THE POLITICAL ECONOMY OF EMIGRATION AND IMMIGRATION

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Trebilcock and Sudak consider the economic effects of both emigration and immigration and analyze optimal migration policies in source and destination countries with a view to evaluating their potential compatibility. Although emigration poses risks of fiscal loss and human capital depletion, the empirical basis for these fears is unclear given possible offsetting factors such as remittances, return migration, and skills transfer, initial incentives for education, and dynamic investment effects of citizens living abroad. Studies find mostly positive welfare gains from migration in immigration countries, with the possible exception of native workers with very low skills. In the labor market, immigration has not been shown generally to significantly depress wages or raise unemployment levels; it is generally a net fiscal benefit to source countries.

Emigration countries should implement policies that address both the desire to leave and the fact of exit. Human capital is retained best when economic and, in some cases, political conditions improve. The authors urge a cautious approach to physical and economic barriers to exit in source countries. Such barriers can raise serious concerns about individual welfare and could be harmful to domestic welfare. Given the fact of exit, emigration countries will be made best off by policies that facilitate remittances, trade, investment, and return migration. Emigrants are properly viewed not as a sunk cost, but as a resource to be cultivated, and one that has all too often been ignored. Immigration countries would be well served by a more decentralized and market-driven approach to migration that permits certain immigrant classes relatively unhindered entry, subject to standard criminality, health, and national security checks. Fiscally induced migration can be limited by requiring immigrants (or their sponsors) to buy private social program insurance to insulate destination countries from drawings against non-contributory social programs over a period of time. Family class immigrants and sponsored overseas refugees could also avail themselves of this program (although this does not preclude refugee applications based on humanitarian grounds). In addition, countries could benefit by relaxing citizenship requirements, allowing certain temporary workers to obtain permanent resident status, and facilitating the citizenship of students studying on a temporary basis.

Potential incompatibilities exist primarily in two areas. First, the emphasis in destination countries on skilled immigrants might aggravate concerns about human capital loss in source countries. Second, the goal of maximizing remittances represents a transfer of wealth from immigration to emigration countries.

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INTRODUCTION

Assuming that emigration and immigration states both implement policies aimed at maximizing their respective domestic welfare functions, are these policies likely to be complementary in nature or to conflict? Surprisingly, although research has extensively analyzed the economic considerations surrounding immigration, the political and economic implications of emigration are only now receiving increasing attention. Kim Barry's paper makes an important contribution to that literature. However, an exclusive focus on the policy implications of either emigration or immigration risks obscuring the interaction between policies of emigration countries and policies of immigration countries. Hence we review the key political economy considerations on *both* sides of the migration equation, and suggest that emigration and immigration states need not view migration as a zero-sum game. In fact, the "gradual institutionalization of relations between most emigration states and their citizens abroad"[1] identified

[1] Kim Barry, *Home and Away: The Construction of Citizenship in an Emigration Context*, 81 N.Y.U. L. REV. 11, 59 (2006).

by Barry suggests several ways in which the objectives of emigration and immigration states may be served by complementary policies. Although the economic consequences are more varied and complex, the exchange of human capital across borders bears many similarities to trade in any other valuable good—a comparison which, we argue, has encouraging implications because it suggests mutual gains from greater international mobility of economic factors of production.

With a set of assumptions that only tenuously approximate reality, neoclassical economic theory suggests that the optimal migration policy would be not to have one at all.[2] That is, neoclassical economic theory suggests that borders should be open since any constraint on the operation of the international labor market (e.g., closed or only semi-open borders) will generate distortions in economic decisionmaking and impose welfare costs globally in terms of foregone production and, consequently, unrealized utility gains. Indeed, economists Bob Hamilton and John Whalley, through an application of neoclassical economic theory, have estimated that the benefits to the world of eliminating all global restrictions on the movement of people could more than double worldwide gross domestic product (GDP) each year and improve the international distribution of income by reducing overall income inequalities.[3] This suggests that, at least from a global welfare perspective, prevailing restrictive immigration policy regimes in most countries are deeply misguided.

Given the complexity of the issues involved, however, reliance on this initial appeal to the conclusions of neoclassical economic theory is premature. Moreover, because migration policy is presumably formulated within a narrower domestic welfare perspective, rather than a global welfare perspective, it is the domestic welfare perspective that informs the following discussion of the economics of migration policies. Our focus on "enlightened economic self interest" should not be construed as implying disregard for a rights-based approach. In fact, differing perspectives do not lead inevitably to sharply incongruent policy implications, although a detailed analysis is beyond the scope of this paper.[4] Within the economic perspective our choice of domestic welfare over global welfare as a policy benchmark is not a comment as

[2] *See, e.g.*, TERESA HAYTER, OPEN BORDERS: THE CASE AGAINST IMMIGRATION CONTROLS 3 (2000) (noting that "economic liberalisation should of course include the free movement of labour as well as of goods and capital").

[3] *See* Bob Hamilton & John Whalley, *Efficiency and Distributional Implications of Global Restrictions on Labour Mobility: Calculations and Policy Implications*, 14 J. DEV. ECON. 61, 70–72 (1984).

[4] For an example on the immigration side, see Michael J. Trebilcock, *The Case for a Liberal Immigration Policy*, *in* JUSTICE IN IMMIGRATION 219 (Warren F. Schwartz ed., 1995).

to which formulation of the welfare function should be preferred, but rather a reflection of political realities that dictate a continued reliance on national welfare as the primary criterion for policy formulation. Again, a comparison of the impacts of different formulations of the welfare function is outside our focus here, although our analysis suggests at least some complementarities between policies promulgated with a view to either domestic or global welfare.

In order to contextualize the discussion of migration policies, it is helpful to first describe current levels and flows of migrants around the world. According to the United Nations, "there were some 175 million international migrants in 2000" (about 2.9% of the world's population), "well over double the 84 million in 1975."[5] The percentage of migrants within the world's population has not increased significantly over the past twenty-five years although migrant stocks in developed nations increased from 3.1% to 4.5% between 1965 and 1990, and the increase in North America, Western Europe, and Australasia was even larger, rising from 4.9% to 7.6% over this period.[6] Still, these relative increases are far below increases in international trade and investment flows, largely reflecting restrictive immigration policies in receiving countries.[7]

The tables reproduced below indicate recent trends in immigration, respectively identifying the top ten countries of emigration from 1970–1995, the top ten countries of immigration from 1970–1995, the fifteen countries with the largest international migrant stock in 2000, and the fifteen countries with the highest percentage of migrants in total population in 2000.[8]

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[5] INT'L ORG. FOR MIGRATION, WORLD MIGRATION 2003: MANAGING MIGRATION—CHALLENGES AND RESPONSES FOR PEOPLE ON THE MOVE 304 (2003), *available at* http://www.iom.int/iomwebsite/Publication/ServletSearchPublication?event=detail&id=2111.

[6] *See* Timothy J. Hatton & Jeffrey G. Williamson, *What Fundamentals Drive World Migration?* 2 (World Inst. for Dev. Econ. Research, United Nations Univ., Discussion Paper No. 2003/23, 2003).

[7] *See* Michael J. Trebilcock, *The Law and Economics of Immigration Policy*, 5 AM. L. & ECON. REV. 271, 272 (2003).

[8] Tables drawn from INT'L ORG. FOR MIGRATION, *supra* note 5, at 305–06; *see also* ORG. FOR ECON. CO-OPERATION & DEV., TRENDS IN INTERNATIONAL MIGRATION 295-303 (2004) (describing techniques used to collect data on migration). There is no universal consensus on the technical definition of a "migrant"—this can make international comparisons difficult, as different countries provide data using different criteria. As the IOM notes, "for the sake of uniformity, the United Nations has proposed that migrant be defined for statistical purposes as a person who enters a country other than that of which he/she is a citizen for at least 12 months, after having been absent for one year or longer." *See* INT'L ORG. FOR MIGRATION, *supra* note 5, at 8; *see also* DEP'T OF ECON. & SOC. AFFAIRS, UNITED NATIONS, RECOMMENDATIONS ON STATISTICS OF INTERNATIONAL MIGRATION (REVISION 1) 17–18 (1998), *available at* http://unstats.un.org/unsd/publication/SeriesM/SeriesM_58rev1E.pdf). Comparisons are therefore necessarily imperfect, and

TABLE 1. TOP TEN COUNTRIES OF EMIGRATION, 1970–1995

Country	Net Number of Emigrants (in millions)
Mexico	6.0
Bangladesh	4.1
Afghanistan	4.1
Philippines	2.9
Kazakhstan	2.6
Vietnam	2.0
Rwanda	1.7
Sri Lanka	1.5
Colombia	1.3
Bosnia and Herzegovina	1.2

TABLE 2. TOP TEN COUNTRIES OF IMMIGRATION, 1970–1995

Country	Net Number of Immigrants (in millions)
United States	16.7
Russian Federation	4.1
Saudi Arabia	3.4
India	3.3
Canada	3.3
Germany	2.7
France	1.4
Australia	1.4
Turkey	1.3
United Arab Emirates	1.3

even the United Nations in compiling its own calculations of migration uses data for migrant stocks calculated by several different methods, depending on the country. *See Definitions and Sources in* UNITED NATIONS, INTERNATIONAL MIGRATION 2002—WALLCHART, *available at* http://www.un.org/esa/population/publications/ittmig2002/Migration2002.pdf) [hereinafter *Definitions and Sources*].

TABLE 3. FIFTEEN COUNTRIES WITH THE LARGEST INTERNATIONAL MIGRANT STOCK,[9] 2000

Country	Net Number of Migrants (in millions)
United States	35.0
Russian Federation	13.3
Germany	7.3
Ukraine	6.9
France	6.3
India	6.3
Canada	5.8
Saudi Arabia	5.3
Australia	4.7
Pakistan	4.2
United Kingdom	4.0
Kazakhstan	3.0
Côte d'Ivoire	2.3
Iran	2.3
Israel	2.3

This paper is organized as follows. Parts I and II discuss the economic implications of emigration and immigration, respectively. We outline the competing theories and empirical evidence, and their policy implications. Part I focuses on the loss of human capital to emigration countries and the impact on their economic growth and tax base, but considers offsetting factors such as increased incentives to acquire higher education, return migration, remittances, and other forms of investment by emigrants in their source country. Part II reviews the labor market effects of immigration and the fiscal effects of immigration on immigration countries, reviews the basic patterns of immigration policies in many immigration countries, and argues that from a domestic welfare perspective, more liberal and market-driven immigration policies would generally be beneficial to immigration countries. The conclusion to our paper relates the policy discussions regarding emigration and immigration by analyzing the interaction

[9] "Migrant stock" is defined for most countries as "the mid-year estimate of the number of people who are born outside the country. For countries lacking data on place of birth, the estimated number of non-citizens. In both cases, migrant stock also includes refugees, some of whom may not be foreign-born." *Definitions and Sources*, *supra* note 8. Note that this is distinct from net migration figures, which measure inflows and outflows.

TABLE 4. FIFTEEN COUNTRIES WITH HIGHEST PERCENTAGE OF MIGRANTS IN TOTAL POPULATION, 2000

Country	Percentage of Migrants in Total Population
United Arab Emirates	73.8
Kuwait	57.9
Jordan	39.6
Israel	37.4
Singapore	33.6
Oman	26.9
Estonia	26.2
Saudi Arabia	25.8
Latvia	25.3
Switzerland	25.1
Australia	24.6
New Zealand	22.5
Gabon	20.3
Canada	18.9
Kazakhstan	18.7

effects between the two sets of policies. We conclude that there are no sharp conflicts between optimal policies for emigration countries and optimal policies for immigration countries, with two caveats. First, significant tension exists between emigration countries and immigration countries regarding the treatment of unskilled workers. Second, the emigration of skilled workers, particularly from developing countries, raises the prospect of human capital depletion in those countries, although the empirical effects of such emigration remain uncertain.

I
THE ECONOMICS OF EMIGRATION

The natural corollary of the neoclassical prediction that a restrictive immigration policy will distort efficient decisionmaking and resource allocation is that a restrictive emigration policy will have broadly the same effects. Hamilton and Whalley's estimate of a doubling of global GDP in the absence of immigration policies[10] requires,

[10] *See* Hamilton & Whalley, *supra* note 3, at 70–72.

obviously, a similarly lax approach on the emigration side: Without any emigrants, the benefits from relaxing immigration policies are moot. However, policymakers in emigration countries—that is, countries where the outflow of people is greater than their inflow (see, for example, Table 1)—have legitimate reasons to be concerned when their country is seen as a less desirable place to live. Emigration does more than decrease the stock of citizens. People possess human and financial capital, among other endowments necessary for economic development, and if migratory patterns adversely affect the rate of flow and the stock of these capital variables, specific policies may be required that either limit emigration, or ameliorate its deleterious effects. While wealthy nations are not immune from these concerns, they loom especially large for developing nations seeking to find a way out of poverty. Although the concerns are significant, the appropriate policy response and the exact magnitude of the "emigration threat" are unclear.

We now proceed to describe briefly some basic causes of emigration, focusing principally on economic factors. We then turn to the economic implications of emigration for the domestic welfare of emigrant countries, and conclude with an assessment of the elements of an optimal emigration policy from the perspective of emigration countries.

A. *The Causes of Migration*

As early as 1885, E.G. Ravenstein, described as "the founding father of modern migration research,"[11] suggested that the primary causes of migration are economic.[12] In the traditional neoclassical models, as described by W. Arthur Lewis, Gustav Ranis, John Fei, and later Michael Todaro, migration is the result of uneven global endowments of capital and labor.[13] Emigration occurs when individuals believe the discounted present value of their potential lifelong post-

[11] RONALD SKELDON, MIGRATION AND DEVELOPMENT: A GLOBAL PERSPECTIVE 19 (1997).

[12] *See* E.G. Ravenstein, *The Laws of Migration*, 48 J. STAT. SOC'Y LONDON 167, 198–217 (1885); E.G. Ravenstein, *The Laws of Migration*, 52 J. ROYAL STAT. SOC'Y 241, 286–89 (1889).

[13] W. Arthur Lewis, *Economic Development with Unlimited Supplies of Labour*, 22 MANCHESTER SCH. ECON. & SOC. STUD. 139, 176–77, 190 (1954); Gustav Ranis & John C.H. Fei, *A Theory of Economic Development*, 51 AM. ECON. REV. 533, 533–34 (1961); MICHAEL P. TODARO, INTERNAL MIGRATION IN DEVELOPING COUNTRIES: A REVIEW OF THEORY, EVIDENCE, METHODOLOGY, AND RESEARCH PRIORITIES 21–28 (1976).

migration wage earnings, subtracting transaction costs, is positive.[14] Yet this traditional explanation has been challenged on both theoretical and empirical grounds. Several competing economic theories have suggested variations on the migration decision.[15] For instance, Oded Stark suggests that migration is the result of geographic risk diversification at the family level.[16] Michael Piore developed a segmented labor market theory, which focuses on rich country demand for workers to fill low status jobs as the explanation for migration.[17] Douglas Massey developed a social capital explanation for migration, which relies on networks created by waves of migrants to facilitate access to preferred jobs and wages at points of destination.[18]

There are, undoubtedly, many less technically nuanced and less economic reasons for migration. At the extreme, natural disasters, unfavorable political regimes, racial or other discrimination, war, and hunger can all explain some migration. In fact, some migratory periods, such as the Irish migration to the United States in the nineteenth century, or the many migrations in Africa, India, the former Soviet Union, and the Middle East are best explained by these extremes. Health conditions, personal fascination (cultural or otherwise), and familial attachment all add to the list of possible migratory push and pull factors.

Empirically, there is no clear answer on how best to explain migration patterns. The World Bank has noted that emigration and

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14 D.S. Massey, *Theory of Migration*, *in* INTERNATIONAL ENCYCLOPEDIA OF THE SOCIAL AND BEHAVIORAL SCIENCES 9828, 9829 (Neil J. Smelser & Paul B. Baltes eds., 2001).

