics. Based on a review of the relevant health literature, Dovlo's conclusion was that "the use of substitutes for doctors has had positive effects on health care and has sustained health services in rural and urban deprived communities" (p. 9). These considerations suggest that two-tier medical training has a role to play.

Eyal and Hurst (2008) have advocated a specific type of two-tier training that they term "locally-relevant training." These authors give a flavor of what they have in mind here:

> Students in locally relevant medical school learn… how to prescribe drugs that are more affordable for poor patients than the western standard of care (often generic equivalents) and that are safer to prescribe when supply or refrigeration are erratic. They gain true mastery in gleaning information using inexpensive tools like the physical exam. For example, they develop advanced expertise in stethoscope diagnosis, to a degree that Western physicians with access to expensive lab tests, X-ray and magnetic resonance imaging (MRI) usually do not require. These students become fluent at strategies and decision algorithms that might be irrelevant or grossly suboptimal in well-equipped Western settings, but remain highly recommended for scarcity conditions (pp. 182–183).

This version of two-tier training merits further attention, particularly in its ability to help deliver health services to rural areas. Further, however, these authors note that it might have the ability to lessen global incentives for medical brain drain through the following paths: by making developing-country health professionals skills less relevant to developed-country medical environments; by reducing "burn-out" of health professions in developing countries through better alignment of expectations with existing, local health environments; by increasing the prestige of rural health practice; by increasing health education recruitment in rural areas; and by providing new career options.

Medical brain drain remains a globalization process with potentially catastrophic consequences for poor people in selected source countries. It requires increased attention and better collaboration among researchers and policymakers in health policy and migration policy and an openness to explore different policy options perhaps in combination to assess their potential.

5. Access to Medicines

If there is one area in which the advance of globalization as trade has been most contentious, it is in the area of *access to medicines*. With the advent of the new WTO TRIPS regime in 1995 (Agreement on Trade Related Aspects of Intellectual Property),

the US government put a great deal of pressure on the governments of Brazil, India and South Africa to honor US patents on HIV/AIDS drugs, thus raising the costs of these drugs to AIDS patients in these countries.[20] In 2001, WTO members gathered in Doha, Qatar for the fourth Ministerial Conference of the WTO. At this meeting, developing countries pushed back. As a result, WTO members issued a special Declaration on the TRIPS Agreement and Public Health. This declaration included the statement that "the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health." More specifically, the declaration reaffirmed four "flexibilities" with regard to TRIPS and public health. For example: "Each member has the right to determine what constitutes a national emergency or other circumstances of extreme urgency, it being understood that public health crises, including those related to HIV/AIDS, tuberculosis, malaria and other epidemics, can represent a national emergency or other circumstances of extreme urgency."

These flexibilities included the production of generic drugs under *compulsory licensing* arrangements under Article 31 of TRIPS. However, Article 31(f) limited the use of these generic drugs to the domestic markets of the producing countries. Matthews (2004) noted that this had "the practical effect of preventing exports of generic drugs to countries that do not have significant pharmaceutical industries themselves… For countries with insufficient manufacturing capacity, the only realistic sourcing mechanism is importation" (p. 78). Unfortunately, importation of this kind was restricted under TRIPS Article 31(f). A WTO "decision" on this issue was adopted in 2003 that allowed least-developed WTO members to import off-patent, generic drugs. However, it was not yet clear that these provisions ensured that existing knowledge would be effectively deployed. First, the 2003 decision was procedurally demanding. Second, deliberations at the TRIPS Council regarding the application of the decision could be lengthy. Third, there was a concern that developed countries with pharmaceutical industries will take unilateral action against developing countries making use of the decision. Fourth, there was evidence of bilateral, TRIPS-plus activity that might be extended to rights under the decision.

The 2003 WTO decision also directed the WTO TRIPS Council to prepare an *amendment* based "where appropriate" on the decision (see Matthews, 2004, 2006 and Abbott and Reichman, 2007). An agreement regarding this amendment was reached in 2005 and is in the process of being ratified by member countries. It remains, however, both for supporting legislation in WTO member countries to be

[20] In the Brazil and Thailand cases, as documented by Ford *et al.* (2007), the pressure by the US government stemmed from bilateral, TRIPS-plus agreements enacted in the 1990s at the insistence of the US. In both cases, the compulsory licensing threat (see below) proved to be significant in the ability of Brazil and Thailand to ensure universal access to antiretroviral therapies.

fully enacted and for the provisions of the amendment to be tested in practice. Indeed, Matthews (2006) noted that "it is perhaps surprising that no developing country has yet used the new mechanism to allow the importation of generic medicines following the issuance of a compulsory license in a developed country prior to patent expiry" (p. 130). Rwanda became the first country to do this in 2007 in order to import HIV/AIDS antiretroviral drugs from Canada under that country's Access to Medicines Regime. However, more than one review of this process found it to be cumbersome and lacking in incentives for providing generic pharmaceuticals to those most in need (for example, see Rimmer, 2008 and Goodwin, 2008).

