

Indian Migration and “Temporary” Labor Programs: Comparing the Costs and Benefits  
in the United States, United Kingdom and Netherlands \*

ABSTRACT

Do the benefits of temporary worker programs—work permits and visas designed to attract skilled migrants for a fixed period of time—outweigh the costs of such programs? I inquire into the political and assimilative ramifications of temporary and permanent admission, specifically the way policies are designed to accommodate non-immigrants admitted to receiving countries as temporary workers. I review existing policies and data in the United States, the United Kingdom and the Netherlands. This paper utilizes newly archived US data on migrant issuances and legal permanent residents to explore the growth in the Indian population admitted since 1970. I compare the US with trends in temporary and permanent admission in the UK and the Netherlands. Findings illustrate that while the employer-driven temporary visa system implemented in the United States reduces the direct costs to governments (relative to the points-based systems in the UK and the Netherlands), the costs associated with crowding out effects, externalities and regulation may be higher relative to the points-based systems of the United Kingdom and the Netherlands. I discuss the distinct qualities of each case within the framework of its domestic policies.

Mary E. Breeding  
Institute for the Study of International Migration  
School of Foreign Service, Georgetown University  
[meb235@georgetown.edu](mailto:meb235@georgetown.edu)

Paper Prepared for the 2010 Migration: A World in Motion  
A Multinational Conference on Migration and Migration Policy, Maastricht, Netherlands

Please do not cite or quote without the author’s permission.

---

\* I owe special thanks to my colleagues at the Institute for the Study of International Migration at Georgetown University for their contributions to the development of this research project and generous support made possible through a grant from the Alfred P. Sloan Foundation. Also thank you to Alberto Fuertes, a PhD Candidate at Georgetown University who has assisted in the archiving of US data on this project and to Binod Khadria for his generous assistance in acquiring UK data.

Indian Migration and “Temporary” Labor Programs: Comparing the Costs and Benefits  
in the United States, United Kingdom and Netherlands

INTRODUCTION

Do the benefits of temporary worker programs—work permits and visas designed to attract skilled migrants for a fixed period of time—outweigh the costs of such programs? Moreover, how do migrant-receiving countries frame their policy debates for maintaining temporary work programs? This paper seeks to stimulate comparative discussion of temporary work programs. I inquire into the political and assimilative ramifications of temporary and permanent admission, specifically the way policies are designed and the resulting labor rights of non-immigrants admitted to receiving countries on temporary visas and work permits. I first outline the policy ramifications of temporary work programs in a cost-benefit analysis framework. Next I assess the costs and benefits of temporary migration with respect to three case studies—the case of Indian migration to the United States, the United Kingdom and the Netherlands. . This analysis specifically looks at migrant labor from India. Few other countries supply as large a number of skilled workers in both temporary and permanent streams. Lastly, I review existing policies and data in the United States, the United Kingdom and the Netherlands. I compare US trends in temporary and permanent admission with trends in the United Kingdom and the Netherlands. I discuss policies and data in each case and outline policy findings related to the cost-benefit analysis. Findings illustrate that while the employer-driven temporary visa system implemented in the United States reduces the direct costs to governments (relative to the points-based systems in the UK and the Netherlands), the costs associated with crowding out effects, externalities and regulation may be higher

relative to the points-systems of the United Kingdom and the Netherlands. I discuss the distinct qualities of each case within the framework of its own domestic policies.

*What is temporary work?*

The term temporary work is defined differently in United States and Europe. US policy refers to a temporary work in the context of temporary work visas. These visas are sponsored by employers and can be renewed after fixed periods (Lowell 1999).

Temporary work visas in the US allow skilled foreign-born workers the ability to apply for and transition to legal permanent resident status without residing in the country for any fixed period of time. Skilled temporary work visas in the United States include work visas for specialty skills and occupations (H-1Bs), inter-company transfers (L-1s), and other kinds of specialty visas such as foreign scholars and cultural specializations (J-1, E-1, O-1 and P-1 visas). The term temporary in the US is used indirectly to refer to a kind of visa on which foreign-born migrant workers can enter the United States, working for a temporary period of time, at any time during which their employers are presented the option of sponsoring to transition to a more permanent US status.

