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Migration, Trade, Capital and Development: Substitutes, Complements and Policies

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Gustav Ranis

ABSTRACT

Migration of the unskilled clearly benefits the origin country, mainly due to the flow of remittances but also if the departure of some raises the ability of others to migrate. This depends on whether trade is a complement or a substitute for migration. The impact of such flows on the destination country is more ambiguous, although most research indicates that wages and employment are not likely to be seriously affected.

Migration of the skilled is ambiguous with respect to the origin country since the impact of brain drain on local development must be weighed against the signaling effect for additional education plus the contribution of remittances. With respect to the destination country, the inflow of skilled labor is generally considered an unambiguous plus as it contributes to the enhancement of productivity.

The paper concludes with policy recommendations aimed at seizing the opportunities arising from the fact that international migration remains the most constrained element of globalization.

Keywords: Migration, Trade, Globalization

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Migration, Trade, Capital and Development: Substitutes, Complements and Policies

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I. Introduction

The post-war era is, of course, not the first experience the world has had with globalization in all its dimensions. The current episode can, however, be distinguished from its 19th century predecessor by its scale, i.e. a world of 6 billion inhabitants, massive movements of goods, services and capital – as well as by continuously falling communication and transport costs, and, last but not least, the instantaneous nature of information flows and agent reaction possibilities. When war and inter-war autarky ended in 1945 international trade was first to pick up, followed by a renewal of public capital movements (ODA) – first to Europe and subsequently to the developing countries – subsequently followed by private portfolio capital and foreign direct investment (FDI), quickly dwarfing ODA. The economic migration of people – i.e. excluding refugees and asylum seekers, has lagged substantially behind – largely because, despite calls – and considerable action – for the increased freedom of trade, capital and associated technology mobility, barriers to the movement of people remained high. It is this dimension of globalization which tends to cause the strongest political resistance; when domestic workers are seen to be threatened by some combination of technology change, imports and immigrants it is invariably the latter which generates the largest rhetorical and policy response.

Nevertheless, pressures for enhanced migration are rising, certainly in the less developed origin (O) countries, but also in some quarters of the more developed destination (D) countries. And the very fact that migration has lagged substantially

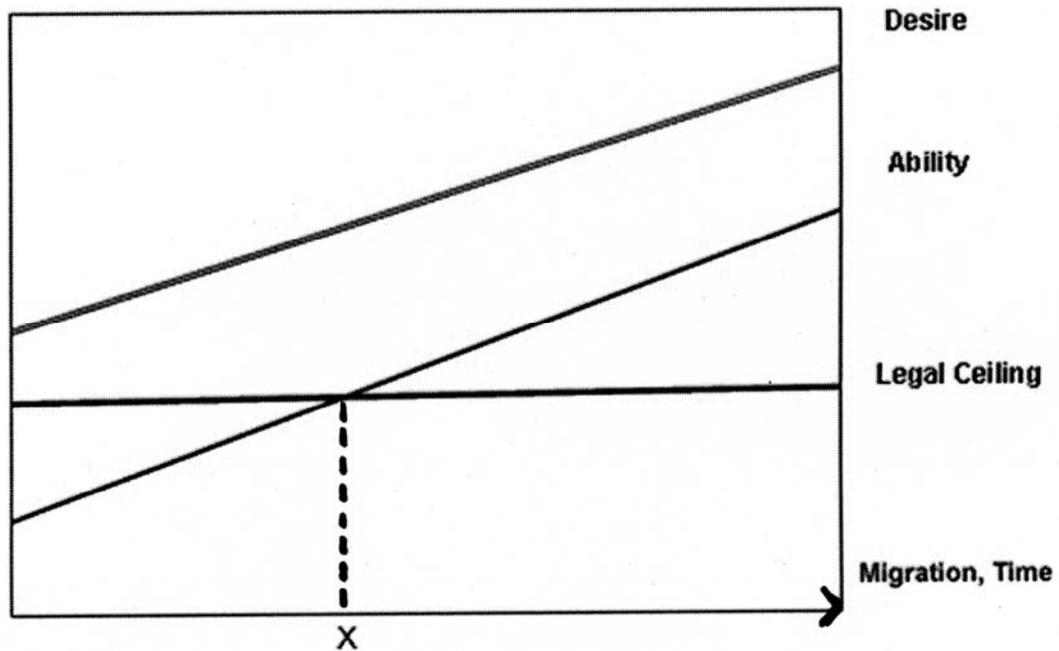
behind the other dimensions of globalization also provides the largest opportunity for additional global welfare gains – especially today when further multilateral trade liberalization is in considerable doubt. We will therefore focus on migration and its interactions with the other elements of globalization as they impact development. In this context, we will find it useful to distinguish between the costs and benefits accruing to the countries of O and D, while differentiating between the movement of skilled and unskilled migrants. Section II concentrates on the movement of unskilled and its relation to the other dimensions of globalization, while Section III attempts the same with respect to the skilled. Section IV suggests some conclusions for policy within the same broad globalization framework.