It has become clear that capacity building is necessary to support use of the system, and the World Bank has been active in this regard. Hopefully, the compulsory licensing option will be helpful in harnessing knowledge in the form of pharmaceuticals to alleviate health crises and promote human development. Another avenue, however, is to improve productive capacities for key pharmaceuticals in developing countries, and the German government has been active in this area. Whatever the mechanism, a sustained commitment by all parties will be necessary.

Given the scale of the health crises facing developing countries, a concerted effort is needed to ensure increased access to medicines on the part of poor people. For example, as noted by Adusei (2011) in the context of antiretrovirals in Sub-Saharan Africa, "as it now stands, access to quality healthcare remains the province of a few elite… The general population cannot afford to buy patented brand name medicines and, most often, people on an antriretroviral regime experience treatment interruptions due to financial difficulties" (p. 1). Relying on compulsory licensing alone now seems to be inadequate. Usefully, Adusei (2011) outlined a more comprehensive approach based on the following elements: negotiation, compulsory licensing, parallel imports, public/private initiatives, patent pools, rejecting "TRIPS-Plus" stipulations in preferential trade agreements, competition law, expired patents, and enforcement lapses or targeted "piracy." Given the magnitude of the problem, and the failure of compulsory licensing efforts, this multi-pronged approach is appropriate.

Access to medicines has been further compromised by "TRIPS-Plus" agreements that are part of the WTO accession process or preferential trade agreements. As documented by El Said (2011) in the case of the Arab world, TRIPS-Plus language can restrict the use of compulsory licensing, extend pharmaceutical patent protection beyond the TRIPS standard of 20 years, shorten transition periods for pharmaceutical patent recognition, and dispute settlement procedures outside of the WTO process. It is thus becoming increasing clear that developing countries need to *avoid* TRIPS-Plus provisions and that these provisions be *subject to scrutiny* at the multilateral level.

One element of the multi-pronged approach might be the proposed Health Impact Fund (HIF). Under the HIF or equivalent program, a pharmaceutical company would register its product and receive payments based on an assessment of its contribution to

global health via an impact assessment. After this registration, the pharmaceutical would be provided at near cost.[21] As Banerjee *et al.* (2010) noted, "although HIF would have to pay large rewards every year to encourage innovation and registration, all who pay for medicines would save money, including patients in high-income states and their insurers and government" (p. 168). These authors proposed multilateral funding levels at 0.03 percent of gross national income. While only recently proposed, it is an option that is worth putting under additional scrutiny.

Finally, as noted by Eyal and Hurst (2008), access to medicines requires trained medical staff to administer those medicines. Consequently, solving the access to medicines problem also requires solving the medical brain drain problem. Therefore, these two conundrums are closely related to one another.

The TRIPS Council of the WTO has addressed the failures of existing mechanisms to provide for effective access to medicines, noting that only Rwanda has made use of the mechanism. Documentation of these proceedings, however, suggests little or no movement on the subject at this multilateral level. Indeed, the process strikes one as more or less frozen (see International Centre for Trade and Sustainable Development, 2011). For this reason, it is imperative that forward movement take place on multiple fronts in order to address this most pressing issue.

6. Concluding Remarks

Globalization is held out by competing groups as both the only means by which global poverty can be reduced and as the cause of that poverty. Neither of these contrasting claims is helpful. First, they fail to adequately distinguish among the many aspects of globalization discussed in the papers of this special issue. Second, they fail to recognise that most dimensions of globalization have both positive and negative potential for eliminating poverty. Third, they fail to adequately address the role of policy in influencing outcomes. In this paper, we have tried to hint at the potential role of policy by considering four areas: trade-related capacity building, standards for MNEs, medical brain drain and access to medicines. In each case, there is room for policy advances that would help to ensure a positive link between globalisation and development. It must be recognized, however, that in the absence of such policies in these and other areas, the link between globalisation and development is significantly weakened.