15 Douglas Massey provides an excellent theoretical overview of the subject. *Id.* at 9829–34. *See also* DOUGLAS S. MASSEY ET AL., WORLDS IN MOTION: UNDERSTANDING INTERNATIONAL MIGRATION AT THE END OF THE MILLENNIUM 17–59 (1998) (describing contemporary theories of international migration). For a less technical overview, see INT'L ORG. FOR MIGRATION, *supra* note 5; an expansive treatment of the subject is THEORIES OF MIGRATION (Robin Cohen ed., 1996).

16 ODED STARK, THE MIGRATION OF LABOUR 39–43 (1991); *see also* Massey, *supra* note 14, at 9829 (describing Stark's theory). This theory might be especially relevant in nations where state programs provide only weak insurance against economic downturns, shifting the insurance costs increasingly onto the familial network. Geographic diversification can play an economic function through remittances and easier subsequent migration, for instance, if the source economy deteriorates, and a non-economic function in the case of political turmoil or instability. Both the neoclassical model and the new economics model use micro-level individual decisions to maximize an objective function—in the former income, in the latter, risk reduction.

17 MICHAEL J. PIORE, BIRDS OF PARADISE: MIGRANT LABOUR AND INDUSTRIAL SOCIETIES 15–49 (1979); *see also* Massey, *supra* note 14, at 9830 (describing Piore's theory).

18 Massey, *supra* note 14, at 9832; *see also* DOUGLAS S. MASSEY ET AL., RETURN TO AZTLAN: THE SOCIAL PROCESS OF INTERNATIONAL MIGRATION FROM WESTERN MEXICO 139–71 (1987).

population growth are closely interconnected,[19] and according to the International Organization for Migration (IOM), "[t]he most obvious cause of migration is the disparity in income levels . . . . Yet there is no cut-and-dry relationship between poverty, demography and emigration."[20] Specifically, the poorest countries with the greatest unemployment or underemployment "do not necessarily supply most of the potential emigrants."[21] From 1970 to 1995, the United Nations listed Mexico, the Philippines, and Colombia among the top ten emigration nations.[22] While not wealthy, these nations certainly fit the demographic and poverty profile for emigration less well than, for instance, nearly any sub-Saharan African nation.

Reflecting these observations, several studies have found evidence that the way in which income disparities between countries affect migratory decisions is itself conditional on the absolute poverty of the potential emigrants. The early work of Massey, and more recent work by Timothy Hatton and Jeffrey Williamson and by Peter Stalker, suggest a bell-shaped relationship between domestic income levels and the decision to emigrate. At very low levels of income, potential emigrants face poverty constraints in incurring the costs of emigration, while at higher levels of income, potential emigrants have no incentive to emigrate.[23] This suggests that at very low levels of economic development, the income gap alone is not sufficient to induce migration, even though that gap may be very large, as is the case in sub-Saharan Africa. The explanation for this apparent paradox may relate to structural and demographic changes brought about by economic development—perhaps something in the process of industrialization such as the move from agrarian to urban settings, or the displacement of other aspects of traditional lifestyles—which generate greater migratory pressures in the early stages of economic development than later stages, or that the financing of a long distance relocation is simply beyond the reach of the world's poorest citizens.[24]

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19 World Bank, Globalization, Growth, and Poverty 81 (2002); *see also* Int'l Org. for Migration, *supra* note 5, at 15.

20 Int'l Org. for Migration, *supra* note 5, at 15.

21 *Id.*

22 United Nations, The World at Six Billion 52 (1999), *available at* http://www.un.org/esa/population/publications/sixbillion/sixbilpart4.pdf.

23 Timothy J. Hatton & Jeffrey G. Williamson, The Age of Mass Migration: Causes and Economic Impact (1998) [hereinafter Hatton & Williamson, The Age]; Peter Stalker, Workers Without Frontiers: The Impact of Globalisation on International Migration (2000); Douglas S. Massey, *Economic Development and International Migration in Comparative Perspective*, 14 Population & Dev. Rev. 383, 390–96 (1988); *see also* Hatton & Williamson, *supra* note 6, at 3 (suggesting explanations for bell-shaped relationship between domestic income levels and emigration).

24 Hatton & Williamson, *supra* note 6, at 3.

A recent discussion paper for the United Nations by Hatton and Williamson tests the relative importance of these competing factors in three geographic and temporal settings: historical (pre–World War I) European mass migration, more recent migration to the United States, and current migration patterns in and out of Africa.[25] The European migrations before the First World War provide a unique opportunity to test the impact of absolute poverty versus relative poverty on emigration in a world relatively unburdened by state-sanctioned restrictions on immigration.[26] The authors identify four fundamentals driving observed emigration rates. First, the share of the labor force in agriculture is found to weakly depress migration, suggesting that rural populations were somewhat less internationally mobile than urban ones. Second, the wage gap, represented by the purchasing-power-parity adjusted real wage in the source country relative to a weighted average for destination countries, is strongly correlated with migration, with the analysis indicating that a ten percent increase in the wage ratio raised annual emigration rates by 0.7 emigrants per thousand persons. Third, birthrates, lagged by twenty years (a proxy for the number of young adults in a population), were found to have a large positively correlated effect on emigration, indicating that young adults are more likely to move and/or that a glut in labor supply provided by the presence of these able-bodied workers created indirect incentives to move. Finally, stocks of previous emigrants living abroad would, for every thousand previous emigrants, "pull" twenty more to emigrate each year (colloquially referred to as the "friends and relatives" effect).[27]

In Hatton and Williamson's analysis of emigration to the United States, unlike the previous analysis of European migration, the effect of immigration policies is important. For instance, initial policies that favored immigration from European countries partly accounted for European immigrants' dominance in U.S. immigration inflows until the 1960s.[28] The authors also found that adding one thousand miles in the distance to Chicago from the source country reduced migration rates by twenty percent; being a landlocked nation reduced emigration by a third; having English as the predominant national language increased emigration by a factor of three; and for every thousand immigrants from a country already represented in the United States,

[25] Hatton & Williamson, *supra* note 6. The data on European migration is drawn from a 1998 work by the authors, although that data is largely reproduced in the 2003 paper referenced above. *See* HATTON & WILLIAMSON, THE AGE, *supra* note 23, at 32–58.

[26] Hatton & Williamson, *supra* note 6, at 6.

[27] *Id.* at 7–8 (citing results of HATTON & WILLIAMSON, THE AGE, *supra* note 23).

[28] *Id.* at 10.

the subsequent annual inflow increased by twenty-six immigrants.[29] With respect to income levels and poverty, the authors found that source country income levels correlate negatively with migration rates to the United States through a relative income variable, but positively through an absolute poverty variable.[30] The net effect depends on initial income levels: For western European countries, a 10% rise in per capita GDP *reduces* migration to the United States by 12.6%, while for a typical African country, a similar GDP increase *raises* migration by 0.3%.[31] If relative incomes are held constant—that is, a concurrent ten percent rise in U.S. per capita GDP is assumed—there is "virtually no effect on the west European country but a 2 per cent rise in migration from the African country."[32]

Hatton and Williamson note that "Africa has generated remarkably few migrants to the major labour-scarce countries despite the massive gains that it would bring to the migrants."[33] The authors recount three possible explanations for the paradox. First, most Organisation for Economic Co-operation and Development (OECD) countries (which are mostly developed countries) stress family reunification and skills as preconditions for admittance. These policies favor immigrants whose countries are already well represented by existing immigrant stocks—which, by and large, Africans are not—or immigrants with advanced skills—again, the development of which is not readily available to the poorest of the poor.[34] Second, the poverty constraint may, for many Africans, be large enough to offset the income differential effect.[35] And third, African populations may be less mobile than populations in other parts of the world.[36] In their subsequent analysis, the authors reject the third explanation, suggesting there is ample evidence for significant mobility within African populations, both domestically and across borders.[37] Working with a limited set of data focused on migration within the confines of the African continent, the authors contend that wage differentials correlate with migration in a manner similar to European migrations (discussed above), but that the poverty constraint is very weak, suggesting that lack of resources is not a significant impediment to migration. This last finding is in marked contrast to the results cited above when

[29] *Id.* at 11.
[30] *Id.* at 11–12.
[31] *Id.* at 12.
[32] *Id.* at 13.
[33] *Id.*
[34] *Id.*
[35] *Id.*
[36] *Id.*
[37] *Id.* at 14.

emigration to rich countries is considered, as in the U.S. example discussed earlier.[38] This result makes intuitive sense: One would expect poverty to be "a smaller impediment for cross-border movements [within Africa] than it would be for trans-Atlantic migration."[39]

Thus, the basic neoclassical economic motivations for emigration are thwarted by the actual costs of moving (which the poorest cannot afford), the geographic realities of movement (Mexico is much closer to the United States than, say, Rwanda, even though it may be significantly more welfare-enhancing for a Rwandan to migrate), and a lack of social networks or émigré communities to integrate the least advantaged. Language barriers also present significant difficulties to successful migration, as do family ties that may be strained during and following emigration, since the probability of family reunification in the destination country, and especially with more distant family, is often low. Perhaps most clearly, immigration policies themselves can frustrate not only economic but also all other motivations for migration.

Despite this, Saskia Sassen has found recently that even in the absence of immigration controls, migration patterns between countries with large economic differences in Europe show "'that few people leave poor regions for richer ones in the absence of controls, even where travel distances are reasonable and conditions vary considerably from one country to another.'"[40] This complicates the neoclassical understanding further. Most emigrants do not move from very poor to very rich countries—in fact, the majority of migration takes place within continents, where income differences are relatively small, not between continents.[41] For instance, the IOM calculated that between 1975 and 1994, only ten percent of Asian emigrants actually left Asia.[42]

The decision to emigrate is a very personal one, influenced by a myriad of factors that are often difficult to identify and quantify. However, while no single cause can explain migration, most indications are that economic considerations are among the more important

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38 *Id.* at 14–15.

39 *Id.* at 15. For another study that specifically considers the push and pull factors of African migration, see T.O. Fadayomi, *Brain Drain and Brain Gain in Africa: Causes, Dimensions and Consequences*, *in* INTERNATIONAL MIGRATION IN AND FROM AFRICA: DIMENSIONS, CHALLENGES AND PROSPECTS 143, 144–52 (Aderanti Adepoju & Tomas Hammar eds., 1996).

40 Saskia Sassen, *Les Migrations Ne Surgissent Pas du Néant* [*Migrations Don't Come Out of Nowhere*], MANIÈRE DE VOIR, Mar.-Apr. 2002, at 10, 13, *quoted and translated in* INT'L ORG. FOR MIGRATION, *supra* note 5, at 15.

41 INT'L ORG. FOR MIGRATION, *supra* note 5, at 16.

42 *Id.* This figure excludes Chinese migrants.

factors. The use of skills-based programs in Canada, Australia, and New Zealand, and the U.S. skills-based H-1B visa program (an initiative that permits skilled workers to enter the United States temporarily, but does not envisage their permanent immigration), all suggest that immigration countries realize that a significant portion of emigrants are motivated by economic concerns.[43] Nevertheless, in formulating emigration and immigration policies, it is important not to lose sight of the complexity of migration—its many sources and disparate causes—which in part explains our more general focus on these policies in this paper (in contrast with Barry's predominant focus on migration between Mexico and the United States). With this, we now turn to a consideration of the economic implications of emigration.

B. Economic Implications of Emigration

There is widespread concern that emigration may be detrimental to emigration countries. The most prominent concern relates to the implications for developing countries of human capital outflows—the so-called "brain drain"—for development. The postulation is as follows: Since human capital is required for economic development, the loss of that human capital in developing countries may hamper their future growth. However, while objections to emigration on human capital grounds have a strong theoretical basis and some empirical support, more recent studies suggest that initial concerns may have been overstated. Two factors militate towards exercising a significant degree of caution in formulating a policy response to migration in emigration countries: the empirical uncertainties of the situation and at least some skepticism, on economic and non-economic grounds, toward programs that would deal with migration by imposing costs and barriers for would-be emigrants. In fact, the prospect of emigration, and particularly the growing demand for labor in developed countries, might present source countries with unique opportunities to leverage their human capital in new ways.

1. The Human Capital Dimension

Many economic theories of development emphasize the importance of investment in specialized human capital. Obviously, the emigration of a developing country's most highly skilled workers has the potential to undermine such investments. The growth models of Paul

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43 Mihir A. Desai et al., *Sharing the Spoils: Taxing International Human Capital Flows*, 11 INT'L TAX & PUB. FIN. 663, 665 (2004).

Romer[44] and Robert Lucas[45] form the foundation of the human capital critique of emigration. Lucas's model of human capital–driven development emphasized that the "theory of human capital focuses on the fact that the way an individual allocates his time over various activities in the current period affects his productivity . . . in future periods."[46] Education is an investment, and the stock of human capital is welfare-enhancing for the country that possesses it, since it can drive economic growth. Robert Barro and Jong-Wha Lee lend empirical credence to the theoretical models linking development with human capital.[47] After constructing a data set for 129 countries from 1960 to 1985, drawing on both direct census and survey figures, and school enrollment data, the authors concluded that "[f]or growth rates of real per capita GDP, the overall years of male and female school attainment at a prior date are each positive influences."[48] More recently, Edward Glaeser et al., in revisiting the long-standing debate on whether institutional strength or human capital accumulation causes growth, suggest that the latter is more fundamental to economic growth than are institutions.[49] The authors find that education levels are a strong predictor of subsequent economic growth, suggesting that this is either a result of technological externalities associated with human capital—which comports with Lucas's view presented above—or, more likely, because "human capital leads to more benign politics, less violence, and more political stability."[50] In other words, investment in higher education levels creates a political externality. This conclusion is reinforced by other researchers' find-

[44] *See* Paul M. Romer, *The Origins of Endogenous Growth*, 8 J. ECON. PERSP. 3 (1994) (discussing two competing viewpoints regarding origins of endogenous growth models); Paul Romer, *Increasing Returns and New Developments in the Theory of Growth*, *in* EQUILIBRIUM THEORY AND APPLICATIONS 83 (William A. Barnett et al. eds., 1991) (outlining and classifying recent growth models); Paul M. Romer, *Endogenous Technological Change*, 98 J. POL. ECON. S71 (1990) (providing growth model driven by endogenous technological change); Paul M. Romer, *Increasing Returns and Long-Run Growth*, 94 J. POL. ECON. 1002 (1986) (setting out model for long-run growth in which knowledge has increasing marginal returns to productivity).

[45] Robert E. Lucas, Jr., *On the Mechanics of Economic Development*, 22 J. MONETARY ECON. 3 (1988).

[46] *Id.* at 17.

[47] Robert J. Barro & Jong-Wha Lee, *International Comparisons of Educational Attainment*, 32 J. MONETARY ECON. 363 (1993) [hereinafter Barro & Lee, *International Comparisons*] (describing multi-national data set on educational attainment useful for studying economic growth); Robert J. Barro & Jong-Wha Lee, *Sources of Economic Growth*, 40 CARNEGIE-ROCHESTER SERIES ON PUB. POL'Y 1 (1994) (explaining empirical data on differences in country growth rates in part based on educational attainment).

[48] Barro & Lee, *International Comparisons*, *supra* note 47, at 392.

[49] Edward L. Glaeser et al., *Do Institutions Cause Growth?*, 9 J. ECON. GROWTH 271, 274 (2004).

[50] *Id.* at 282.

ings, such as those of Alberto Alesina et al., suggesting that political stability predicts economic growth.[51]

There is clearly a consensus that human capital is essential to growth and an important force driving technological and institutional changes that determine growth outcomes. However, the question remains: Does emigration lead to depletion of human capital stocks and reduced incentives to invest in human capital? An intuitive response appears to be that it must: If skilled and educated individuals form a substantial portion of the emigration cohort, they are necessarily reducing the available human capital stock in source countries. Early on, Herbert Grubel and Anthony Scott suggested that where labor markets are not efficient—that is, where externalities associated with skilled labor of the type discussed above exist—emigration may be harmful to long-run growth (although they ultimately downplayed the deleterious effects of emigration by limiting the scope of these externalities).[52] Subsequent work by Jagdish Bhagwati and Koichi Hamada,[53] and Viem Kwok and Hayne Leland,[54] reinforced the view that emigration can have significant deleterious effects on human capital formation, and consequently growth, as did more recent work by Nadeem Haque and Se-Jik Kim,[55] and by Kaz Miyagiwa.[56]

Somewhat provocatively, Bhagwati argued in 1976 for a tax on the brain drain, intended to ameliorate some of the brain drain's effect on poor countries.[57] The crux of the idea is to levy a supplementary income tax on highly skilled emigrants in destination countries with the proceeds of the tax to be transmitted to developing

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51 Alberto Alesina et al., *Political Instability and Economic Growth*, 1 J. ECON. GROWTH 189 (1996). *But see* Glaeser et al., *supra* note 49, at 282–85 (noting strong *correlation* between institutional quality and growth but expressing more skepticism regarding existence of *causal* relationship between institutions and growth).