II. Migration of the Unskilled

This type of migrant represents the largest potential benefit to global welfare even as the distribution of the gains as between O and D countries remains controversial. The desire to migrate by both the unemployed, underemployed and those employed at very low incomes in the third world is a function of the availability of information, geographic distance, the gaps in prospective life-time incomes, plus the perceived probability of gaining employment in the D country. The ability to migrate, on the other hand, depends on some combination of family income levels, access to credit markets, government support, the extent of diaspora corridors abroad and, of course, the level of entry barriers erected by the D countries. As indicated in Figure 1a picturing Mexico as a typical case, we can expect the desire to migrate to dominate both the private ability to do so and the D countries level of barriers. In some O

countries, e.g. the Philippines, the government may step in by providing both information and financial support, in return for the promise of enhanced remittances which tend to shift up both the desire and ability curves. However, to the extent that immigration barriers remain the dominant constraint, i.e. X marks the actual level of migration, there will be increasing pressure to attempt illegal entry.

Figure 1a: The Mexican Case



The benefits of unskilled migration to the O country are clear. Given the fact that it is likely to find itself in a labor surplus condition, the withdrawal of even substantial numbers of unskilled workers from rural or, more likely, urban informal sector pursuits is not likely to affect output significantly; indeed, given that there is likely to be family subsidization of underemployed relatives, plus a real chance for

positive adjustments in technology made possible as a consequence of such departures, productivity is likely to rise and poverty to decline.

There are other substantial benefits accruing to the O country. Chief of these is the receipt of the remittances which not only substantially enhance family incomes but also have important dynamic spill-over effects. Such receipts are likely to encourage additional entrepreneurial and investment activities by those left behind and, probably as important, innovative activities by returning migrants who have had new windows and contacts opened to them while abroad, especially since the D country is likely to be a more advanced market economy. But even in relatively advanced developing O countries such as Pakistan, sending temporary migrants to the Middle East, evidence from its North-West Frontier Province has indicated the important entrepreneurial, human capital contribution of returned migrants, along with their financial capital.

Mexico, for example, receives \$20-25 billion in remittances annually, exceeding FDI flows (\$18 billion in 2004), and estimated to provide 20-30% of her micro-enterprise capital.¹ In 2000 Mexico's unskilled earnings gap with the U.S. was roughly 6 times.² An individual's average annual gain by moving to the U.S. is thus estimated at \$10,000 which, over a working life, amounts to a roughly \$250,000 differential, clearly undergirding the desire to migrate - substantially above either the ability to migrate or the legal barrier put up by the U.S. The Philippine case is not too different, except that here, as noted above, the government has been more directly involved in supporting emigration via the provision of information and credit

¹ Woodruff, Christopher and Rene Zenteno, (2001).

² R.B. Freeman, *Journal of Economic Perspectives*, Spring, 2006.

advances. Between 1975 and 1986 the number of Philippine contract workers moving to other parts of Asia increased from 4,200 to 76,650 and those moving to the Middle East from 1, 552 to 262,758.³ In 2003, remittances amounted to 10.2% of GDP, up from 2.7% in 1990.⁴ Globally, remittances have reached \$150 billion in 2004⁵, almost 3 times ODA, with an estimated additional \$50 billion underreported. In some O countries remittance flows have risen to 40% of export earnings and 20% of GDP. These flows have clearly helped reduce poverty rates and had an equalizing effect on the distribution of income.