[21] See Pogge (2008) and Banerjee *et al.* (2010). In some aspects, this proposal is an alternative to that of Lanjouw (2006) who proposed that developed-country patent systems allow for patent enforcement only in one of two regions of the world: developed countries or developing countries. In the case of what Lanjouw termed "global" diseases, developed-country pharmaceutical companies would choose to ensure patent protection in developed countries where markets are significantly larger, allowing for less-costly delivery of generic pharmaceutical to the developing world. In the case of "tropical" diseases, the pharmaceutical companies would choose to ensure patent protection in the developing countries, hopefully spurring innovation.

Appendix: OECD Guidelines for MNEs

The OECD (2001) has established the following voluntary guidelines for the operation of MNE. They state that any MNE should:

(1) Contribute to economic, social and environmental progress with a view to achieving sustainable development.
(2) Respect the human rights of those affected by their activities consistent with the host government's international obligations and commitments.
(3) Encourage local capacity building through close cooperation with the local community, including business interests, as well as developing the enterprise's activities in domestic and foreign markets, consistent with the need for sound commercial practice.
(4) Encourage human capital formation, in particular by creating employment opportunities and facilitating training opportunities for employees.
(5) Refrain from seeking or accepting exemptions not contemplated in the statutory or regulatory framework related to environmental, health, safety, labor, taxation, financial incentives, or other issues.
(6) Support and uphold good corporate governance principles and develop and apply good corporate governance practices.
(7) Develop and apply effective self-regulatory practices and management systems that foster a relationship of confidence and mutual trust between enterprises and the societies in which they operate.
(8) Promote employees' awareness of, and compliance with, company policies through appropriate dissemination of these policies, including through training programs.
(9) Refrain from discriminatory or disciplinary action against employees who make bona fide reports to management or, as appropriate, to the competent public authorities, on practices that contravene the law, the Guidelines or the enterprise's policies.
(10) Encourage, where practicable, business partners, including suppliers and subcontractors, to apply principles of corporate conduct compatible with the Guidelines.
(11) Abstain from any improper involvement in local political activities.

References

Abbott, FM and JH Reichman (2007). The Doha Round's public health legacy: Strategies for the production and diffusion of patented medicines under the amended TRIPS provisions. *Journal of International Economic Law*, 10(4), 921–987.

Adusei, P (2011). Exploiting patent regulatory "flexibilities" to promote access to antiretroviral medicines in sub-Saharan Africa. *Journal of World Intellectual Property*, 14(1), 1–20.

Anderson, RJ (2009–2010). Toward global corporate citizenship: Reframing foreign direct investment law. *Michigan State Journal of International Law*, 18, 1–31.

Banerjee, A, A Hollis and T Pogge (2010). The Health Impact Fund: Incentives for improving access to medicines. *Lancet*, 375(9709), 166–169.

Bhagwati, J (1976). *The Brain Drain and Taxation: Theory and Empirical Analysis*. Amsterdam: North Holland.

Bowman, H (2006). If I had a hammer: The OECD guidelines for multinational enterprises as another tool to protect indigenous rights to land. *Pacific Rim Law and Policy Journal*, 15(3), 703–732.

Brenton, P, R Newfarmer, W Shaw and P Walkenhorst (2009). Breaking into new markets: Overview. In Newfarmer, R, W Shaw and P Walkenhorst (eds.), *Breaking into New Markets: Emerging Lessons for Export Diversification*, pp. 1–35. Washington, DC: World Bank.

Brown, CP (2009). *Self-Enforcing Trade: Developing Countries and WTO Dispute Settlement*. Washington, DC: Brookings Institution Press.

Dovlo, D (2004). Using mid-level cadres as substitutes for internationally mobile health professionals in Africa: A desk review. *Human Resources for Health*, 2(7), 1–12.

El Said, MK (2010). *Public Health Related TRIPS-Plus Provisions in Bilateral Trade Agreements*. Cairo: World Health Organization.

Eyal, N and SA Hurst (2008). Physician brain drain: Can nothing be done? *Public Health Ethics*, 1(2), 180–192.

Ford, N, D Wilson, GC Chaves, M Lotrowska and K Kijtiwatchakul (2007). Sustaining access to antiretroviral therapy in the less-developed world: Lessons from Brazil and Thailand. *AIDS*, No. 21(Suppl 4), pp. S21–S29.

Francois, J and M Manchin (2007). Institutions, infrastructure, and trade. World Bank Policy Research Working Paper No. 4152. Washington, DC: World Bank.