In Europe temporary work is much more directly used to refer to a temporary work permit, which allows citizens to work for a period of time. Work permits may be renewed in some cases, but the definition of temporary is indeed a fixed period of time after which the migrant is expected to return to his or her home country (Koslowski 2008). Relative to the European context, US temporary work visas may be viewed as “probationary” or even as flexible visas (Chakravartty 2001; Pritchett 2009). This is a significant difference rooted in how the historical and cultural trajectories of countries in

North America and Western Europe have shaped policies and attitudes toward migrants over time (Hollifield 2007).

How do we compare differences between temporary migrants entering the United States and temporary migrants in European countries? In this analysis, I account for two kinds of temporary migrants in the US, migrants entering on H-1 visa holders and L-1 visa holders, the most dominant visas on which skilled labor enter the US. The below analysis relies on archived historical data of annual visa issuances collected from the Department of State and data on legal permanent residents collected by the Department of Homeland Security. Since April 2008 I have worked with a research team at the Institute for the Study of International Migration to archive this data. I use work permit data collected from the governments of the United Kingdom and the Netherlands to assess temporary work in these countries.

### THE POLITICS OF TEMPORARY WORK

While there is a substantial policy debate surrounding issues of temporary versus permanent admissions of foreign-born workers, there has not been substantial empirical social science research on the topic. Existing research may be classified broadly into three categories: public policy research considering market failures and government responses (and subsequent failures) to labor market shortages; research in labor economics on foreign-born workers; and a small, but growing, literature in sociology and political science assessing the societal and political consequences of temporary work programs.

First, existing public policy research on temporary work programs often frames the debate in a cost-benefit analysis format adopting one of two arguments—either that

temporary work programs are too temporary or that they are not temporary enough. Those who argue temporary programs are too temporary assert there is a demand for policy change to allow more flexible work permits and visas to foreign skilled workers. They argue there is a need to provide migrants the opportunity to easily transition to legal permanent status and to acquire other benefits more closely linked to citizenship (Castles et al. 1984). Researchers on this side of the policy debate frame it such that net social benefits of foreign-born migration outweigh the deadweight social losses and other costs to migration. This case is made by illustrating that migrants have more crowding-in than crowding-out effects—that they create more jobs than they displace. Migrants not only fulfill niches and labor market shortages in some areas, but through research and development, foreign-born workers can create gains in technology and can stimulate demands in their sectors leading to job creation and profit generation. Advocates for increasing the number of foreign born workers and allowing more flexible temporary work programs, emphasize positive externalities associated with skilled foreign-born in receiving countries and assert that gains to society outweigh the costs associated with regulating admission of skilled migrants.

They make an equally important argument related to migration and development—that increasing foreign workers and allowing them to stay on in host countries can stimulate development of migrants' home countries (Newland and Agunias 2007; Pritchett 2009). For instance, in a recent CGD report Lant Pritchett notes that:

Some simple numbers make the politics of the [immigration] policy predicament clear. The industrial world currently transfers something on the order of \$70 billion a year in overseas development assistance. The magnitude of the beneficial impact of this aid in immigrant-receiving countries is hotly debated, but let us assume that the voluntary and mainly altruistic transfer of the \$70 billion leads to roughly \$70 billion in benefits for poor-country citizens. A recent World Bank

Study has estimated the benefits of the rich countries allowing just a 3 percent rise in their labor force through relaxing restrictions. The gains from even this modest increase to poor-country citizens are \$300 billion—roughly four and half times that magnitude of foreign aid (Pritchett 2009, 3).

Hence, according to researchers such as Pritchett, the projected development prospects for a three percent increase in admissions of foreign labor from developing migrant-sending countries such as India to more developed migrant-receiving countries are greater than the current gains from foreign aid that developed countries supply to migrant-sending developing countries. This translates into an argument—not only for bringing in more foreign workers and allowing them to stay in migrant-receiving countries—but for allowing more flexible labor mobility overall. In a world where information and capital are global and mobile, the argument is to equally allow for the mobility of labor. This side of the policy debate is further rooted in contextual arguments about multiculturalism and transnationalism.