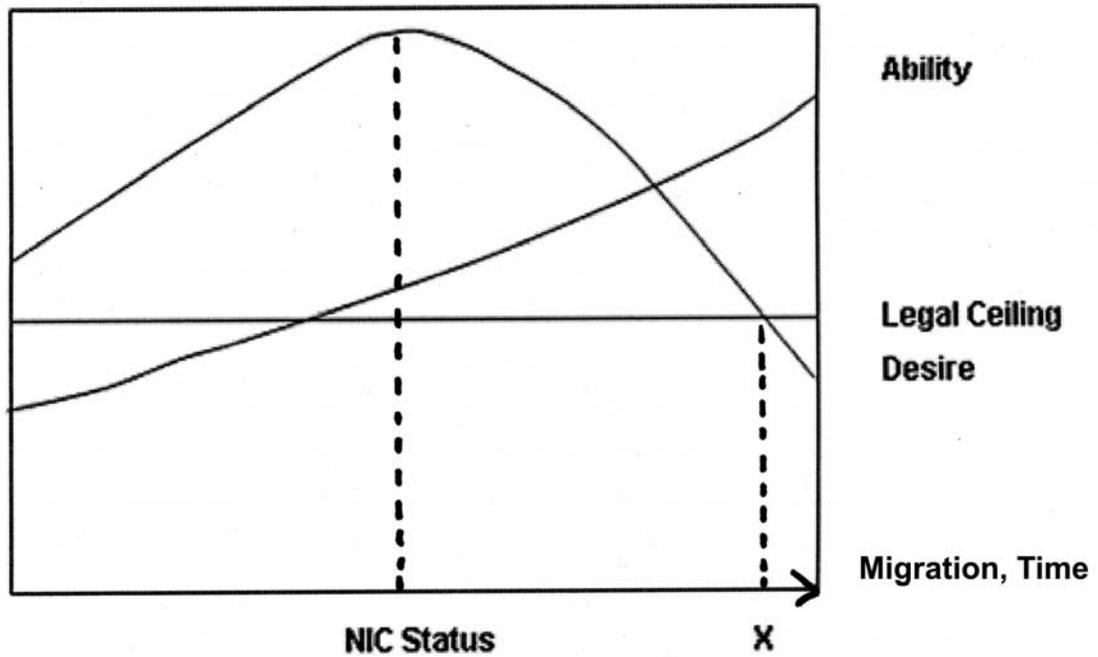
Remittances, as well as other types of capital inflows, including ODA and private capital, of course, substitute for unskilled labor migration. To the extent such inflows generate equitable growth, the income gaps between the O and D countries will decline and the desire to migrate will fall even as the ability rises. If, after some time, the country is successful in reaching East Asian NIC status, or Kuznets' epoch of "modern economic growth", the D country's import barriers will at some point, i.e. beyond X, no longer be binding (see Figure 1b).

³ Philippine Overseas Employment Administration

⁴ International Organization for Migration.

⁵ Maimbo, Samuel Munzele and Dilip Ratha (eds) (2005), Remittances: Development Impact and Future Prospects, World Bank.

Figure 1b: The East Asian Case



Remittances have additional advantages in comparison with other types of capital inflows. For one, they are likely to be more dependable, fluctuating less; for another, they are likely to be counter-cyclical, i.e. increasing in times of economic decline or natural disasters, while other types of private capital often act cyclically. Moreover, remittances are less likely to cause Dutch Disease problems, either of the narrow or the extended variety. With respect to the traditional, narrow variety, since remittances are likely to be more broadly dispersed, frequently ending up in the hands of rural and urban informal sector families, they are less likely to cause a strengthening of the currency and a shift from exportable to non-traded goods, especially if they are used for entrepreneurial investment rather than purely consumption activities. Turning to the extended Dutch Disease variety, which we define as the political economy consequence of capital inflows which tend to take the

pressure off and thus permit governments to actually avoid reforms, the decentralized character of remittances again renders them comparatively much less likely than foreign aid to be a source of reform obstruction and the object of rent-seeking and corruption.