Goldin, I and KA Reinert (2012). *Globalization for Development: Meeting New Challenges*. Oxford, UK: Oxford University Press.

Goldin, I and KA Reinert (2010). Ideas, development, and globalization. *Canadian Journal of Development Studies*, 29(3–4), 329–348.

Goodwin, PE (2008). Right idea, wrong result — Canada's access to medicines regime. *American Journal of Law and Medicine*, 34(4), 567–568.

Hallaert, J and L Munro (2009). Binding constraints to trade expansion: Aid for trade objectives and diagnostic tools. OECD Trade Policy Working Paper 94, Organization for Economic Cooperation and Development.

Hoekman, B, W Martin and A Mattoo (2010). Conclude Doha: It matters! *World Trade Review*, 9(3), 505–530.

International Centre for Trade and Sustainable Development (2011). TRIPS council members debate biodiversity, access to medicines. *Bridges Weekly Trade News Digest*, 15(8), 1–3.

Jaffee, S and O Masakure (2005). Strategic use of private standards to enhance international competitiveness: Vegetable exports from Kenya and elsewhere. *Food Policy* 30(3), 316–333.

Johnson, S, JD Ostry and A Subramanian (2010). Prospects for sustained growth in Africa: Benchmarking the constraints. *IMF Staff Papers* 57(1), 119–171.

Kaplan, D (1997). Reversing the brain drain: The case for utilising South Africa's unique intellectual diaspora. *Science, Technology and Society*, 2(2), 387–406.

Ketkar, SL and D Ratha (2010). Diaspora bonds: Tapping the diaspora during difficult times. *Journal of International Commerce, Economics and Policy*, 1(2), 251–263.

Kim, SJ and KA Reinert (2009). Standards and institutional capacity: An examination of trade in food and agricultural products. *International Trade Journal*, 23(1), 54–77.

Kirigia, JM, AR Gbary, LK Muthuri, J Nyoni and A Seddoh. (2006). The cost of health professionals' brain drain in Kenya. *BMC Health Services Research*, 6(89), 1–10.

Lanjouw, J (2006). A patent policy proposal for global diseases. *Innovations*, 1(1), 108–114.
Maertens, M and JFM Swinnen (2009). Trade, standards, and poverty: Evidence from Senegal. *World Development*, 37(1), 161–178.
Martineau, T, K Decker and P Bundred (2004). "Brain drain" of health professionals: From rhetoric to responsible action. *Health Policy*, 70(1), 1–10.
Matthews, D (2004). WTO decision on implementation of paragraph 6 of the Doha declaration on the TRIPS agreement and public health: A solution to the access to essential medicines problem? *Journal of International Economic Law*, 7(1), 73–107.
Matthews, D (2006). From the August 30, 2003 WTO decision to the December 6, 2006 agreement on amendments to TRIPS: Improving access to medicines in developing countries? *Intellectual Property Quarterly*, 10(2), 91–130.
Mullan, F (2005). The metrics of the physician brain drain. *New England Journal of Medicine*, 353(17), 1810–1818.
Murray, J (2001). A new phase in the regulation of multinational enterprises: The role of the OECD. *Industrial Law Journal*, 30(3), 255–270.
Organization for Economic Cooperation and Development (2001). The OECD Guidelines for Multinational Enterprises: Text, Commentary and Clarifications.
Organization for Economic Cooperation and Development (2010). The OECD Guidelines for Multinational Enterprises: Report by the Chair of the 2010 Meeting of the National Contact Points.
Pogge, T (2008). Access to medicines. *Public Health Ethics*, 1(2), 73–82.
Record, R and A Mohaddin (2006). An economic perspective on Malawi's medical "brain drain." *Globalization and Health*, 2(12), 1–8.
Redding, S and AJ Venables (2004). Geography and export performance: External market access and internal supply capacity. In Baldwin, RE and LA Winters (eds.), *Challenges to Globalization: Analyzing the Economics*, pp. 95–127. Chicago: University of Chicago Press.
Rimmer, M (2008). Race against time: The export of essential medicines to Rwanda. *Public Health Ethics*, 1(2), 89–103.
Ruggie, J (2008). Protect, respect and remedy: A framework for business and human rights. *Innovations*, 3(2), 189–212.
Skeldon, R (2009). Of skilled migration, brain drains and policy responses. *International Migration*, 47(4), 3–29.
United Nations Special Representative on Human Rights and Transnational Corporations (2010). Updating the guidelines for multinational enterprises discussion paper. United Nations.