Conversely, on the other side of this argument, some frame the policy debate in way that illustrates the costs and overall deadweight losses to society as being greater than the benefits accrued from allowing foreign temporary workers to transition to more permanent status. This is confounded with arguments about restricting and more tightly regulating the flow of skilled foreign workers. Researchers on this side of the policy debate highlight crowding out effects associated with poor implementation of temporary programs resulting in admission of foreign workers when the demand is not there and negative externalities associated with increasing skilled migration. These arguments largely ignore issues related to migration and development and often fail to factor in the costs of enhanced security and regulation associated with the policies they advocate for restricting the flow of labor. This side of the policy debate is also flogged with

ethnocentric claims about how increasing the presence of foreigners is harmful to preserving cultural heritage in migrant-receiving, primarily Anglo, countries (Heritage Foundation 2009).

The issue with most research related to temporary admissions is that there is no clear policy answer. Research based on market failures and government responses, is inherently based on subjective measures placed on consequences of migration. Finding a balance between completely open, mobile flows of labor across borders and completely shut borders that is both politically accepted and optimizes gains from admission of high-skilled migrants remains an inherent challenge across North America and Europe. Depending on how the research is framed, the policy recommendations from such research often take a one-sided view. Along these lines, labor economics research on temporary workers has largely dealt with labor market shortages and how policy can address these shortages. Resulting policy recommendations are framed in one of the two policy debates highlighted above (e.g. the work of George Borjas and Frederic Doquier among others).

In recent years, temporary work programs have gained more attention in research regarding responses to migration (e.g. Koslowski 2008; Thelen and Van Wijnebergen 2003). Such research is usually couched into analyses of integration, assimilation, citizenship, or security. But to date, few have looked directly at issues related to temporary admission—what the social and political consequences are of temporary labor as compared to permanent migration. Below I present an institutional approach to understanding how different state policies in the US, UK and Netherlands deal with public policy—attempting to bridge these literatures. My intention is ultimately to present

a cost benefit analysis of each system's temporary program taking social and political interests into account.

## THE INDIAN DIASPORA AND THE WORLD

Why focus on skilled Indian migrants? Indian migration is unique; few other countries supply as large a number of skilled workers in both permanent and temporary streams, especially with respect to H-1B visa entrants in the United States. Comparative country-level data confirm many notions regarding the desirability of high-skilled Indian migrants to choose the United States as their top destination country. The United States consistently maintains higher proportions of Indian migrants and there is a constant backlog of high-skilled Indian workers seeking entry for both temporary and permanent positions. Chakravartty (2001) accredits this to the flexibility of US temporary visas, particularly the H-1B. She asserts that the US process of temporary admission for skilled foreign born workers facilitated "new meanings of cultural and economic citizenship in relation to India's attempts to position itself as an information superpower" (Chakravartty (2001, 326). Many explanations are used to explain why the US has dominated as a desired destination country for Indian citizens even when compared to countries in the European Union. Some of these explanations include: (1) institutions for structural and legal frameworks of the United States and EU countries; (2) the kinds of immigration policy migrant-receiving countries have adopted toward Indian migrants; and (3) cultural and kinship variables linking Indian citizens to the United States.

Historically, international migration from India can be viewed in three distinct waves, one occurring prior to India's independence; a second between 1947-51 and a third wave of voluntary migration post 1951, particularly in the 1990s after the

restructuring of the Indian economy. During these waves of migration there have been distinct differences in patterns of Indian migration to the United States relative to the European Union, particularly regarding patterns of Indian migration to the United Kingdom. The UK's colonial legacy in India and policies toward Indian migrants in the 20<sup>th</sup> century facilitated migration to the UK.

The first wave of Indian migration occurred in 1834 after the British abolished slavery. Prior to this a number of Indians had worked for the British as manual labor and with the abolition of slavery those who resided in other British colonies remained in the locations where they had been moved. Hence, many Indian migrants were permanently relocated to places in the Caribbean, Southeast Asia and other neighboring countries.