52 Herbert B. Grubel & Anthony D. Scott, *The International Flow of Human Capital*, 56 AM. ECON. REV. 268, 270–73 (1968).

53 Jagdish Bhagwati & Koichi Hamada, *The Brain Drain, International Integration of Markets for Professionals and Unemployment: A Theoretical Analysis*, 1 J. DEV. ECON. 19 (1974).

54 Viem Kwok & Hayne Leland, *An Economic Model of the Brain Drain*, 72 AM. ECON. REV. 91 (1982) (suggesting employers' asymmetric information regarding educated workers' productivity as cause of brain drain).

55 Nadeem U. Haque & Se-Jik Kim, *"Human Capital Flight": Impact of Migration on Income and Growth*, 42 INT'L MONETARY FUND (IMF) STAFF PAPERS 577 (1995) (examining impact of human capital migration on growth and income levels).

56 Kaz Miyagiwa, *Scale Economies in Education and the Brain Drain Problem*, 32 INT'L ECON. REV. 743 (1991) (demonstrating effects of brain drain on workers of various skill levels in sending country).

57 *See generally* TAXING THE BRAIN DRAIN I: A PROPOSAL (Jagdish N. Bhagwati & Martin Partington eds., 1976) (elaborating upon brain drain tax proposal).

countries for development spending.[58] Mihir Desai et al. have recently revisited the taxation proposal in a contemporary context.[59] Using the examples of India and the United States, the authors suggest that taxation schemes may be a feasible method for emigration nations to control the degree and impact of the "brain drain."[60] We discuss their proposal and its implications in more detail below.

Empirical evidence on the brain drain has been hampered by the lack of comparable data regarding education levels and migration. The most comprehensive study to date is that of William Carrington and Enrica Detragiache.[61] Classifying the stock of immigrants in OECD countries based on education level and country of origin (for sixty-one developing countries), they find that emigrants tend to have above average education levels for their country of origin, and that "[f]or almost all countries, the highest migration rates are for individuals with a tertiary education."[62] This is especially true in the Caribbean and Central America, where virtually all of the countries show migration ratios[63] of citizens with tertiary education of greater than ten percent, with some countries losing as much as fifty percent of their most highly educated citizens to the United States.[64] In South America, Guyana shows a migration rate of over seventy percent for citizens with tertiary education—in other words, seven in ten university educated individuals leave for the United States.[65] Some of the poorest African countries, such as Sierra Leone, Ghana, Gambia, and Uganda, each have migration ratios in excess of fifteen percent for highly skilled citizens.[66] A subsequent working paper for the World Bank by Frédéric Docquier and Abdeslam Marfouk expands on the

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58 A public finance–based analysis of the approach is provided in Jagdish N. Bhagwati & Koichi Hamada, *Tax Policy in the Presence of Emigration*, 18 J. PUB. ECON. 291 (1982).

59 *See* Desai et al., *supra* note 43, at 677–86 (exploring range of taxation instruments available to source countries to manage human capital flows).

60 *Id.*

61 William J. Carrington & Enrica Detragiache, *How Big is the Brain Drain?* (IMF, Working Paper No. WP/98/102, 1998) [hereinafter Carrington & Detragiache, *How Big*]; *see also* William J. Carrington & Enrica Detragiache, *How Extensive is the Brain Drain?*, 36 FIN. & DEV. 2 (1999) [hereinafter Carrington & Detragiache, *How Extensive*]; Frédéric Docquier & Hillel Rapoport, *Skilled Migration: The Perspective of Developing Countries* (World Bank, Working Paper No. WPS 3382, 2004), *available at* http://wdsbeta.worldbank.org/external/default/WDSContentServer/IW3P/IB/2004/09/22/000160016_20040922151739/Rendered/PDF/WPS3382.pdf.

62 Carrington & Detragiache, *How Big*, *supra* note 61, at 3; *see also* Carrington & Detragiache, *How Extensive*, *supra* note 61, at 2.

63 In this context, a migration ratio is the ratio of individuals with the particular educational attainment that emigrate versus those who do not.

64 Carrington & Detragiache, *How Big*, *supra* note 61, at 17.

65 *Id.*

66 *Id.* at 18–19.

work of Carrington and Detragiache, largely confirming their conclusions (but adding that the regions with the highest migration ratios of skilled emigrants, Central America and Central, Eastern, and Western Africa, saw large increases in the rates of educated citizens leaving between 1990 and 2000).[67]

Thus theoretical and empirical considerations create a strong case for concern about the effects of emigration on development. However, there are mounting concerns that this focus on human capital depletion (centered around how many people with high education levels leave), while intuitive, is incomplete. Some possible objections to the conventional wisdom include the positive incentive effects that emigration may have on the decision to pursue tertiary education in the first place, and the prospect of return migration and "brain circulation."[68] Investment and fiscal effects also bear consideration. Emigrants facilitate the creation of economic networks that not only permit the circulation of ideas, but also of foreign capital, and the exploitation of unique trade and business opportunities. The dramatic rise in remittance payments, another form of investment, is at least one very direct economic benefit from emigration.

2. *The Decision to Educate*

Given that the ability to emigrate is valuable, factors that influence the possibility of emigration, particularly in poor countries, may be pursued by individuals to maximize the chances of subsequent emigration. The immigration policies of most developed nations, traditionally the destination for economically motivated emigrants, are replete with mechanisms intended to facilitate migration of skilled individuals. For instance, the point systems in Canada, New Zealand, and Australia all give preference to individuals with certain educational prerequisites.[69] Several economists have suggested that these incentive effects may be significant, with Oded Stark et al. emphasizing that "[s]ince prospective migration favorably alters the incentives of a poor country's workforce to invest in human capital formation, policymakers may wish to reconsider before embarking on measures that hinder migration."[70] Unfortunately, the empirical evi-

[67] Frédéric Docquier & Abdeslam Marfouk, *Measuring the International Mobility of Skilled Workers* (1990–2000) 22 (World Bank Policy Research Working Paper Series, No. 3381, 2004).

[68] On "brain circulation," see *infra* notes 80–82 and accompanying text.

[69] Desai et al., *supra* note 43, at 665.

[70] Oded Stark et al., *A Brain Gain with a Brain Drain*, 55 ECON. LETTERS 227, 233 (1997). Andrew Mountford makes similar arguments. Andrew Mountford, *Can a Brain Drain Be Good for Growth in the Source Economy?*, 53 J. DEV. ECON. 287 (1997) (exam-

dence pertaining to incentive effects is limited. In one of the few studies to specifically consider the issue, Michel Beine et al. looked at a cross-section of thirty-seven developing countries.[71] Given the limited availability and reliability of data, and the difficulty in model specification, the authors appropriately offered only a tentative conclusion that "the incentive effect of migration prospects cannot be easily dismissed on empirical grounds."[72] However, to the extent that individuals' decisions to invest in education are in part influenced by the possibility of subsequent emigration, a country's human capital stock may be enhanced if a significant percentage of educated citizens subsequently choose to remain in their home countries.

Within the education context, one concern raised by the emigration of a country's most skilled workers relates to a country's ability and willingness to provide higher level educational institutions. In terms of ability, the emigration of well-educated individuals may reduce the availability of instructors. For instance, India suffers from severe shortages of skilled postdoctoral-level professionals to teach at the university level, particularly in engineering colleges, where some estimates suggest up to 10,000 teaching vacancies.[73] Research at high levels often involves exploiting research networks and coordinating with related professionals. Without the possibility of such collaboration, research output and the incentive to enter a research program may be reduced. While there are no reliable data on the actual extent of the problem and the causal relationship with emigration, the vacancy rates at Indian engineering colleges suggest that this may be an example of human capital loss. We have suggested that emigration opportunities may increase incentives for higher education in emigration countries. It would be unfortunate if the emigration of highly educated citizens left no one qualified to teach at the university and postgraduate levels. Without qualified instructors, the incentives for higher education would be undermined.

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ining relationship between increased incentives for education stemming from possibility of migration and productivity levels in source countries).

[71] *See* Michel Beine et al., *Brain Drain and Economic Growth: Theory and Evidence*, 64 J. DEV. ECON. 275 (2001). Noriyoshi Hemmi, working with Beine's model, extends the analysis by introducing fixed costs, and finds that the brain drain may be deleterious in the short run, but that the long-run growth prospects ought to improve in the presence of emigration. Noriyoshi Hemmi, *Brain Drain and Economic Growth: Theory and Evidence: A Comment*, 77 J. DEV. ECON. 251–56 (2005).

[72] Beine et al., *supra* note 71, at 287.

[73] Desai et al., *supra* note 43, at 677 (citing WORLD BANK, INDIA: SCIENTIFIC AND TECHNICAL MANPOWER DEVELOPMENT IN INDIA 46 (2000)).

3. *Return Migration*

Apart from incentive effects, the prospect of return migration might also counter the deleterious influence of skills emigration. As *The Economist* suggests, "don't emigrate, circulate."[74] The case for return migration is relatively straightforward: If skilled emigrants return, the decline in human capital precipitated by their initial departure is mitigated.[75] Return migration is about more than mere "reacquisition" of human capital—the returnees are an important source of new ideas and knowledge acquired abroad, not limited to technical knowledge, but also political and moral ideals. Although authoritative empirical treatment of return migration has been remarkably sparse, there are indications that the phenomenon is growing in importance. George Borjas and Bernt Bratsberg, considering outmigration of the foreign-born from the United States, find that significant numbers of immigrants do return home, although the effect varies by source country—very poor countries geographically distant from the United States receive fewer return emigrants.[76] An earlier study by Borjas found that it is primarily the least-skilled immigrants who return home, suggesting that "failures" are the most likely return migrants (a less favorable result from the human capital perspective). These results are challenged by Guillermina Jasso and Mark Rosenzweig, who earlier found that it is the most-skilled workers who are most likely to return home.[77] A study for the Public Policy Institute of California by AnnaLee Saxenian of 1500 first-generation Indian and Chinese immigrants to the United States, found that of those employed in Silicon Valley—the cream of the crop in terms of technical skills—a full fifty percent returned home at least once a year on business, and five percent return at least five times a year.[78]

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[74] *The View from Afar*, ECONOMIST, Nov. 2, 2002, at 11, 12.

[75] Several economists have considered more specifically the theory surrounding return migration. *See, e.g.*, George J. Borjas & Bernt Bratsberg, *Who Leaves? The Outmigration of the Foreign-Born*, 78 REV. ECON. & STAT. 165 (1996) (presenting conceptual and empirical analysis of return migration behavior of foreign-born persons in United States); Manon Domingues Dos Santos & Fabien Postel-Vinay, *Migration as a Source of Growth: The Perspective of a Developing Country*, 16 J. POPULATION ECON. 161 (2003) (showing that some emigrants can rationally decide to return to their home country upon accumulation of certain amount of knowledge abroad); Mountford, *supra* note 70.

[76] Borjas & Bratsberg, *supra* note 75, at 170–71.

[77] Guillermina Jasso & Mark R. Rosenzweig, *How Well Do U.S. Immigrants Do? Vintage Effects, Emigration Selectivity, and Occupational Mobility*, *in* 6 RES. POPULATION ECON. 229, 229-53 (T. Paul Schultz ed., 1988). *See also* George J. Borjas, *Immigrant and Emigrant Earnings: A Longitudinal Study*, 27 ECON. INQUIRY 21 (1989). Both studies are helpfully summarized in Borjas & Bratsberg, *supra* note 75, at 164.

[78] *See* ANNALEE SAXENIAN ET AL., LOCAL AND GLOBAL NETWORKS OF IMMIGRANT PROFESSIONALS IN SILICON VALLEY 25 (Pub. Pol'y Inst. of Cal. ed., 2002), *available at*

Saxenian contends that part of the explanation for the growth of, for instance, India's Bangalore and Hyderabad software development and outsourcing centers lies with the close business networks facilitated by Indian engineers working in Silicon Valley.[79]

Several limited studies have suggested that return migration levels are highly significant. For instance, Jean Johnson and Mark Regets, writing for the National Science Foundation, argue that whether brain drain or brain circulation is a more appropriate descriptor of migratory patterns must be decided on a case-by-case basis.[80] They base their findings on a study by Michael Finn. Finn's study looked at the number of foreign science and engineering students who obtained doctoral degrees in the United States from 1990 to 1991, and considered how many of them were working in the United States in 1995.[81] Johnson and Regets note that for some countries, such as China and India, the stay rates are remarkably high—88% and 79% respectively.[82] On the other hand, countries such as South Korea, Taiwan, and Mexico saw much smaller retention rates of 11%, 42%, and 30% respectively.[83]

An increasing number of policy initiatives focus on temporary or permanent return migration as an important skills-transmission mechanism. The United Nations explicitly recognizes the value of two-way trade in human capital through the Transfer of Knowledge through Expatriate Nationals (TOKTEN) program, which helps skilled emigrants return home to assist on specific development programs on a temporary basis.[84] The IOM has assisted skilled emigrants from

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http://www.ppic.org/content/pubs/R_502ASR.pdf; *see also The View from Afar*, *supra* note 74, at 12 (referencing Saxenian's study of brain circulation among Chinese and Indian immigrants in Silicon Valley); ANNALEE SAXENIAN, SILICON VALLEY'S NEW IMMIGRANT ENTREPRENEURS 56 (Pub. Pol'y Inst. of Cal. ed., 1999), *available at* http://www.ppic.org/content/pubs/R_699ASR.pdf [hereinafter SAXENIAN, NEW IMMIGRANT ENTREPRENEURS] (discussing brain circulation and entrepreneurship in Chinese and Indian immigrant communities in Silicon Valley).

79 SAXENIAN, NEW IMMIGRANT ENTREPRENEURS, *supra* note 78, at 56–71.

80 Jean M. Johnson & Mark C. Regets, *International Mobility of Scientists and Engineers to the U.S.: Brain Drain or Brain Circulation?* 4 (Nat'l Sci. Found. Issue Brief No. 98-316, 1998), *available at* http://www.nsf.gov/sbe/srs/issuebrf/sib98316.htm.

81 *Id.* at 3 (citing MICHAEL G. FINN, STAY RATES OF FOREIGN DOCTORATE RECIPIENTS FROM U.S. UNIVERSITIES, 1995 (1997)).

82 Johnson & Regets, *supra* note 80, at 3. The authors note that the Chinese figures are higher due to one-time policies granting permanent residency to Chinese students following political developments in China—specifically, the Chinese government reaction to student demonstrations. *Id.*

83 *Id.*

84 *See* Tokten.org, Objectives and Benefits, http://www.tokten.org/toktenobj.aspx (last visited July 10, 2005).

Afghanistan in returning to help rebuild that shattered country.[85] Legal reforms such as increasing recognition of dual citizenship, discussed at length by Barry, further decrease the costs of return migration.[86]

4. *The Declining Tax Base*

While it is relatively uncontroversial that emigration will, on the whole, reduce the tax base, the actual fiscal effects are much more difficult to quantify, requiring data on permanent and temporary migration flows that are not available.[87] Tax losses can be significant. Mihir Desai et al. calculate that India loses $700 million annually in tax revenues from skilled emigrants leaving to the United States under the H-1B visa program.[88] This compares with India's annual individual income tax revenues of $5.84 billion.[89] However, some caution needs to be exercised when extrapolating this mathematical reality to arrive at clear fiscal results. Emigration will have differing fiscal effects depending on the skill and employment background of the emigrant. The drawing down of fiscal reserves as a result of reduced contributions needs to be weighed against the effect of the emigrant's departure on potential current and future claims on government expenditures. Further, emigrants who are not officially employed, or who remit little by way of tax to the authorities, will be a small fiscal drain, and in many cases their departure may improve the fiscal balance sheet. Tax policy itself may in some cases be a contributing factor to relocation decisions, although this might be more significant in the case of developed countries.