The most important substitute for unskilled labor migration is, of course, trade which is able to incorporate such labor in the form of labor intensive commodities and send it to the D country “under the radar.” Unfortunately, while trade has virtually exploded in the post-war era, early liberalization efforts have recently tended to run out of steam and neo-protectionist measures, including anti-dumping provisions and exemptions from preferences, targeted especially on textiles, shoes and other labor intensive commodities, have been on the rise.

In addition to trade and capital movements, an additional substitute for unskilled migration is the inflow of technology, especially if it is adaptable to the more labor abundant environment of the O country and thus enhances the potential of keeping unskilled labor productively employed at home or embodied in exports. Indeed, I would place much more weight, either in discussing the impact of migration, of trade or of capital, on such dynamic dimensions rather than on static comparative advantage and efficiency criteria.

In summary, various other dimensions of globalization can act as substitutes for unskilled labor migration. Moreover, the economic benefits of such migration for the O country are overwhelmingly clear. On the negative side of the ledger, we can record the not inconsiderable social costs incurred as a result of prolonged family

separations as well as the risks of exploitation and ill treatment of migrants, temporary or permanent, in the D country.

Turning to the benefits and costs of unskilled migration with respect to the D country, the situation is somewhat less clear. The arrival of “cheap labor” from abroad is usually greeted by much more political flak than the arrival of “cheap goods” incorporating “cheap labor.” Yet both serve the interests of dispersed D country consumers since the former may encourage the survival, at least for a time, of relatively “sick” or defensive industries, while the latter directly enhances consumer welfare. The other benefits, increasingly recognized, especially in the rich D countries suffering from low birth rates, is that large-scale migration by overwhelmingly young workers is necessary to help support the welfare and safety net packages of the indigenous elderly population. We can safely assume that such pressures in the future will be even greater because of continuously falling birth rates and rising life expectancies. It is, moreover, a fact that there are jobs, at the lower end of the occupational totem pole, mostly in agriculture and personal services, that D country workers are reluctant to take up and which have been increasingly filled by unskilled immigrants. In this important sense, unskilled immigrants are substitutes for capital, increase indigenous labor force participation rates and thus enhance the productive capacity of the D country.

Nevertheless, resistance to the admission of unskilled migrants continues to be formidable in almost all D countries. The key objection, emanating mainly from unions and their political allies, focuses on the cost, in terms of lowering indigenous unskilled worker wages, as we would expect from economic theory. Nevertheless,

what empirical evidence we have casts doubt on the robustness of this effect. David Card, for example, examining such national experiments as the Mariel boat lift and Algerian inflows into France, found only relatively minor negative wage impacts on earlier migrants and virtually none on indigenous unskilled workers.⁶ All in all, from a global welfare point of view, unskilled migration from poor to rich countries seems to have large upside benefits for both sides, yet it is clearly the most controversial, and the most restricted, of all globalization flows. Here politics and both intentional and unintentional misperceptions decidedly trump economics.

III. Migration of the Skilled

When we attempt to examine the costs and benefits for both the O and D countries of high talent labor migration the story is, of course, quite different. The benefit to the O country is still the contribution such migrants make to the volume of remittances, although the spending pattern of these somewhat more well-to-do left behind families is likely to be somewhat different, i.e. more additional consumption rather than investment oriented. Still, on the benefit side, skilled migrants are likely to stimulate others in the O country to seek additional education in preparation for future migration, thus increasing the average level of education. Moreover, there is a good chance that such migrants will ultimately return, once the home country has reached a certain level of income and opportunity. This has certainly proven to hold in the cases of Korea, Taiwan and India with engineers, IT specialists and others leaving Silicon Valley and its equivalents, returning home— sometimes after many

⁶ David Card (2001). “Immigrant Inflows, Native Outflows and the Local Labor Market Impacts of Higher Immigration,” *Journal of Labor Economics*, 19, 22-64.

years – and contributing in a major way to the growth of high tech industries in the O countries.

But there are also costs to be considered, especially in the short run, when a poor O country loses valuable human capital on which it has invested substantial educational expenditures. This perverse movement of human capital – from poor to rich countries – has occasioned much discussion and policy debates in the past, including Bhagwati's suggestion of an exit tax and equally unimplemented efforts to restrict long-term stays abroad by legal/contractual means.