The second wave of Indian migration occurred during the period between 1947 and 1951, the post-partition exodus. This was a period of involuntary migration (Khadria 2006). During this time approximately 14.5 million migrants left India. Six million Muslims moved to Pakistan and five million Sikhs and Hindus entered India (Kosinski and Elahi 1985). During this time, some of those who migrated also relocated to other countries, particularly the United Kingdom and the United States. In the UK, prior to the Commonwealth Immigrants Act of 1962, all citizens of British colonies could emigrate freely, but the 1962 Act limited the restriction of Indian migrants in the UK, allowing only those with government-issued employment vouchers to settle. The Act was a response to the high influx of Indian and Pakistani labor post partition. The act was later amended in 1971, establishing further the rules for foreign-born in the United Kingdom. This second wave of migration continued through mid 1970s.

The final migration wave began in 1991 and continues through the present. In 1991, India experienced an economic restructuring of its economy, led by changes in the Indian Ministry of Finance and the World Bank. India relaxed many of its protectionist policies and opened the economy up to the global market in a way that it had previously not experienced—opening the economy to foreign direct investment and trade. The economic changes in India also coincide with the Immigration Act of 1990 in the United States (DoJ 2008). The Immigration Act created new categories of work visas in the United States, most notably the establishment of H1-B Visas allowing for the mobility of high-skilled labor from sending countries to the U.S. The H-1B established a new route for skilled Indian migrants with a desire to emigrate. During the 1990s skilled Indian migration boomed, particularly in information technology, science, and related fields. Today, as noted above, India is consistently one of the top five source countries for skilled migrants (supplying nearly 15 percent of skilled migrants to all OECD countries in 2006).

#### *Indian Diaspora Stock Data*

The Indian Diaspora comprises slightly more than two percent of India's population. In 2006 the stock of Indian migrants residing in the United States was estimated to be 1.48 million Indians compared to 570,000 in the United Kingdom and 9,200 in Ireland, the next largest case country in the EU (SOPEMI 2008). When comparing Indian migrants in the European Union to those in the United States, much of the comparison is therefore limited to assessments of migrants in the United Kingdom and the United States.

### *Indian Diaspora Flow Data*

An estimated 10% of India's Diaspora resides in the United States entering on temporary worker visas issued by the United States Department of State (MOIA 2006). Temporary work categories are increasingly important as the vehicle for admission of foreign workers, particularly professionals, executives and managers in the United States. Moreover, an unknown number of foreign students are employed either in addition to their studies or immediately thereafter in practical training. The growth in the number of foreign professionals admitted to the United States for temporary stays, particularly involving skilled professions, reflects global economic trends.

In 2006 India was among the top five source countries for skilled migrants, supplying nearly 15 percent of skilled migrants to all OECD countries (relative to 18% of skilled coming from the UK, 11% from China, 4% from Malaysia and 3% from the Philippines). India is consistently one of the top suppliers of skilled migrant workers for both computer professionals and accounting sectors—the two sectors dominating the flow of migrants to OECD countries in 2006-2007 (SOMPENI 2008).

The share of Indian workers among temporary worker admissions into the United States in 2001 was 54.8% (Khadria 2006), and this estimate has continued to grow. In the United States, 35.98 percent of all visas issued to Indians for travel (inclusive of tourists and students) were issued to skilled Indian migrants and their family members in 2006. A total of 157,485 temporary visas (including H, L, O, P and E visas) were issued in 2006 to Indian migrants—roughly a quarter of all temporary visas.

Similarly in the UK, Indians were the largest nationality to receive work permits accounting for 37 percent of the total approved work permits. Indians also accounted for

more than 40 percent of the approximately 22,000 entries under the Highly Skilled Migrant Programme. Percentage comparisons with the United Kingdom are similar to the United States, but the overall numbers of Indian migrants and characteristics of migrants differ (SOPEMI 2008, 286). Observations of flow data give support to the claim that the United States and the United Kingdom remain the most desired destination countries for Indian migrants relative to other countries in the EU as well as outside countries—Canada and Australia.