5. *Remittances*

Emigrants provide further economic opportunities to their home countries through several forms of investment. Barry notes that increasing recognition of the scale of remittances has driven some countries to adopt specific policies aimed at maximizing remittance levels.[90] Table 5 lists the top twenty countries receiving remittances in 2000, while Table 6 categorizes remittances by area of origin.[91] The IMF estimates remittances in 2000 at $63 billion dollars (U.S.), with

[85] *See Outward Bound*, ECONOMIST, Sept. 8, 2002, at 24, 26.

[86] Barry, *supra* note 1, at 42–50.

[87] *See, e.g.*, Desai et al., *supra* note 43, at 675.

[88] *Id.*

[89] *Id.*

[90] Barry, *supra* note 1, at 35–36.

[91] Both tables are taken from INT'L ORG. FOR MIGRATION, *supra* note 5, at 311.

over $51 billion of this amount going to developing countries.[92] Other estimates, attempting to include remittances that might travel through unofficial channels, put the figure closer to $100 billion.[93] This compares with total official development assistance of $41.6 billion in 2000.[94] India tops the list of remittance-receiving countries, at over $11.5 billion in 2000 alone.[95] For some countries, the gap between remittances and foreign aid can be large, with Turkey receiving remittances thirty-nine times the amount of foreign aid, Mexico thirty-four, Costa Rica twenty-four, India six, Tunisia five, and Lesotho four.[96] In a series of papers, Peter Gammeltoft finds that between 1988 and 1999, annual remittances to developing countries more than doubled, and that remittances go primarily to lower-middle-income and low-income countries.[97] While lower-middle-income countries receive the greatest amount of remittances, remittances constitute a much greater share of international capital flows to low-income countries (measured against aid and foreign investment).[98]

Desai et al. question the notion that remittances might somehow offset the negative consequences of the brain drain.[99] Their rough calculations suggest that of the $700 million India loses in tax revenues due to the H-1B visa program, only about $300 million finds its way back into government coffers.[100] However, while it may be true that some portion of lost tax revenues are not recaptured by the government directly, the fact that remittances to India are roughly twice the revenues the government generates from income taxes should ameliorate some of the concern regarding declining tax revenues, assuming that remittances in part meet needs that would otherwise need to be provided out of tax revenues. A study by J. Edward Taylor and Irma Adleman suggests that remittances also have strong multiplier effects:

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92 *Id.* at 311; *see also* 2 IMF, BALANCE OF PAYMENTS STATISTICS YEARBOOK 54 (2002) (listing total remittances at approximately $63 billion and remittances to developing countries at $52 billion).

93 Peter Gammeltoft, *Remittances and Other Financial Flows to Developing Countries* 5 (Ctr. for Dev. Research, Working Paper No. 02.11, 2002) [hereinafter Gammeltoft, *Remittances*]; *see also* Peter Gammeltoft, *Remittances and Other Financial Flows to Developing Countries*, 40 INT'L MIGRATION 181, 183 (2002) [hereinafter Gammeltoft, *Financial Flows*].

94 *See* WORLD BANK, GLOBAL DEVELOPMENT FINANCE: BUILDING COALITIONS FOR EFFECTIVE DEVELOPMENT FINANCE 87 (2001).

95 INT'L ORG. FOR MIGRATION, *supra* note 5, at 311.

96 Gammeltoft, *Remittances*, *supra* note 93, at 3.

97 *Id.* at 2-3; *see also* Gammeltoft, *Financial Flows*, *supra* note 93, at 187.

98 Gammeltoft, *Remittances*, *supra* note 93, at 2.

99 Desai et al., *supra* note 43, at 676.

100 *Id.*

TABLE 5. TOP TWENTY COUNTRIES RECEIVING MIGRANTS' REMITTANCES, 2000

Country	Remittances (US$)
India	11,585,699,000
Mexico	6,572,599,000
Turkey	4,560,000,000
Egypt	3,747,000,000
Spain	3,414,414,000
Portugal	3,131,162,000
Morocco	2,160,999,000
Bangladesh	1,948,999,000
Jordan	1,845,133,000
El Salvador	1,750,770,000
Dominican Republic	1,688,999,000
Greece	1,613,100,000
Colombia	1,553,900,000
Ecuador	1,316,700,000
Yemen	1,255,206,000
Indonesia	1,190,000,000
Sri Lanka	1,142,329,000
Brazil	1,112,999,000
Pakistan	982,899,000
Jamaica	789,299,000

The introduction of money into the economy stimulates the creation of jobs and other economic activity.[101]

Remittances are not without their possible drawbacks. First, they can be volatile. The IOM calculates that in the case of Egypt the standard deviation from annual averages in remittance payments between 1980 and 1999 was seventeen percent, fifty percent in the case of Cameroon, and over one hundred percent in Botswana, Ghana, Lesotho, and Nigeria.[102] Volatility might make it difficult to make long-term plans that would put remittance payments to their most efficient uses, and could in some situations create a culture of depen-

[101] J. EDWARD TAYLOR & IRMA ADLEMAN, VILLAGE ECONOMIES: THE DESIGN, ESTIMATION AND USE OF VILLAGEWIDE ECONOMIC MODELS 27–29 (1996).
[102] INT'L ORG. FOR MIGRATION, *supra* note 5, at 226.

TABLE 6. MIGRANT REMITTANCES* FROM VARIOUS WORLD REGIONS, 1988 TO 1999

Year	Region of Origin					Destination	
	Africa	Americas	Middle East	Asia	Europe	Developing Total	World Total
1988	2,998	3,194	5,644	6,365	6,396	24,597	34,568
1989	3,119	3,737	4,828	6,921	9,370	27,975	37,847
1990	3,589	4,751	6,320	6,777	12,722	34,159	45,933
1991	3,423	5,793	5,539	7,317	4,924	26,996	38,998
1992	4,838	7,252	8,005	7,254	3,280	30,629	43,573
1993	4,946	7,470	7,782	7,807	3,534	31,539	43,727
1994	4,884	9,653	5,864	11,097	3,938	35,436	47,598
1995	5,383	11,499	5,590	11,786	5,113	39,371	51,761
1996	5,464	11,239	5,825	15,380	5,609	43,517	55,896
1997	6,389	12,036	6,560	21,066	6,130	52,181	63,153
1998	6,492	13,235	6,154	15,566	7,650	49,097	60,409
1999	5,993	14,589	6,203	17,906	6,520	51,211	62,976

* in US$ millions

dency (although given that most remittances are sent back to support family members, it is unclear whether such dependency on family members is a priori objectionable).[103] Second, remittances are often used to finance consumption purchases such as food, medicine, televisions, and clothing, which may not have significant development benefits, especially if the consumption is of imported goods.[104] Third, it is not entirely clear whether the intuition that emigrants with higher incomes remit greater amounts to their home country holds. In fact, Lindsay Lowell suggests the opposite: "[E]ducation tends to reduce the likelihood that a worker remits" (in part because more highly skilled immigrants tend to come from families with less pressing financial needs, and in part because they tend to integrate more fully into host country societies), although the substantiating data is weak.[105] Ultimately, while remittances may entail certain risks, little empirical work has tracked the actual effect of remittance payments, or even the characteristics of those who send remittances. Whether remittance payments on their own are a net benefit is a question less complex than whether remittance payments might sufficiently spur development to offset the human capital concerns raised above. That question is largely an open one.

6. *Other Investment*

Apart from remittances, emigrants can also invest in their countries of origin by creating business opportunities for compatriots abroad, and by channeling investment from their destination countries back home. The Indian software engineers in Silicon Valley, discussed above, are a case in point. Additionally, the network effects previously discussed in the immigration context are likely to provide commensurate benefits to emigration states. Several studies in the trade literature suggest that at least as far as goods are concerned, emigration networks play a significant role both in directing investment from the diasporas back home, and in opening investment and export opportunities for the home country abroad. For instance, David Gould estimates that increased emigration can spur significant growth in bilateral trade between source and destination countries.[106] Subse-

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[103] *Id.* at 229.

[104] B. Lindsay Lowell, *Some Developmental Effects of the International Migration of Highly Skilled Persons* 19 (Int'l Labour Office (Geneva), Int'l Migration Papers No. 46, 2001).

[105] *Id.* at 20.

[106] David M. Gould, *Immigrant Links to the Home Country: Empirical Implications for U.S. Bilateral Trade Flows*, 76 REV. ECON. & STAT. 302, 314 (1994) ("The empirical results indicate that immigrant information can play an important role in determining U.S. bilateral trade flows.").

quent analysis by Keith Head and John Ries finds that the results are similar in the Canadian context, where a ten percent increase in immigrant stock is associated with a one percent increase in exports from Canada to the home country, and a three percent increase in imports to Canada.[107] Desai et al. similarly confirm that the close ties between local Indian talent pools and Indian software development professionals in the United States suggest "that the brain drain may actually be stimulating trade in services and investment for source countries through these network effects."[108]

More direct investment is also possible. Barry notes the preference given by the Indian government to "incentivize capital inflows"[109] from emigrant populations.[110] The fact that these capital investments are given preference over the investments of non-Indian foreigners speaks to the continuing skepticism attached to foreign investment by those in developing countries. Where, however, the investor is of shared ethnic or cultural background, apparently there is less concern for either loss of independence or undue influence.

7. *The "Optimal Brain Drain"*

While the negative aspects of emigration, such as human capital stock depletion and tax base erosion, cannot be dismissed, evidence suggests that neither can the positive effects generated through brain circulation and return migration, incentives to educate, remittance payments, and other forms of investment. The idea of an optimal level of emigration of skilled workers arises from the work of Stark et al., Mountford, and Beine.[111] It appears that some level of emigration may be desirable, although empirical evidence on where the equilibrium point arises is unfortunately unavailable. However, as Lowell notes, "[t]his is a promising line of thought because if there is an optimal level of emigration that stimulates the pursuit of higher education in source countries, and spurs economic growth, then governments should choose to take advantage of emigration."[112]

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[107] Keith Head & John Ries, *Immigration and Trade Creation: Econometric Evidence from Canada*, 31 CANADIAN J. ECON. 47, 53 (1998).

[108] Desai et al., *supra* note 43, at 675.

[109] Barry, *supra* note 1, at 35 n.86.

[110] *Id.* at 40–42.

[111] *See supra* notes 70–72 and accompanying text; *see also* Docquier & Rapoport, *supra* note 61 (concluding that for developing countries optimal migration rate of highly skilled citizens is likely to be positive, although difficult to specify precisely, and therefore urging caution when considering restrictions on international mobility of educated populations).

[112] Lowell, *supra* note 104, at 16.

C. Emigration Policy

Policy makers do not have the benefit of waiting for all the empirical ambiguities noted above to be resolved. Rather, policy must be made based on the existing set of data, with a clear view of the uncertainties present therein. Broadly speaking, the focus on emigration policies is a relatively recent phenomenon, which provides researchers with less material on which to base a critical assessment, but more freedom to offer innovative solutions. Barry identifies several sets of policies instituted by emigration countries that aim to decrease the possible negative effects of emigration, including policies aimed at political and legal incorporation of emigrants into the source country body politic, and those directed towards increasing income flows from emigrants. Using her broad outline of the evolution of emigration policy, we offer a brief critical assessment of this developing field, suggesting that many of the nascent tools reflect an increasing degree of sophistication on the part of emigrant nations.

It is uncontroversial that emigration policies will be directed at increasing domestic welfare. Still, arguments can be made, at least under certain conceptions of fairness, that a state's responsibility to its citizens precludes a simple domestic-centered view of welfare: Countries regularly intervene politically and economically on behalf of expatriate communities. From the domestic welfare perspective, governments ought to maximize the amount of financial contributions their countries obtain from emigrants, in the form of remittances and other types of investment, while minimizing the human capital and fiscal losses associated with emigration, either by relying on financial contributions, or by incentivizing people not to leave in the first place, or to return if they have left. Allowing for specific consideration of emigrants' welfare complicates the analysis somewhat, as there may be incompatibility, for instance, between imposing taxes on those who leave and permitting emigrants to retain income earned in their activities abroad.

Barry describes three broad categories of policy tools aimed at retaining larger portions of emigrant income, specifically, those seeking "to sustain or increase inflows of remittances . . . to coerce economic contributions styled as taxes; and . . . [to] offer an array of benefits and incentives to attract capital and investment inflows from emigrants."[113]

Mechanisms aimed at sustaining or increasing remittance payments, the first of the three tools directed towards income retention, are largely beneficial, although it is not clear whether states have gone

[113] Barry, *supra* note 1, at 35.

far enough in pursuing the various channels available. Barry identifies two ways in which remittances are maximized: first, by increasing the ease with which remittances can be transmitted through official means, and second, by enhancing the emotional connection between emigrants and states.[114] To the extent that allegations of corruption, inefficiency, and unreliability in government institutions find resonance in the actual experiences of emigrants, this indicates a clear area in which governments can improve.[115] Active efforts to reduce fees for transmission of remittance payments are likely to enhance the efficiency of the remittance process, as well as to reduce mistrust among emigrant groups regarding "sudden state interest in monies they traditionally have sent home by private, informal means."[116] It would be a mistake, however, for states to focus on government-controlled transmission channels to the detriment of less official channels that may be more efficient and more readily acceptable to emigrants. For instance, several banks in Paris have reportedly been able to offer transfer services for remittance payments at rates significantly lower than traditional private money-transfer services.[117] Such developments should be analyzed closely, and emulated where practicable. Semi-official mechanisms that combine private sector innovation in money transmission with some degree of oversight may hold some promise for generating greater remittance flows, as would clear rules that at the very least do not penalize income received from family members abroad, reducing incentives to conceal those monies from authorities.

The second mechanism aimed at increasing the emigration state's share of emigrant incomes identified by Barry is the coercion of economic contributions, "styled as taxes."[118] These methods find some resonance in the taxation proposals of Bhagwati, and more recently Desai et al., which both advocate the taxation of emigrant incomes and the redistribution of monies back to emigration states. Desai, for instance, canvasses three possible forms a taxation regime might take. One would be a unilateral adoption of U.S.-style tax rules, which tax citizens and permanent residents on their global incomes. An alternative is a cooperative regime that would have destination countries collect taxes, but subsequently remit a portion of those taxes to source

[114] *Id.* at 35–36.

[115] *See id.* at 36.

[116] *Id.* at 36.

[117] INT'L ORG. FOR MIGRATION, *supra* note 5, at 230.

[118] Barry, *supra* note 1, at 35, 36–40.

countries. A third would entail exit taxes levied on human capital (that is, on skilled emigrants).[119]

Each of these proposals is subject to several complications. In the case of unilateral taxation of international income, the largest obstacle may be the collection of reliable data without extensive cooperation from other countries. A cooperative tax regime, the second proposal, would require an even higher level of bilateral or multilateral coordination. The practical obstacles, however, are not necessarily a critical impediment to adoption of these policies, as evidenced by the successful implementation of the first option by the United States (which, admittedly, is in a unique position). That option, however, which at least in the U.S. example is based on the principle of not taxing income twice, would not raise significant revenues if the U.S. credit system—which reduces one's domestic tax obligations if income is taxed abroad—were adopted, unless domestic tax rates in sending states were set significantly above those in destination states. For instance, an Indian emigrant to the United States, working and paying taxes there, would upon calculating credits for these taxes only be liable to the Indian tax authorities if Indian tax rates were set above U.S. rates. Such a move, however, might create counterproductive incentives for emigrants to renounce their Indian citizenship and might therefore have deleterious macroeconomic effects on the Indian economy.