While high talent manpower is clearly needed to support the O country's development efforts, all too frequently the educational structure yields outputs not really suited to the needs of the contemporary economy, creating a mismatch, with potentially explosive political consequences, e.g. the well-known case of the highly skilled unemployed in Sri Lanka. In such circumstances, unless the domestic educational production function can be reformed so that the output is better suited to the developing country's needs, emigration may provide the only possible escape valve. On the other hand, there are cases, including the Philippines, where it is official policy to generate skilled labor, in this instance doctors and nurses, specifically for purposes of export and remittances, seen not as a cost but as a benefit to society.

Turning to the D country situation, while unskilled immigrants, as we have seen, can generally be viewed as substitutes for capital, skilled labor is likely to constitute a complement to the rich country's capital, both physical and human. While D country immigration barriers are therefore usually friendlier to skilled immigrants than to the

unskilled, empirical evidence indicates that the negative impact of such arrivals on the incomes of their indigenous counterparts is actually likely to be larger than what we found to be the case for the unskilled. Unless the skilled arrivals fill a particular, relatively poorly serviced, non-competitive niche or, in a dynamic context, are in a position to help generate entirely new economic activities, they ultimately represent a greater threat to the income levels of their domestic counterparts than in the unskilled case. Nevertheless, given their modest number and the relative absence of union opposition to their arrival, the overall political resistance is likely to be much lower; moreover, the recognition that they help overcome specific shortages and/or provide entrepreneurial energy and generate precious technology change, especially in the knowledge industries, is more likely to carry the day, certainly in the more dynamic D countries. In the case of the U.S., for example, it has been estimated that a 10% increase in the number of foreign graduate students raises patent applications by 4.7%, and we all know of the contribution of Chinese and Indian migrants to the science and technology explosions in the Silicon Valley.

IV. Conclusions for Policy

It should be abundantly clear that the enhanced South-North migration of both unskilled and skilled individuals would not only increase global welfare but is almost certain to benefit both the O and D countries. At present, since migration is clearly the most constrained of the various dimensions of globalization, it also offers the greatest potential for future gains. This potential emanates not only from the fact that it is a static substitute or complement to the other elements of globalization but also

because, as we have noted above, it also has a potentially important dynamic catalytic impact.

International trade has initially exploded, rising 25 times since 1950, much faster than per capita income. Even if the Doha Round cannot be resuscitated, we can expect trade to continue to grow – if at somewhat lower rates - since it is generally recognized to represent a positive sum game – even if the gains are not equitably distributed as between North and South. The arrivals of foreign capital, shifting from ODA in the immediate post-war era to private flows, can also be expected to continue to expand – and the same can be said of the transfer of technology, even though trade-related property rights issues do still need to be sorted out.

The most obvious policy conclusion, but also the most difficult to implement, would, of course, be for the D countries to lower their barriers to migration, especially those curbing the unskilled labor variety. When domestic producers and labor unions in the so-called sunset industries feel threatened by a combination of technology change, competitive imports and the arrival of migrant workers, it is usually the latter, more visible and threatening, which is likely to bear the brunt of restrictive actions. While, as already mentioned, politics here is usually in a good position to trump rationality, just as with respect to the traditional emphasis on reciprocity in trade liberalization negotiations, nowhere else is the problem as pronounced as in the realm of international migration. The resistance is usually more modest with reference to the flow of skilled immigrants since they can be defended as likely to be net helpful to the local economy. Even as the pressures mount to accept more immigrants, whether for reasons of demographics, business interests,

entrepreneurial renewal, or job characteristics, most rich D countries, e.g. Japan and the U.S., prefer to close one eye to illegal immigration rather than to lower official barriers. This holds generally in spite of the serious humanitarian and rule-of-law related side-effects. The recently passed U.S. immigration legislation, focused on penalties and border fences, can be seen as a response to this general attitude.