The third proposal seems less desirable in principle, because of its effects on the mobility options of citizens. Whether we should care about these depends on the value we attach not only to individual capacity for choice, but also to the efficiency gains and incentive effects associated with voluntary exchange, compared to centrally planned or coerced exchange. Consider the lessons of simple trade models, which suggest that where exchanges are voluntary both parties are, in general, made better off by exchanges. In the context of economic development, a system that relies on voluntary financial and nonmonetary contributions from emigrant populations creates a strong incentive for countries to institute political and economic policies that will attract support from emigrants. Although the role of institutions in economic development is not entirely clear, protection of private property rights and "good government" in general would be expected to create conditions that would make emigrants more comfortable with repatriating not only their financial capital—either as remittances, direct and indirect investments, or as part of a business network—but also their human capital—that is, themselves. While

[119] Desai et al., *supra* note 43, at 682–85.

there is a sequencing issue at play—how can institutions improve without corequisite human capital?—permitting emigrants to choose the degree of financial contribution and engagement with their mother country might have some beneficial disciplining effect on that country's domestic policies, perhaps not dissimilar to the stabilizing effect that higher stocks of human capital themselves are thought to have. Although we do not want to overstate this analogy, it is noteworthy that in most cases where barriers have been introduced to prevent one's own citizens from leaving, this has been done in part as a substitute for substantive economic and political change (for example, in the former Soviet Union). In addition, to the degree one accepts the argument that the ability to leave as an emigrant (if not the right to be accepted as an immigrant) is in itself valuable, permitting maximum flexibility in relocation may be desirable. Mandated redistribution has neither of these qualities.

Desai et al. propose possible modifications of this exit taxation system that help ameliorate some of the initial concerns, and relate the rationale for the tax more closely to the human capital aspect of emigration that is most troublesome.[120] For instance, if one construes the tax as a recapture for education and training costs incurred by the source state, it is at least arguable that the loss of the emigrant directly affects the ability of the source country to recapture fiscal expenditures spent training that individual, human capital effects notwithstanding. Extracting taxes for emigration not directly from the emigrant, but either from the emigrant's sponsoring employer in a destination country, or from the sponsoring country's government, while economically parallel to a direct tax, shifts the taxation burden away from the individual. This can be seen as a compensation payment from the immigration country for the training of the immigrant. Clearly, there are organizational considerations, but the idea is less immediately offensive on fairness grounds.

Another variation, with even greater salutary attributes, would be to implement a system of forgivable loans to finance educational expenditures. In this system, some portion of educational costs would be payable by citizens directly during the course of their education, and loans would be available to those in need to cover the costs of education. These loans would be repayable upon graduation, although repayment could be partially waived according to some predetermined schedule should the potential emigrant choose to remain at home. In order to ensure that graduates are not induced to flee the country in order to escape loan repayments, various mechanisms

120 Desai et al., *supra* note 43, at 684–85.

would have to be explored to secure repayment. For instance, education bonds from students, or guarantees by family members, might be required to create the appropriate incentive structure to prevent the economically impractical prospect of chasing graduates around the globe for what, in relative terms, are likely to be small financial amounts. By providing notice of the tax structure *before* a graduate enters education, the government is signaling that it is concerned about the prospect of human capital flight, but leaving the citizen with the option to emigrate should his or her individual cost-benefit calculations still favor such a move. Such a system is likely to induce efficient educational decisions, and to the extent that the financial benefits of emigration are large, emigration will occur. That having been said, all of these proposals still run the risk of adversely affecting the educational decision in the first place, or, in the case of citizenship-linked taxation, of inducing the renunciation of citizenship to avoid taxation.[121] It is also unclear whether such tax regimes would supplement or substitute for voluntary remittance payments. In any event, these proposals should be treated with care.

Barry's third mechanism for increasing emigration states' shares of emigrant incomes is the use of various benefits and incentives aimed at attracting capital and investment flows.[122] These programs exhibit the salutary characteristic of choice. They suggest that institutional and legal changes, such as increased political stability, protection of property rights, and a generally favorable investment climate are necessary to attract foreign investment from emigrants, and that the prospect of increased investment may prod governments to take steps that will increase investor confidence. The extent to which emigrant business networks are fully utilized is unclear. Some evidence suggests that greater government innovation on this front could speed up the process of economic growth, as well as the depth of growth, through these networks, particularly given the trade literature noted above, indicating significant benefits from migration for both source and destination countries.

In addition to the three income retention mechanisms identified above, Barry discusses increased efforts by emigration states to promote legal and political integration of emigrant communities.[123] Efforts to increase the emotional and practical connections between emigrant communities and emigration states are also likely to have positive effects. The benefits of a national identity that incorporates

[121] Even where tax credits are implemented so that income is not taxed twice, the renunciation may be precipitated due to differences in taxation levels.

[122] Barry, *supra* note 1, at 35, 40–42.

[123] Barry, *supra* note 1, at 42–58.

emigrants in a positive way, along with the legal and political methods of incorporation outlined by Barry, extend far beyond the realm of remittances. A positive role in the national myth, enhanced legal rights and protections, political recognition of emigrants, and increased participation in domestic life by emigrants are also likely to increase the chances of return migration and brain circulation, the efficacy of foreign emigrant networks, the options for future emigrants who choose to leave, and investment flows from destination to source countries. Interestingly, many of these initiatives apparently have been hampered in the past not because of their excessive financial costs, which one might reasonably assume to be relatively small, but due to cultural and political barriers reflective of our Westphalian conception of nationhood.

In the long run, institutional change and economic development are likely to be the strongest determinants of whether people want to leave, and of whether they want their persons and their money to return. Bearing in mind the unsettled though close relationship between human capital and institutional development, it is difficult to argue that the poorest countries which suffer some of the worst excesses of poor political leadership ought to simply change. In many cases that would be an unrealistic demand. Of the policies we have canvassed above, only the emigration taxation proposals would resolve the brain drain problem by seeking to keep people at home through imposing financial penalties on their departure. For this reason, these policies need to be treated with the greatest caution. They not only impair the ability of migrants to make the emigration decision, but also reduce emigration countries' incentive or obligation to improve other types of policy decisions so as to minimize the potential impact of human capital flight. The emigration taxation proposals hold the greatest promise for actually preventing people from leaving in the short term. This effect, however, should be viewed with skepticism, since reduced emigration also means that the salutary effects of labor outflows will be lost. Any taxation policy must be designed not as a substitute for other necessary economic and political developments, but to complement them. Special care should be taken to weigh the possible benefits of such a program against the adverse effects of exacting mandatory payments from emigrants; the program may, in the end, be counterproductive if it simply increases incentives to renounce source country citizenship.

The magnitude of the economic effects of emigration on source countries are to a large degree indeterminate. The human capital concerns, while clearly worrisome, merit significantly more research before we can assess how much emigration of skilled workers might be too much. Despite significant progress on the issue in recent years, the relations between emigration opportunities and the decision to educate, return migration, brain circulation, and future investment are still not sufficiently clear to endorse a strongly coercive mechanism of migration control on the part of emigration countries. Even taxation alternatives ought to be approached with care. In terms of fiscal effects, while there is undoubtedly some first stage erosion of the tax base, the dynamic effects of remittances, return migration, and investment are not well understood. Examples like India, where brain circulation and investment from emigrants have been linked with significant economic progress, militate in favor of a cautious approach. Most importantly, policies can be implemented which minimize the risk of overcompensating for uncertain economic consequences of emigration while maximizing the positive effects, such as increasing incentives for remittances, return migration, brain circulation, investment flows, and development of international social and business networks.

II
The Economics of Immigration

In this part we review the economic implications of immigration from the perspective of the domestic welfare of immigration countries, focusing on two principal concerns: the impact on domestic labor markets, and the fiscal effects of emigration. We then briefly describe the pattern of existing immigration policies in many developed immigration countries and critique certain features of these policies. Finally, we sketch the contours of a more decentralized, market-driven set of immigration policies that we believe would enhance domestic welfare in immigration countries.

A. *Economic Implications of Immigration*

Current debates and available empirical evidence surrounding the economic impacts of immigration on receiving countries are much more sophisticated than they were even a decade ago. However, there are many issues that are far from satisfactorily resolved because of the sheer complexity of the causes and effects of immigration. First, immigration policies differ functionally among developed countries so that empirical evidence drawn from one country cannot yield conclusive answers concerning the effects of immigration in another country. Second, the nature of immigrant cohorts to a given country has not been static over time, reflecting shifts in "pull" and "push" factors, as well as changes in immigration policies within countries, making problematic any attempt to draw general conclusions about the desirability of increasing immigration flows (even within a given country).[124] Finally, immigrant cohorts to most developed countries have been and continue to be highly heterogeneous. Refugees and asylum seekers, family-sponsored immigrants, and independent or economic immigrants are often considered together by economists in attempting to evaluate empirically the welfare effects of immigration. It would not be surprising if each subset (and indeed subsets of each subset) of immigrants had separate and differing welfare effects for recipient countries, much as specific emigrant characteristics drive social welfare consequences in emigration states. With these significant cautions in mind, however, the stylized facts and available empirical economic evidence suggest that immigration has been of net benefit to the vast majority of the residents of destination countries, the only possible losers being native workers with very low skill levels.[125] Indeed, casual observation suggests that massive influxes of immigrants to the "New World" over the past two centuries have been accompanied by massive increases in real per capita incomes—in the case of the United States, 1600% between 1820 and 1992.[126]

However, despite these data on the economic benefits of immigration, prevailing public attitudes reflect serious reservations about the economic desirability of immigration.[127] Surveys taken over the past decade generally show that a majority of residents in developed countries would prefer that current immigration levels be reduced or at the very least maintained, but certainly not increased. The survey results reflect fears that increased numbers of immigrants will, inter alia, increase unemployment, displace native workers, lower wages, increase the fiscal burden borne by natives, and increase the crime

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[124] *See* GEORGE J. BORJAS, HEAVEN'S DOOR: IMMIGRATION POLICY AND THE AMERICAN ECONOMY 8 (1999) (describing changing skill distribution among immigrants to United States over time); *see generally* Hatton & Williamson, *supra* note 6 (offering quantitative assessment of economic and demographic factors driving world migration at different times).

[125] In a study coauthored with colleagues Richard Freeman and Lawrence Katz, Borjas argues that empirical evidence suggests that adverse labor market impacts of immigration on wages are concentrated primarily on high school dropouts. *See* George J. Borjas, Richard B. Freeman & Lawrence F. Katz, *How Much Do Immigration and Trade Affect Labor Market Outcomes?*, *in* 1 BROOKINGS PAPERS ON ECONOMIC ACTIVITY 1, 62–63 (William C. Brainard & George L. Perry eds., 1997) (comparing immigration effects on high school dropouts with those resulting from trade with less developed countries).

[126] *See* Randall K. Filer, *Heaven's Door: Immigration Policy and the American Economy*, 39 J. ECON. LITERATURE 578, 579 (2001) (reviewing BORJAS, *supra* note 124).

[127] *See Dreaming of the Other Side of the Wire*, ECONOMIST, Mar. 10, 2005, at 27, 28 [hereinafter *Dreaming*]; JULIAN L. SIMON, THE ECONOMIC CONSEQUENCES OF IMMIGRATION 377–78 (2d ed. 1999).

rate.[128] We focus here on the labor-market and fiscal effects of immigration.

1. *Labor Market Effects of Immigration*

Recent studies of the effects of immigration on labor markets have generally demonstrated that increased numbers of immigrants have played little observable role in reducing wages or in increasing unemployment.[129] Noel Gaston and Douglas Nelson have remarked that "[t]he uniformity with which the authors of [empirical work in labor economics] conclude that there is essentially no consistent evidence of labour-market effects from immigration is truly striking."[130] The authors do, however, acknowledge that: "It is also widely agreed that there are sizeable negative effects on migrants of the same origin and vintage, and, perhaps not quite so widely held, agreement that the small, and shrinking, group of native high-school drop-outs experience economically, and statistically, significant negative consequences from contemporary immigration."[131]

After a thorough review of the empirical evidence in the literature, the National Research Council (NRC) in 1997 concluded that "[t]he weight of the empirical evidence suggests that the impact of immigration on the wages of competing native-born workers is small . . . ."[132] These findings are puzzling given the accepted labor economics account of the expected effects of greater labor market competition. The conventional analysis suggests that by increasing the supply of labor, *ceteris paribus*, wages will decrease among similarly endowed and situated workers. The *ceteris paribus* proviso is important. It requires immigrants to increase the supply of labor in domestic labor markets without simultaneously increasing the demand

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128 *See Dreaming*, *supra* note 127.

129 *See* Noel Gaston & Douglas Nelson, *Immigration and Labour-Market Outcomes in the United States: A Political-Economy Puzzle*, 16 OXFORD REV. ECON. POL'Y 104, 105, 107 (2000) [hereinafter Gaston & Nelson, *Immigration*]; *see also* Noel Gaston & Douglas Nelson, *The Employment and Wage Effects of Immigration: Trade and Labour Economics Perspectives*, *in* TRADE, INVESTMENT, MIGRATION AND LABOUR MARKET ADJUSTMENT 201, 201 (David Greenway et al. eds., 2002) [hereinafter Gaston & Nelson, *Employment and Wage*].

130 Gaston & Nelson, *Immigration*, *supra* note 129, at 105; *see also* AM. IMMIGRATION LAW FOUND., ECONOMIC GROWTH AND IMMIGRATION: BRIDGING THE DEMOGRAPHIC DIVIDE (2005), *available at* http://www.ailf.org/ipc/special_report/2005_bridging.pdf (arguing that lower-skilled immigrants actually complement rather than replace native workforce, and are essential to future economic growth in United States).

131 *Id.* at 109.

132 THE NEW AMERICANS: ECONOMIC, DEMOGRAPHIC, AND FISCAL EFFECTS OF IMMIGRATION 220 (James P. Smith & Barry Edmonston eds., 1997) [hereinafter THE NEW AMERICANS].

for labor. However, an offsetting increase in the demand for labor is in fact quite plausible, since immigrants are consumers of goods and services, and the increased demand for and provision of goods and services inevitably associated with their presence ought to result in a corresponding increase in labor demand by domestic suppliers of goods and services.

Recently, George Borjas, Richard Freeman, and Lawrence Katz have argued that these studies find very little evidence of adverse labor market effects not because these effects do not exist, but because of the difficulty of isolating the impacts of increased numbers of immigrants in local labor markets.[133] Gaston and Nelson have offered a recent competing theoretical explanation of the empirical finding that immigration has little adverse impact on native workers.[134] They argue that the prediction of labor economics that native workers will experience a decrease in wages and an increase in unemployment is dependent upon the paradigmatic labor economics model which assumes (ostensibly for the sake of convenience) that there is only one final good produced in the economy. With only one final good produced in the economy and production technology held constant, the traditional labor market prediction is that since the supply of labor has increased (with less than a proportional increase in demand for labor), the labor market clearing wage rate must decline. Gaston and Nelson argue that adopting a multiple final goods model (such as the one favored by trade theorists) and allowing for trade conditions that permit an approximation of the conditions for factor-price equalization (such as, inter alia, fixed commodity prices) could result in no adverse wage or unemployment effect being realized. This is the case because with more than one economy, and with each economy producing at least two goods with identical technology (assuming fixed commodity prices), the only way an economy can respond to a unilateral increase in, for example, unskilled labor is to alter its output mix in favor of goods whose production is more intensive in unskilled labor. This theoretical result is uncontroversial in trade theory and is quite robust with regard to changes in assumptions regarding the number of goods, the presence of non-traded and intermediate goods, and even the presence of joint production. Gaston and Nelson soften this theoretical conclusion by stating that their objective is not to show that "factor-price insensitivity actually obtains, but that, in a world with more than one output, some of the

[133] *See* Borjas, Freeman, & Katz, *supra* note 125, at 67.

[134] *See* Gaston & Nelson, *Immigration*, *supra* note 129, at 104, 110–12; *see also* Gaston & Nelson, *Employment and Wage*, *supra* note 129, at 222–23.

adjustment to an endowment shock will occur via a change in the output mix, reducing the actual, and measured, costs to the competing factor (i.e. domestic unskilled labour)."[135]

An important caveat needs to be attached to the recent empirical research on the effects of immigrants on receiving countries' labor markets. Even if it proved to be the case that immigration (perhaps at higher than current levels) has depressed wages or raised unemployment amongst native workers, it is still not clear that the net domestic welfare effects would be negative. After all, international trade often has similar effects but we generally conclude that liberalized trade increases total net welfare (especially consumer welfare) in importing countries. Liberalized immigration may have similar effects. Indeed, if immigrants are generally more productive in receiving countries than sending countries (perhaps because of poor institutions and infrastructure in the latter),[136] these effects could be more pronounced than if they stayed at home and provided goods and services for export into developed countries' goods and services markets. On the other hand, as pointed out above, in the case of immigration, immigrants are likely to increase demand for locally produced goods and services that are typically not traded internationally. As well, as also noted above, an increase in the supply of labor is likely to change the output of receiving countries' economies: Production will increase in areas of immigrant labor, reducing negative effects on native workers in those areas. In any event, it is far from clear why we should regard adverse effects on receiving countries' labor markets negatively in the case of immigration, but positively on net in the case of international trade. In both cases, both global and domestic welfare is enhanced by freer international movement of factors of production.

2. *Fiscal Effects of Immigration*

The other most common economic fear harbored by the public with respect to increased immigration is that immigrants impose a collective cost upon the public sector's finances by burdening the welfare state with disproportionate claims for, inter alia, welfare payments, food stamps, subsidized public education, publicly provided or subsi-

135 Gaston & Nelson, *Immigration*, *supra* note 129, at 108.

136 World Bank, *supra* note 19, at 82 (indicating that poor institutions and infrastructure depress production in many emigrant countries); Mancur Olson, *Big Bills Left on the Sidewalk: Why Some Nations Are Rich and Others Poor*, J. Econ. Persp., Spring 1996, at 3, 16–20 (describing boost in productivity of migrating individuals and effects of economic institutions on productivity).

dized healthcare, and public pensions.[137] Fears of this nature are most likely to be warranted when borders are open and when immigrants are entitled to participate in the programs of the welfare state immediately upon their arrival or after only a brief period of residency (a form of adverse selection problem).[138] When borders are open, immigrants cannot be means-tested to ensure that they have the resources or opportunities to provide for themselves economically after entry. In addition, with open borders immigrants may arrive without having a sponsoring individual or group committed to supporting them in the event that they find themselves in need of assistance. Recent theorizing suggests that having open borders (or even merely the ineffective enforcement of closed borders) and no restrictions on participation in the programs of the welfare state may constitute an unstable and unsustainable combination of policies that could lead to the collapse of the redistributive public sector.[139]

However, empirical analysis suggests that immigration, at least at current levels, does not place as heavy a burden on the welfare state as is commonly believed, and indeed appears to generate a net fiscal surplus. The most sophisticated study available on the fiscal impacts of immigration in the United States, recently produced by the NRC, suggests that each immigrant and their descendants will on average generate a net fiscal benefit of $80,000 for natives of the United States in net present value terms in 1996 dollars.[140] Highly skilled immigrants and their descendants generate a greater fiscal surplus ($198,000 each) than lower skilled immigrants ($51,000 each), while immigrants with less than high school education generate a negative

137 A recent study of U.S. data suggests that immigrants benefit disproportionately from the Social Security Program relative to the U.S.-born. However, like the U.S.-born, immigrants pay more into the system than they receive in benefits, thereby benefiting the U.S.-born taken as a whole. *See* Alan L. Gustman & Thomas L. Steinmeier, *Social Security Benefits of Immigrants and U.S. Born*, *in* ISSUES IN THE ECONOMICS OF IMMIGRATION 309, 309–10 (George J. Borjas ed., 2000).

138 This is the strongest objection that Alan Sykes makes to open borders. *See* Alan O. Sykes, *The Welfare Economics of Immigration Law: A Theoretical Survey with an Analysis of U.S. Policy*, *in* JUSTICE IN IMMIGRATION 158, 171–79, 193 (Warren F. Schwartz ed., 1995). It is worth noting tangentially here that if a fiscal surplus is significant enough, it will deter some immigration that would be beneficial for the host country—it may constitute "fiscally deterred migration."

139 *See, e.g.*, Gordon M. Myers & Yorgos Y. Papageorgiou, *Immigration Control and the Welfare State*, 75 J. PUB. ECON. 183, 183–87 (2000) (arguing that high costs of border control could lead to collapse of redistributive welfare systems in richer countries); George J. Borjas, *Immigration and Welfare Magnets*, 17 J. LABOR ECON. 607, 608–09 (1999) (suggesting that immigrants using public assistance are attracted to states with more generous welfare benefits).

140 *See* THE NEW AMERICANS, *supra* note 132, at 334, 336.

long-term fiscal impact of $13,000.[141] Overall, the NRC estimates a significant positive gain of up to $14 billion per year to native Americans.[142] In 2002, the President's Council of Economic Advisors also put the gain at up to $14 billion per year.[143] Borjas questions the results of the NRC study based on doubts regarding the realism of some of the study's assumptions concerning U.S. fiscal policy and the inevitable uncertainty associated with trying to predict economic activity over extremely long time-horizons,[144] although his own more conservative estimates (in part reflecting his findings of declining economic performance amongst recent cohorts of immigrants) have themselves been subject to criticism.[145] The Economic Council of Canada estimates the benefits of immigration to Canadians to be an approximately 0.3% increase in yearly per capita income for every one million immigrants admitted to the country.[146] Given that there are approximately five million immigrants currently living in Canada,[147] the implication of this estimate is that annual per capita GDP is 1.5% higher in Canada than it would be if the country had pursued a policy of closed borders for the past several decades. This translates into a benefit of approximately US$349.50 per Canadian per year.[148] Discounting this annual benefit at 8% per annum, the net present value of Canada's immigrant population to Canadian natives amounts to approximately US$4368 each.

However, the empirical evidence is not uncontroversial. Borjas adopts a different approach to measure this "immigration surplus" and arrives at a radically lower estimate. Borjas suggests that the benefit to natives from immigrants in the United States is approximately 0.1% of GDP, which represents less than thirty dollars per person per year. However, Borjas emphasizes that this benefit comes at a large redistributive cost—users of immigrant labor (employers and consumers of goods produced by immigrants) gain in total approximately

141 *Id.* at 334.

142 *Id.* at 152.

143 *Dreaming*, *supra* note 127, at 29.

144 *See* Borjas, *supra* note 124, at 124–25.

145 *See* Filer, *supra* note 126, at 578–79 (arguing that Borjas selectively presents data to support his bias in favor of reduced immigration).

146 *See* Neil [NMI] Swan et al., Econ. Council of Can., Economic and Social Impacts of Immigration 25 (1991).

147 According to Statistics Canada census figures, there were 5,448,480 immigrants living in Canada in 2001. *See* Statistics Canada, Immigrant Population by Place of Birth, by Provinces and Territories (2001 Census), *available at* http://www40.statcan.ca/l01/cst01/demo34a.htm (last modified Jan. 26, 2005).

148 Canada's per capita GDP in 2001 in purchasing-power-parity adjusted U.S. dollars was approximately $27,130. *See* U.N. Dev. Programme, *Human Development Report* 2003, at 237, *available at* http://hdr.undp.org/reports/global/2003/.

2% of GDP, while suppliers of labor (native workers) lose approximately 1.9% of GDP. Borjas's position is that the net benefits associated with immigration come at too high a redistributive cost to be attractive.[149]

Notwithstanding these reservations, the benefits from liberalized immigration policies in developed countries are likely to increase, rather than diminish, in the future. The economies of most developed countries are increasingly characterized as knowledge-based. The increasing importance of knowledge, information, and specialized human capital should augment the benefits associated with liberalized immigration policies in developed countries in the future. Michael Porter's work on the geographic clustering of industries[150] and related work delineating the factors underlying the concentration of innovation in circumscribed geographic areas[151] suggest that the facilitation of the formation of industrial clusters and the endogenous development of competitive advantage may constitute strong rationales for liberalizing immigration policy. Romer's endogenous growth theory, which emphasizes the importance of human capital, increasing returns to scale, and technological diffusion,[152] also suggests, at least implicitly, that enhanced economic growth is an excellent reason to liberalize immigration policy, at least with respect to skilled immigrants. By allowing specialized human capital freer geographical access to clusters, a liberalized immigration policy could generate significant "snowballing" or network effects (agglomeration economies) in terms of drawing the best talent in a particular field from elsewhere, which would serve to solidify and perpetuate the competitive advantage of a particular cluster.

The United States has an array of clusters that are considered to be among the most prominent examples of this phenomenon and that

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149 *See* Borjas, *supra* note 124, at 90–92. A recent analysis finds that benefits to natives from immigration are much smaller than previous studies have found, but that adverse effects on wages are much smaller as well, and that immigration plays a much smaller role in redistribution from labor to capital than previously thought. Michael Ben-Gad, *The Economic Effect of Immigration—A Dynamic Analysis*, 28 J. Econ. Dynamics & Control 1825, 1826, 1832, 1843 (2004).

150 *See* Michael E. Porter, *Location, Competition, and Economic Development: Local Clusters in a Global Economy*, 14 Econ. Dev. Q. 15 (2000) (describing current state of knowledge about clusters, defined as critical masses of unusual competitive success in particular business areas).

151 *See, e.g.*, Michael E. Porter & Scott Stern, *Measuring the 'Ideas' Production Function: Evidence from International Patent Output* (Nat'l Bureau Econ. Research, Working Paper No. 7891, 2000) (evaluating determinants of new ideas by comparing patterns of international patenting across countries); Scott Stern et al., *The Determinants of National Innovative Capacity* (Nat'l Bureau of Econ. Research, Working Paper No. 7876, 2000) (examining relationship between technological innovation and location).

152 *See supra* note 44.

serve to draw considerable talent from foreign labor markets. Silicon Valley is the most famous example; other notable examples include the Detroit/Windsor auto manufacturing cluster, the Wall Street financial services cluster, the Oregon logging and lumber cluster,[153] and the technology cluster known as "Route 128" in Massachusetts.[154] The concentration of hardware, software, and networking firms in the Silicon Valley area and the consequent attractiveness of the area to top international computer engineering and programming talent is manifest in its continued worldwide preeminence. That a more liberalized immigration policy would have benefits for the further development of a cluster is clear from the well-organized lobby that has recently been successful in pressuring Congress to increase—on several occasions—the number of H-1B temporary worker visas available for high-tech workers.[155]

The clustering phenomenon provides a partial explanation of why trade, foreign direct investment, and immigration might in some instances complement each other rather than substitutes. Since clusters facilitate the development of comparative advantage in specific industries, and since countries will tend to host clusters that differ along industrial lines, if individuals with the skills and interests are allowed to relocate freely to the most attractive clusters, given their skills, productive efficiency in all countries will be enhanced. This enhanced productive efficiency and concentration of industries in geographically far flung areas will lead to more trade and more cross-country movements of persons, *ceteris paribus*. However, this is not the full story. Trade, foreign direct investment, and immigration are also substitutes, especially in manufacturing, where it may often be easier and more cost effective for corporations to bring the factory to the workers, rather than have the workers relocate to the factory. A

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[153] *See* Michael E. Porter, *Clusters and Competition: New Agendas for Companies, Governments, and Institutions*, *in* ON COMPETITION 197, 229 (Michael E. Porter ed., 1998).

[154] *See* ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128 (1994).

[155] Amidst pressure from rapidly expanding tech companies, the 105th United States Congress increased the number of H-1B visas available to skilled high-tech workers from 65,000 to 115,000 for the 1999 and 2000 fiscal years. *See Visa Shortage Leaves High-Tech Firms Scrambling for Workers*, CNN ONLINE, Aug. 4, 1999, http://www.cnn.com/U.S./9908/04/high-tech.visas/. For subsequent commentary, see SUZETTE BROOKS MASTERS & TED RUTHIZER, THE H-1B STRAITJACKET: WHY CONGRESS SHOULD REPEAL THE CAP ON FOREIGN-BORN HIGHLY SKILLED WORKERS (Ctr. for Trade Studies at the Cato Inst., Trade Briefing Paper No. 7, 2000). Further changes were enacted in fall 2000 that, inter alia, increased the number of H-1B visas available to 195,000 annually for fiscal years 2001, 2002, and 2003. Press Release, U.S. Dep't of Labor, U.S. Department of Labor Issues Final Rules on Employment of H-1B Non-Immigrant Workers (Dec. 19, 2000), *available at* http://www.dol.gov/dol/esa/public/media/press/whd/opa2000375.htm.

corporation's selection of a country in which to manufacture goods is dependent upon an array of factors including prevailing wage rates, regulatory compliance costs, quality of governance, taxation regimes, infrastructure, proximity to markets, access to natural resources, and government subsidies and incentives.[156] In practice, therefore, we actually observe trade, foreign direct investment, and the international movement of persons as complements in some instances and substitutes in others.

B. *Existing Immigration Policies*

1. *Health, Criminality, and National Security Screens*

Basic health, criminality, and national security background checks are a standard feature of immigration policies in most developed countries and are likely to be considered valid categories of restraints on immigration by most economists, at least from a domestic welfare perspective. Terminally ill and elderly would-be immigrants will often be unemployed because of the limitations imposed by their illnesses or their age and thus will not provide tax revenues or contribute more generally to the economic productivity and prosperity of the nation; the terminally ill will often draw disproportionately on the healthcare amenities of the welfare state. In addition, some terminal illnesses are communicable. Consequently, many terminally ill would-be immigrants would impose significant costs on the recipient country and can validly be excluded from admission from a domestic economic perspective, although defining the precise boundaries of what constitutes an illness that justifies exclusion is problematic.

If one accepts the premise that those with criminal records are more likely to commit crimes in the future, then a criminality check prior to admission is likely to be valid economically from both domestic and global economic viewpoints, although, like health-based exclusions, defining criminality-based exclusions in an economically relevant manner is not unproblematic. Arguably, those with criminal records are less likely to be successful economically in the recipient country's legal labor market and in the aggregate will impose

[156] *See, e.g.*, John H. Dunning, *Re-Evaluating the Benefits of Foreign Direct Investment*, *in* COMPANIES WITHOUT BORDERS: TRANSNATIONAL CORPORATIONS AND INVESTMENT IN THE 1990s 73, 88–90 (U.N. Conference on Trade & Dev. 1996) (describing factors that affect locational decisions by transnational enterprises).

increased costs on society through the costs associated with criminal activities.[157]

As the September 11, 2001 terrorist attacks in the United States dramatically underscored, national security checks on would-be immigrants have a similar justification. The now obvious inadequacies in national security screening of would-be immigrants or visitors relate less to substantive immigration law (which in many jurisdictions already contained relevant substantive powers to exclude or deport persons reasonably suspected of terrorist affiliations) and more to ineffective enforcement. Moreover, the challenges entailed in effectively screening the millions of tourists and visitors to countries like the United States each year should not be confused with the more modest challenge of screening much smaller numbers of would-be immigrants.

2. *Admission Policies*

Beyond health, criminality, and national security screens, most immigration countries also adopt more general requirements for admission. These policies typically address three classes of immigrants: independent or economic immigrants, family-sponsored immigrants, and refugees (and sometimes a smaller, fourth class of immigrant investors).[158] In contrast to other major receiving countries, such as Canada, Australia, and New Zealand, the United States focuses most of its annual intake of legal immigrants on family-sponsored immigrants rather than independent immigrants. Immigration to the United States grew from an annual average of 252,000 in the 1950s to 816,000 in the 1990s. The source area composition of U.S. immigration has also changed dramatically over this period: The proportion of immigrants from Western and Central Europe sharply declined, the proportion from Eastern Europe nearly doubled, and Asian and Latin American immigration dramatically increased. These changes are depicted in the following table:[159]

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157 The United States alone spends over $100 billion per year on law enforcement. Peter H. Schuck & John Williams, *Removing Criminal Aliens: The Promises and Pitfalls of Federalism*, 22 HARV. J.L. & PUB. POL'Y 367, 382 (1999).

158 *See* Trebilcock, *supra* note 7, at 272.