Multilateral negotiations to reduce migration barriers have never been tried. Given the convergence of issues relating to trade and immigration, such a function might sensibly be lodged in the WTO. With services now included in WTO negotiations this would represent a rational extension - especially when migration is increasingly perceived as of potential benefit to both rich and poor countries. Though there are legitimate worries about the further overloading of that body, this would appear to be a better option than working with the toothless International Organization for Migration - or creating yet another new look-alike institution.

Secondly, as the 2005 report of the UN's Global Commission on National Immigration emphasized, member countries' "best practice" related to guest worker arrangements could be generalized. For example, it recommended multilateral consideration of a South Korean program forcing temporary migrants to deposit a proportion of their earnings in a special savings account which is forfeited if "temporary" threatens to become "permanent."

A third policy option would be the installation of a much more effective trade adjustment assistance program in D countries so that, given the simultaneous arrival of immigrants and imports, affected domestic workers could be retrained and actually moved into "sunrise industries." Discussion during the WTO Hong Kong Ministerial

Conference in December '05 suggested focusing ODA more specifically on the facilitation of trade. Such an initiative could include moving towards a Global Trade and Migration Adjustment Assistance Program, administered by the World Bank or the WTO, financed mainly by D countries' ODA contributions and following multilaterally negotiated rules of the game. Foreign aid spent at home in this fashion is likely to yield a higher return to D country taxpayers. Inevitably, when all is said and done, elements of globalization can lead to some job losses in the D countries. The reaction has varied from minimal state intervention in the form of a rather ineffective adjustment assistance program – plus a rather flexible labor market – in the U.S., to substantial public purse support, combined with strict government controls over the labor market, in France. Perhaps the best model may be found in Denmark which combines a generous public safety net with a relatively flexible labor market. But since all, especially emerging countries, will not have the same budgetary capacity, assistance from outside may be warranted. But, even in the absence of major changes in the international rules of the game, O countries can provide systematic information, and even financial support, to potential migrants, both temporary and permanent, as for example, in the case of the Philippines. Improving credit access may serve to reduce the demand and simultaneously enhance the ability of unskilled would-be migrants to move – thus reducing the potentially explosive gap previously referred to.

One way to be helpful in this regard is by facilitating the flow of remittances which, as we have mentioned, can make important financial as well as entrepreneurial contributions to the O countries' development, while incurring much

smaller risks than other capital flows with respect to either the narrow or broad definition of the “Dutch Disease.” Given their increased importance and the even more rapidly increasing realization of their importance to both parties, special efforts should be made to reduce current exorbitantly high remittance transfer fees in the D countries.

But, ultimately, the only reliable way to reduce expected lifetime income gaps between individuals in the O and D countries is to enhance participatory, i.e. labor absorbing, development in the former. With Mexican immigrants benefiting to the extent of approximately \$250,000 by migrating to the U.S., while equality of outcomes is certainly not required, a reduction of such huge expected income gaps, for an individual Mexican and, as important, for her children, undoubtedly is. And that, in turn, of course, requires successful development in the O country, mainly a domestic affair, but one that can be assisted from the outside. How to do this effectively extends beyond the scope of this paper.⁷

⁷ See however, G. Ranis, “Toward the Enhanced Effectiveness of Foreign Aid,” presented at the UNU-WIDER Conference on Aid, June 16-17, 2006, Helsinki, Finland, to be published.

References:

Card, David (2001). "Immigrant Inflows, Native Outflows and the Local Labor Market Impacts of Higher Immigration," *Journal of Labor Economics*, 19, 22-64.

Freeman, Richard B. (2006). "People Flows in Globalization," *Journal of Economic Perspectives*, Spring, 20(2).

International Organization for Migration, <http://www.iom.int/jahia/jsp/index.jsp>

Maimbo, Samuel Munzele and Dilip Ratha (eds) (2005), Remittances: Development Impact and Future Prospects, World Bank.

Philippine Overseas Employment Administration, <http://www.poea.gov.ph/default.htm>

Woodruff, Christopher M. and Rene Zenteno, (2001). "Remittances and Microenterprises in Mexico," working paper, www2-irps.ucsd.edu/faculty/cwoodruff/RemittancesDec01.pdf [off-site PDF]

World Bank (2005). "Global Economic Prospects: Economic Implications of Remittances and Migration 2006," Herndon, VA.