159 Hatton & Williamson, *supra* note 6, at 9.

TABLE 7: SOURCE AREA COMPOSITION OF U.S. IMMIGRATION, 1951–99 (% OF TOTAL)

Region of origin	1951–60	1961–70	1971–80	1981–90	1991–99
Europe	52.7	33.8	17.8	10.3	14.9
West	47.1	30.2	14.5	7.2	5.7
East	5.6	3.6	3.3	3.1	9.2
Asia	6.1	12.9	35.3	37.3	30.8
Americas	39.6	51.7	44.1	49.3	49.7
Canada	15.0	12.4	3.8	2.1	2.1
Mexico	11.9	13.7	14.2	22.6	25.3
Caribbean	4.9	14.2	16.5	11.9	10.8
Central America	1.8	3.1	3.0	6.4	5.6
South America	3.6	7.8	6.6	6.3	5.9
Africa	0.6	0.9	1.8	2.4	3.8
Oceania	0.5	0.8	0.9	0.6	0.6
Total (in thousands)	2,515	3,322	4,493	7,338	7,605

Current admission policies in many countries requiring that employers first ensure that no domestic workers are qualified for the job, or demanding that the employer demonstrate that the employment of the foreign worker at issue would not harm domestic workers, are difficult, if not impossible, to justify within an economic framework. If an employer has extended its recruitment drive to encompass foreign labor markets and is willing to absorb the additional transaction costs associated with recruitment of a foreign worker, then this commitment should be considered prima facie evidence and perhaps sufficient proof that equally qualified workers are not available domestically. In any event, such labor certification conditions constitute blatant protectionism, often preventing employers from hiring the most qualified candidates due to the availability of a marginally qualified domestic candidate.

For economic or independent migrants, immigration policies in developed countries sometimes entail passing point tests (as in Canada, Australia, and New Zealand), that depend on, inter alia, demonstrating language proficiency, possessing significant formal education and work experience, working in an occupation experiencing high demand, having relatives who are residents or citizens, and being of a demographically attractive age for the destination country. The available evidence suggests that point system restrictions may be justified from a domestic economic perspective, although the result is not uncontroversial.[160] The use of a point system helps improve the average skill level of immigrants,[161] helps ensure that they are better educated (an education that may have been subsidized by the country of origin), ensures that immigrants are more likely to be able to speak at least one of the major languages of the country (so that they can be more readily and productively integrated into the labor market), and helps ensure that immigrants are young enough that they help improve the demographic profile (dependency ratio) of the country (e.g., to maintain public pay-as-you-go pension schemes), and thereby increase the country's overall fiscal surplus.

Under prevailing immigration policies in many developed countries, sponsorship by an immediate family member who is already a citizen or permanent resident of the destination country is often sufficient to qualify an immigrant for entry. From a domestic economic perspective it may seem that having close relatives in the destination country would be irrelevant to subsequent economic performance and that, as a consequence, there should be no importance placed on the presence of relatives in the destination country. However, if the sponsor's welfare or utility is included in the social welfare function (an aggregate measure of welfare or utility), as it generally should be, then the arrival of a close relative has an immediate and significantly positive welfare effect on the destination country. In addition, the presence of immediate family members will likely play an important role in integrating immigrants into domestic labor markets and networks.

Another major class of immigrants is illegal immigrants. Illegal immigration has become a major phenomenon in many developed countries—in excess of 300,000 illegal immigrants per year enter the United States, and 400,000 to 500,000 enter Western Europe.[162] From the perspective of economic welfare, many illegal immigrants are almost certainly beneficial for their host economies. Many illegal immigrants work at jobs that natives do not want at prevailing wage

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160 Arnold De Silva has found that earnings of refugees and economic immigrants differ initially but converge over time in the Canadian labor market. De Silva argues that in Canada the single most important determinant of labor market success is age and that skills-based screening may be largely ineffectual. *See* Arnold De Silva, *Earnings of Immigrant Classes in the Early 1980s in Canada: A Reexamination*, 23 CAN. PUB. POL'Y 179, 197 (1997).

161 *See, e.g.*, Alan G. Green & David A. Green, *Canadian Immigration Policy: The Effectiveness of the Point System and Other Instruments*, 28 CAN. J. ECON. 1006 (1995) (investigating effect of point system on occupational composition of Canadian immigrants); Paul W. Miller, *Immigration Policy and Immigrant Quality: The Australian Points System*, 89 AM. ECON. REV. 192 (1999) (evaluating effect of skills-based immigration programs on immigrant quality and labor market performance).

162 *See* Hatton & Williamson, *supra* note 6, at 2.

levels—i.e., positions that pay remuneration below natives' reservation wage. In addition, illegal immigrants are almost certainly net contributors fiscally because they generate considerable tax revenues for host governments through property taxes, sales taxes, and mandatorily withheld income taxes, while remaining ineligible for most social programs (e.g., welfare payments, unemployment insurance, food stamps, and public housing). Moreover, they have little incentive to try to receive benefits from most social programs for fear of being discovered and returned to their country of origin. The monetary cost of the social services that illegal immigrants do use, such as emergency medical care or public education, almost certainly does not offset the tax contributions that illegal immigrants make.

A final class of immigrants are refugees. There were over twelve million refugees worldwide in 2001 and another twenty-five million internally displaced persons.[163] Economic theory does not have much to say about the admission of refugees. Refugees and asylum seekers are admitted for humanitarian reasons in accordance with the Geneva Convention criteria[164] in nearly all developed countries. Consequently, there is not wide policy latitude with respect to their admission[165]—especially regarding those who arrive in the desired destination country seeking asylum (as opposed to displaced persons selected abroad). It is notable, however, that the performance of refugees in the labor market has been found to partially converge with other immigrant classes over the long run.[166]

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163 *See* INT'L ORG. FOR MIGRATION, *supra* note 5, at 312–13.

164 *See* Convention Relating to the Status of Refugees, July 28, 1951, 19 U.S.T. 6259, 189 U.N.T.S. 137.

165 Some commentators, however, argue that international treaty obligations regarding refugees and asylum seekers are not always (or even usually) well respected. *See, e.g.*, Carolyn Patty Blum, *A Question of Values: Continuing Divergences Between U.S. and International Refugee Norms*, 15 BERKELEY J. INT'L L. 38 (1997) (noting contributions of each federal government branch to divergence between U.S. law and international refugee law); Joan Fitzpatrick, *The International Dimension of U.S. Refugee Law*, 15 BERKELEY J. INT'L LAW 1 (1997) (arguing that U.S. refugee law is out of sync with international treaties).

166 *See* De Silva, *supra* note 160, at 197; Miller, *supra* note 161, at 194 t.3. The Economic Council of Canada reports that "research has not documented any differences in the economic gain to Canadians from different classes of immigrant, with one exception. The exception is the self-selected refugee immigrants—the only case where the economic costs seem likely to outweigh the economic benefits." SWAN ET AL., *supra* note 146, at 138. Note, however, that decisions with respect to self-selected refugee immigrants are subject to the Geneva Convention commitments. As a consequence, refugees cannot be discriminated against legitimately in immigration policy.

3. *Quota Systems*

One of the key ingredients of immigration policy in most developed countries is a quota system that restricts the number of immigrants that will be accepted each year in each major admission category (independent immigrants, family immigrants, and overseas refugees). These quotas are typically justified on the basis that completely open borders would be problematic because of negative externalities (e.g., congestion effects), labor market effects, and the political and fiscal stresses that would be placed on the redistributive programs of the welfare state due to fiscally induced migration.[167] Despite the problems perceived to be associated with illegal immigration (which are at least in part due to quotas), quota systems are an arbitrary way of limiting the number of immigrants arriving each year. One of the primary shortcomings of the quota method is that it unduly hampers the flow of immigrants who can demonstrate that they will not be a burden on the amenities of the welfare state. Many would-be immigrants, despite the fact that they are able to demonstrate that they will not be a burden through various means, such as the possession of adequate personal resources or through prearranged employment (independent immigrants), through the sponsorship of legally resident or citizen relatives (family immigrants), or through the sponsorship of a private party or organization (refugees selected overseas), are not able to emigrate due to quota restrictions. In this respect, immigration quotas have many of the same adverse effects on domestic and economic welfare in receiving countries as import quotas in international trade.

Another problem associated with the quota system is that quotas must be set in advance, which places the very difficult (perhaps impossible) task of predicting the needs of the labor market (at least in the case of the independent class quota) in the hands of a centralized bureaucracy. Central planning for the future needs of the domestic labor market is an assignment that, to be done correctly and accurately, requires an almost unlimited amount of information including, inter alia, accurate forecasts of the global macroeconomic environment, an assessment of the economic health and prospects of each of the country's major industries, an accurate determination of how well domestic firms are faring internationally, and a sensitivity to changes

[167] Alan Sykes has argued, however, that open borders may be the first-best solution if such a policy were coupled with changes to social programs making them inaccessible to noncitizens. But Sykes acknowledges that the political process may not accommodate these restrictions with ease, and that these restrictions may not be legally feasible. *See* Sykes, *supra* note 138, at 176.

in demand due to shifting consumer preferences and relative prices of goods and services. The cost of generating an accurate forecast is likely to be prohibitive. As a result of the stochastic nature of economic outcomes, an ideal immigration policy would take into account the ever-changing state of the economy and the national labor market in determining the appropriate number and kind of immigrants to admit on a yearly, monthly, or even weekly basis. Moreover, given the administrative delays associated with processing immigration applications in virtually all developed countries, the lags between quota setting and actual admissions are likely to prove problematic.

C. *Reforming Immigration Policies*

We believe that domestic welfare in receiving countries would be greatly enhanced by devolving and decentralizing power over immigration decisionmaking to private parties to a far greater extent than currently prevails, although health, criminality, and national security checks should be retained for the reasons outlined earlier. This reorientation would allow the international movement of people to be much freer and would promote a more efficient mix of international movements in goods, services, capital, and labor. One of us has spelled out in some detail elsewhere how such a decentralized approach to immigration policy might operate.[168] In brief, such an approach would operate as follows.

Those who wish to immigrate who have already secured employment or who have financial resources sufficient to maintain independence from the amenities of the welfare state (except publicly subsidized education and healthcare) would be able to emigrate freely provided that they, either individually or through their employer, have taken out specified minimum coverage private insurance to cover any drawings that they may make against non-contributory social programs within a certain period of time after entry (analogous to mandatory third-party liability automobile insurance). This private insurance requirement responds to the need to screen out fiscally-induced immigration by internalizing a significant portion of the social costs of immigration to would-be immigrants or their sponsors. To the extent that the prescribed minimum coverage proves to be inadequate to reimburse drawings on these social programs, immigrants and their sponsors would be jointly and severally liable for reimbursement of the deficiency. Failure to cover or meet liabilities would constitute legal grounds for deportation.

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[168] *See* Trebilcock, *supra* note 7, at 296–313.

The social programs to which immigrants in this category would be denied legitimate access immediately after entry would include, inter alia, welfare payments, food stamps, and public noncontributory pensions. Publicly subsidized education and healthcare would not be among the excluded benefits and would thus be available to all immigrants. Public education would not be among the excluded items because, economically, public education is one of the primary mechanisms for enhancing the future quality of a country's human capital and hence economic growth potential (as we noted in Part I). Also, philosophically, public education is one of the primary mechanisms through which liberal democratic states impart liberal values, such as tolerance, to succeeding generations—a function that is important in establishing and perpetuating the security of a nation's liberal democratic institutions.[169] Publicly subsidized healthcare would not be among the excluded items because, given that the immigrant has presumably already passed a medical examination prior to landing, adverse selection or abuse of the system in this regard is unlikely. Further, given the fact that all immigrants are taxed on their income at the same rates and in precisely the same way as natives, there appears to be little justification for denying them the enjoyment of publicly provided education and publicly subsidized healthcare. Similarly, objections that increased immigration will result in increased negative congestion effects and thus generate demand for more infrastructure such as highways, schools, and hospitals are met by the fact that immigrants pay taxes just as natives do.

The selection of a minimum residence period for which social assistance insurance coverage would be required is to some extent arbitrary. However, arguably it should not be longer than the period of residence required to qualify for citizenship: in Canada three years, in the United States five years. Longer periods would create normatively problematic categories of first- and second-class citizens. One of the main advantages of this insurance scheme is that in a competitive private insurance market premiums would adjust to reflect the expected drawings of immigrants given their observable characteristics such as educational background, occupation, type of sponsor (e.g. employer, family, or humanitarian), age, work experience, etc. If it turns out that the fears of fiscally induced immigration are exaggerated and immigrants do not draw public benefits at a significant rate, insurance will be inexpensive and readily affordable for most sponsors. If fears of fiscally induced immigration are well-founded, then

[169] *See* ARTHUR M. SCHLESINGER, JR., THE DISUNITING OF AMERICA 17–18 (1992) (arguing for importance of public education as unifying force in diverse democracies).

insurance premiums will be significantly higher, thereby increasing the costs of sponsorship and creating stronger incentives for sponsors to be more selective in screening potential immigrants.

Among the major beneficiaries of this liberalized immigration policy regime would be foreign students studying in the United States.[170] Students from abroad admitted to study at the post-secondary level have in most cases established that they have the motivation and talent required to succeed in an academic environment. This same motivation and talent is often translatable into considerable value in the labor market. If these students are able to secure employment and sponsorship (with social program insurance coverage) upon graduation, there is little reason to preclude them from doing so.

In fact, there appear to be several reasons to encourage them to stay. Most college and university graduates on student visas are fluent in at least one of the county's major languages and are well educated, talented, and motivated, and therefore prima facie well equipped to contribute immediately to the domestic economy. In addition, they are likely to be relatively young so that their presence can help improve the dependency ratio. They are likely to have already internalized to a considerable extent the values and social mores of the receiving country. The United States educates about one-third of all foreign students. About half of all students who complete Ph.Ds are still in the United States five years after completion (sixty percent in the physical sciences and mathematics).[171] The security, visa, and immigration policies adopted by the United States after the September 11 terrorist attacks have significantly reduced the number of foreign graduate students studying in the United States—to the benefit of many other receiving countries.[172] Indeed, a case can be

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[170] Jagdish Bhagwati has long advocated a liberal approach to encouraging foreign students to stay on in the United States after they have completed their formal education. *See, e.g.*, JAGDISH BHAGWATI, *The False Alarm of Too Many Scientists*, *in* A STREAM OF WINDOWS: UNSETTLING REFLECTIONS ON TRADE, IMMIGRATION, AND DEMOCRACY 363 (1998). Bhagwati remarks:

> The intelligent and highly motivated foreign students who come to this country for scientific education and then 'stay on' in large numbers assimilate readily, becoming indistinguishable from native-born Americans. . . . The scientific eminence of the United States thus reflects a virtuous circle: the best and the brightest from around the world are attracted to our universities, and they in turn help make our universities world class.

Id. at 368.

[171] *See Outward Bound*, *supra* note 85, at 24.

[172] Steven J. Rosenstone, Challenges Facing Higher Education in America: Lessons and Opportunities 12–15 (Dec. 3, 2004) (paper presented to Univ. of Toronto Conference on Taking Public Universities Seriously), http://www.utoronto.ca/president/04conference/downloads/Rosenstone.pdf.

made for mitigating other restrictions on foreign students, such as highly differentiated foreign student tuition fees and restrictions on off-campus employment during their studies, given the even higher percentage that would be likely to stay with more accommodating immigration policies.

An arrangement very similar to that envisaged for independent immigrants could be instituted for family preference immigrants. Under the decentralized family preference system, any individual that is sponsored by a relative (such as a spouse, parent, or non-minor child) would be immediately eligible for immigration, provided that the would-be immigrant has met health, criminality, and national security checks, and that his or her sponsor has secured social program insurance of a specified minimum amount on the immigrant's behalf. This would be a highly desirable development because of the extremely long waits currently imposed on family-sponsored immigrants in many developed countries. For instance, quotas in the United States have created a queue of millions of family-based immigrants, with waits up to ten years.[173] As with independent immigrants, family-sponsored immigrants admitted through the decentralized process would be eligible to receive publicly subsidized education and healthcare benefits (with the possible exception of those who are sixty-five years or older upon landing, or those who cannot meet the health check, who could be required to obtain independent private health insurance), but any welfare payments, food stamps, or public pension payments received within a specified period of time after entry would be subject to reimbursement by the sponsor's insurer. The degree of proximity of the family relationship required in the family category of admission relationships, which is a long-standing matter of contention in immigration policy debates in many countries, is of second-order importance under these proposals given their cost-internalizing nature.

The issue of refugee admissions is less amenable to a decentralized approach to immigration policy. There are two main types of refugees—those who arrive in the host country seeking admission (inland refugee claimants), and displaced persons who are selected overseas for admission to the host country (overseas refugee claimants). Because countries have an obligation under international law to consider the cases of inland refugee claimants on their merits by virtue of the Geneva Convention, the decentralized approach is not

[173] Howard F. Chang, *The Economic Analysis of Immigration Law*, *in* MIGRATION THEORY: TALKING ACROSS DISCIPLINES 205, 220 (Caroline B. Brettell & James F. Hollifield eds., 2000).

readily applicable. For refugees selected overseas, however, the decentralized approach will generally be relevant. Developed countries often establish targets or quotas for the number of refugees selected overseas for admission to the host country. A complete abandonment of the quota approach in favor of decentralized overseas admissions may result in a deluge of overseas refugee claimants (although this is unlikely). The current quotas are arbitrary, but are to some extent understandable because refugees selected overseas often lack valuable labor market skills such as fluency in the language of the country of landing and/or specialized human capital, and because they may take longer to integrate into the country's labor market (although, as noted above, the empirical evidence does not support fears of long-run non-integration).[174] But an abandonment of the quota system for overseas refugees should not be ruled out altogether. Despite these concerns, many residents and religious and community organizations in developed countries take great pride in extending aid to or sponsoring refugees and asylum seekers, gaining psychic utility from helping those in desperate need. With the adoption of a decentralized system requiring social program insurance by sponsors similar to that advocated for the independent and family classes, there seems to be little to fear fiscally from a higher influx of refugees selected overseas.

With respect to illegal immigration, one obvious way of mitigating this phenomenon is to liberalize immigration policy. By eliminating quotas for immigrant admissions, and by allowing those sponsored by employers (and supported with social program insurance) to gain entry so long as they pass health, criminality, and national security checks, the level of illegal immigration should be reduced. Although obtaining employer sponsorship, securing social program insurance, and passing health, criminality, and national security checks imposes transaction costs that would not necessarily accompany illegal immigration, being considered a "legitimate" or "legal" immigrant is likely to be of considerable psychic value. In addition, once legally admitted to the country, under these proposals an immigrant would immediately begin fulfilling the period of residency required to participate fully in social programs and also to naturalize as a citizen (thereby ultimately gaining the rights associated with full political participation).

If demanding employer sponsorship and social program insurance of unskilled immigrants proves to impose too great a burden in terms of transaction costs on employers or would-be immigrants, and thus

[174] *See* De Silva, *supra* note 160, at 197.

fails to stem the tide of illegal immigration, another way to eliminate the pressure for illegal immigration would be to distribute temporary work visas to any employer-sponsored immigrant.[175] Due to the problems associated with trying to expel temporary workers, exemplified by the permanent guest worker phenomenon of Western Europe, this liberal temporary worker system could be accompanied by an automatic graduation to permanent legal immigrant status after a specified period of continuous employment in the host country. That is, if one held a temporary work visa for, e.g., three or five years and worked continuously (or nearly continuously, if not with the same employer, for the entire period), then one would be automatically extended legal permanent resident status. During the period of residence as a temporary worker, the only social services available would be publicly subsidized education and healthcare services. Upon the automatic grant of permanent resident status, the temporary worker would qualify for full participation in all social programs and would begin the period of residency necessary to naturalize as a citizen and secure the rights associated with full political participation. Thus, there would be very little incentive for would-be workers to immigrate illegally because they would forgo the medium to long-term benefits associated with the relatively straightforward process to work legally. The host country would also benefit from the implementation of this system. Immigrants who otherwise might have entered the country illegally would be registered as temporary workers and thus would be easily identifiable by the host country. Creating a registry of temporary workers would help social program administrators curtail the consumption by such workers of social services to which they are not entitled (such as welfare, non-contributory pension benefits, food stamps, etc.); would (at least to some extent) reduce foregone tax revenues by reducing the incentives to pay workers "under the table"; and would allow many of the resources previously allocated to patrolling borders for illegal immigrants to be allocated to more productive uses.

Relaxing citizenship requirements is an additional dimension of more liberal immigration policies (as Barry emphasizes with respect to emigration policies).[176] Citizenship in the world today is primarily an accident of birth, although it is also possible to naturalize as a citizen of most countries. In *jus soli* countries, one immediately becomes a citizen when born within the jurisdictional boundaries of the state. In

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[175] *See On the Border: The Best Solution So Far to One of America's Thorniest Problems*, ECONOMIST, May 21, 2005, at 36 (discussing recent bill proposed by Senators John McCain and Edward Kennedy that proposes similar solution).

[176] Barry, *supra* note 1, at 42–50.

jus sanguinis countries, one is a citizen if one is born to parents who are citizens of the country. Citizenship is the fullest membership available in nation-states and carries with it the ability to participate in all of the social programs of the state, as well as serving as the basis for full political participation in the community. Developed countries differ in the conditions that need to be satisfied before a permanent legal resident can naturalize as a citizen,[177] although many countries require that the applicant be at least eighteen years old, be fluent in at least one of the country's official languages, have at least a rudimentary knowledge of the country's history and government, and express support for the country's legal and political institutions. One of the main ways in which naturalization policies differ among countries is in the time it takes for permanent legal residents to become eligible to naturalize to citizen status. In Canada, the minimum residence period is three of the past four years;[178] in the United States it is five years of legal permanent residency (with less than thirty months of those five years spent outside the United States, except in special cases);[179] in Australia, it is two years during the past five years (with at least twelve months of Australian residence in the past two years);[180] in Germany, the minimum period of legal permanent residence has been recently been reduced to eight years (prior to January 2000, it was fifteen years).[181] The choice of the period of permanent legal residence required to naturalize is necessarily somewhat arbitrary and impossible to justify precisely. Nonetheless, a relatively brief naturalization period should be preferred to a long naturalization period because precluding long-term residents from full political participation is likely to be a disincentive to immigration, especially for skilled immigrants; this disincentive is likely to be more significant under the social program insurance proposals outlined above.

Some receiving countries currently impose restrictions on citizenship such that one must renounce one's previous citizenship or pre-

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177 For a comparative discussion and analysis of contemporary citizenship practices and requirements, see Patrick Weil, *Access to Citizenship: A Comparison of Twenty-Five Nationality Laws*, *in* CITIZENSHIP TODAY: GLOBAL PERSPECTIVES AND PRACTICES 17 (T. Alexander Aleinikoff & Douglas Klusmeyer eds. 2001).

178 *See* Citizenship & Immigration Can., How to Become a Canadian Citizen (2004), http://www.cic.gc.ca/english/citizen/howto-e.html.

179 *See* U.S. CITIZENSHIP & IMMIGRATION SERVS., NATURALIZATION ELIGIBILITY WORKSHEET, http://uscis.gov/graphics/exec/natz/worksheeta.asp?JS=Y&Brow=IE&Ver=6.0&Cookies=Y&Plat=U&iStage=1&DebugLevel=2b (last visited Oct. 13, 2005).

180 Austl. Gov't, Dep't of Immigration & Multicultural & Indigenous Affairs, How to Apply for Australian Citizenship (2004), http://www.citizenship.gov.au/how.htm.

181 *See* GERMAN EMBASSY LONDON, GERMAN NATIONALITY: REFORM OF GERMANY'S CITIZENSHIP AND NATIONALITY LAW, http://www.german-embassy.org.uk/reform_of_germany_s_citizenshi.html (last visited July 7, 2005).

vious foreign allegiances in order to acquire citizenship in one's new country of residence, although a number of receiving countries in recent years have abandoned this requirement. Militating in favor of allowing dual or multiple citizenship is the fact that forcing an applicant for citizenship to renounce his or her former citizenship discourages otherwise socially beneficial forms of immigration. In opposition to dual or multiple citizenship it might be argued that allowing naturalized citizens to retain foreign citizenship creates the potential for divided loyalties and may be cause for concern in periods of armed conflict (e.g., a dual citizen might be conscripted by two different countries on opposing sides of a conflict). It might also be argued that because citizenship allows individuals to vote, divided loyalties might be a problem if a person is able to exercise political voice in two countries with antithetical interests. However, it is equally arguable that significant numbers of immigrants with dual or multiple citizenship are likely to mitigate these potential international conflicts. For receiving countries, the option of dual citizenship is likely to attract skilled immigrants who wish to preserve opportunities for business, investment, and professional or political engagements in sending countries. Such return investment does come at an offsetting cost to receiving countries, as it diverts a greater level of remittances and investments to sending countries.

In summary, in order to realize most of the economic benefits associated with liberalized immigration flows without impairing the viability of the welfare state through fiscally induced immigration, we argue for abandoning numerical quotas on independent and family-sponsored immigrants and relying instead on the mechanisms of sponsorship and minimum mandatory social program insurance. The sponsorship/mandatory social program insurance system would protect the integrity of the welfare state by preventing its abuse by newcomers. At the same time, decentralization of immigration decisionmaking would improve the efficiency of labor markets in developed countries by decreasing the uncertainties associated with recruiting abroad, by decreasing the waiting period associated with the bureaucratic requirements of immigration agencies, and by allowing the needs of the labor market to indirectly determine the number of immigrants admitted each year. The delegation of immigration decisionmaking power to those benefiting from the decisions (sponsors and potential immigrants), coupled with a policy requiring them to internalize the costs of any social program abuses through insurance premiums, would generate a much better alignment of incentives. In addition, relatively permissive policies on naturalization and dual citizenship reduce the disincentives to socially desirable forms of immigration.

The timing of immigration policy reforms may prove to be a key determinant of how much benefit individual countries will be able to realize from liberalization. Many industries already face increasingly fierce global competition for the recruitment of those possessing highly specialized human capital. Given the empirical fact that once clusters form in a particular locale they tend to be self-perpetuating, an important first-mover advantage may be seized by those countries willing to dispense with formal immigration quotas and allow international labor markets to operate more freely. Such initiatives should be complemented by more effective public and private resettlement assistance programs (e.g., language training, job search assistance, housing and schooling assistance). Credential equivalency determination mechanisms should also be made more effective to ensure that potential immigrants are fully informed of the status of their qualifications before immigrating, that professional bodies and licensed trades are objectively assessing such credentials and avoiding protectionist biases, and that appropriate bridging programs are available to permit immigrants to upgrade their formal and on-the-job qualifications.[182] Clustering benefits are likely to be most concentrated in the recruitment of those with highly specialized human capital, but may be realized to an indeterminate extent with the recruitment of relatively unskilled workers as well. As natives and highly skilled immigrants are drawn increasingly into employment demanding highly specialized human capital, new complementary opportunities for unskilled workers arise. Dual-career households demand nannies, housekeepers, gardeners, and cooks. To the extent that these positions cannot readily be filled by unskilled native workers, growth in highly skilled occupations may be hampered for lack of affordable ancillary services.[183] Thus, developed countries will reap the greatest range of benefits possible if they liberalize immigration policy generally. Not only will countries adopting such policies capture a potentially very important first-mover advantage, but they will be able to reinforce this advantage by admitting unskilled workers (who meet the requirements proposed above) to provide the support services demanded by many highly skilled workers, their families, and their employers.

Conclusions

In Parts I and II of this paper, we have addressed the question of the optimal choice of policies for emigration countries and immigration countries respectively and attempted to identify points of comple-

[182] *See* Jeffrey G. Reitz, Warmth of the Welcome 239–41 (1998).
[183] *See* World Bank, *supra* note 19, at 82.

mentarity and potential conflict, adopting largely an economic perspective in both cases.

Emigration countries will be made best off by policies that facilitate remittances, trade, and investment by emigrants, and that tread cautiously in the area of exit penalties such as taxes. At the same time, emigration countries must improve their domestic economic environments if they wish to stem the outflow of skilled workers. Given the fact of exit, remittances are likely to be maximized by minimizing transaction costs associated with the transmission of remittances, maximizing the discretion available to senders of remittances as to entities or uses to which remittances may be applied, and avoiding or at least minimizing any form of direct taxation of such remittances. Remittances, along with trade and investment ties, are also likely to be maximized by relatively permissive rules on dual or plural citizenship, avoiding legal obligations to renounce one's source country citizenship on becoming naturalized as a citizen of another country. The proposals to tax emigrants who retain citizenship in their source countries on worldwide income are difficult to operationalize, and may create incentives for emigrants to renounce their source country citizenship. Where emigrants have been beneficiaries of publicly financed higher education in their source countries, there may be a stronger case for differential treatment of those who remain and those who emigrate with respect to public assistance in the provision of higher education, e.g., by forgiving higher portions of student loans by graduates who remain and requiring emigrants to repay a higher portion of these loans, perhaps secured by bonds or parental guarantees required to be obtained at the time that financial assistance is extended.

Immigration countries will be made best off by adopting policies that are more decentralized and market-driven but address concerns over fiscally induced immigration by requiring immigrants or their sponsors to purchase private insurance against the possibility of immigrants' future welfare claims. For countries of immigration, more highly skilled immigrants are likely to entail lower risks of negative fiscal effects, although a reasonably generous definition of skilled immigrants seems desirable, given the complementarities entailed in services provided by more highly skilled and less highly skilled immigrants. In the absence of a mandatory social insurance program requirement, this would suggest reliance on at least a basic point system (but without quotas), such as a variant of that employed in Canada, Australia, and New Zealand, and in some countries (like the United States) according less prominence to family class immigrants, at least to those that cannot meet basic criteria of prospective economic integration, such as some of the criteria typically employed in point systems. In addition, there would seem to be room to increase temporary work visas for immigrants that fall outside these criteria, the holders of which should be able to graduate to permanent resident status and ultimately naturalization after some minimum period of relatively continuous temporary employment. An intermediate solution might be to adopt a basic point system (without quotas) for all permanent immigrants combined with mandatory private insurance program coverage for claims on noncontributory social programs during the period to naturalization. However, this would introduce much greater bureaucratic involvement in the admissions process than under the former regime standing alone, unless the point system were keyed only to some simple variables such as age, language skills, and level of education. For countries of immigration, requiring immigrants to renounce their source country's citizenship as a condition for acquiring the citizenship in the recipient country is likely to discourage some forms of socially beneficial immigration and the establishment and expansion of mutually productive trade and investment relationships between source and destination countries.

There are some potential incompatibilities between the two policy prescriptions above, although areas of complementary policy goals suggest that viewing migration policies as a zero-sum game is unwarranted. One cause for concern is the strong emphasis placed by immigration countries on recruiting highly-skilled workers, in the context of emigration countries attempting to cope with the potential adverse human capital effects of emigration. Even here the empirical evidence is somewhat ambiguous as to whether such immigration constitutes a net brain drain to countries of emigration, or whether on the other hand it increases incentives for citizens of these countries generally to increase their investments in human capital (some of whom will remain). Moreover, skilled emigrants are likely to be more active in mutually beneficial trade, investment relationships, and brain circulation between source and destination countries. While countries of emigration no doubt wish that countries of immigration would accept more of their least skilled and least productive workers (who may entail negative fiscal effects for source countries), countries of immigration are likely to view many such potential immigrants negatively. While in some cases such workers may be able to find more productive employment opportunities in countries of immigration than in countries of emigration,[184] they are likely to entail greater fiscal risks on average for receiving countries than more highly skilled workers.

184 *See* Olson, *supra* note 136, at 17.

Promoting the emigration of a source country's least productive workers ("pauper emigration" in nineteenth century terms) is not a serious alternative to the pursuit of domestic economic and social policies and international economic policies designed to enhance economic productivity and growth generally in source countries.

The goal of maximizing remittances on the part of emigration countries represents a transfer of wealth from immigration to emigration countries. However, it is unclear how concerned immigration nations need to be, or perhaps, should be, given that these financial decisions are generally made using the after-tax income of gainfully employed immigrants. In addition, the view of remittances as a form of development aid, given the fact that remittance flows are disproportionately directed towards lower-income countries, might suggest that these payments should be seen as part of a more integrated development strategy. In that case, the losses of financial capital associated with remittance flows would be seen as acceptable losses resulting out of immigration countries' genuine concern for the welfare of those in emigration countries. Finally, to the extent that remittances are voluntary, they might represent a very efficient form of resource allocation, since presumably the monies are transferred in the first place because they are more urgently required at home, enhancing global welfare if not domestic welfare in the source country.