#### TRENDS TEMPORARY WORKERS AND LEGAL PERMANENT RESIDENTS

Stocks and flows of Indian migrants give a snapshot of the current Diasporas and how it is situated in the United States and Europe. However, how do flows of temporary migrants differ from legal permanent residents? Below I present issuance data collected by the United States Department of State. Colleagues at the Institute for the Study of International Migration and I have acquired data collected on visa issuances and legal permanent residency status. At present we have gathered United States Department of State data on visa issuances from 1970 to 2008. This allows us assess the flows of labor between India and the United States before and after the Immigration Act of 1990 and India's economic restructuring.\*

Table 1 about here

---

\* One methodological point—It should be noted that I am using archived data of visa issuances as opposed to the commonly used visa admissions data. Issuance data allows comparison with data from the EU. Admissions data does not, since admissions measure the count of trips made in and out of the United States by visa holders, not the actual number of migrants entering the country. Issuance data give a more precise estimate of migrant flows. I argue that economists and others who use annual admissions data as their key source of measuring the number of migrants coming into the country every year struggle with a serious—and often ignored—validity problem in their analysis. They are likely not capturing what they think they are capturing in their measurements, hence creating Type II error in testing hypotheses they might wish to test in any statistical analysis they undertake.

Figure 1 and Table 1 highlight trends in skilled visa issuances and Green cards allotted to Indian permanent residents between 1971 and 2008 in the United States. Prior to 1990, Indians entering the United States were much more likely to enter as permanent residents. The start of India's third wave of migration in 1991 is clear from Figure 1. The establishment of the H-1B increased streams of temporary workers and slowed the number of Indians entering as legal permanent residents.

Table 2 about here

In comparing this data with work permits in the United Kingdom and the Netherlands, this is a shared trend (Table 2 and Figure 3). As work permits for temporary labor increase, the number of permanent residents decline, or at least taper off. What do these trends suggest? They clearly highlight a change in how classic settler countries and new immigration countries are receiving migrants—that is a preference for temporary work programs. According to the 2008 SOPEMI report the stock of temporary migrants in the European Union relative to permanent residents is now three to one—with roughly 2.5 million temporary residents.

Do these temporary programs really produce benefits that outweigh the costs of their implementation, and how do we calculate and consider this question? The answer, depending on the framing of the policy debate, varies in each country and context. It depends largely on how countries view policy.

## COST & BENEFITS OF EMPLOYER-DRIVEN VS. POINTS-BASED SYSTEMS

### *Cost-Benefit Analysis Framework*

Let us consider the effectiveness of temporary work programs in the framework of simple public policy model—the motivations behind temporary programs as well as

the cost and benefits to different actors involved. Moreover, let us think about the costs and benefits of different kinds of temporary programs—employer-driven versus points-based. Below I outline the framework and then present a short macro-analysis of each case country within this context. Politicized debates and recent empirical research on temporary programs often fail to consider the basic policy implications these programs have on the labor market. Below I attempt to do so.

First, why do temporary programs originate in the first place? Temporary programs are responses to failures in the labor market—responses to market shortages of labor with specific skills. Consider a market for Software A in Country X. In the national economy of Country X, if there are not enough software engineers to meet the demands of the firms producing Software A, the firms that make the software will be forced to operate below their maximum capacity. This will result in fewer software engineers working at higher wages and few output of products domestically (assuming production happens only in Country X). If the firms wish to remain in Country X, they will need to find more labor. The result is a loss to all actors involved—including a social loss when the firm is unable to meet consumer demand.

The obvious goal of temporary program is to assist in situations like this by inducing labor market supply. Temporary work programs allow firms to employ foreign-born workers to meet labor market shortages for a fixed period of time (shifting the supply curve to the right). In a perfectly competitive, ideal market model, temporary programs increase the number of workers in the economy, reduce wages forcing them toward an equilibrium wage, generate more production of demanded goods (ultimately at lower prices), and further result in increased consumer spending. Other positive

outcomes can be associated with temporary work programs as policy responses to labor market shortages. New foreign-born entrants into Country X have the capacity to generate positive externalities. They may bring skills sets with them which firms in Country X previously do not have. Further, these new workers may generate positive social externalities by participating in other activities in the economy of Country X and bringing new cultural and social identities with them that add to the multicultural aspects of Country X's society (assuming that's a desired value in Country X).

These are positive outcomes of temporary programs, such as the employer-driven system in the United States and the points-based systems of the UK and the Netherlands. The actual outcomes are far more complex. Yes, temporary worker programs reduce labor market shortages in specific industries and unquestionably generate a number of positive externalities to employers and society. They also, however, generate a number of costs and are not without their share of difficulties.

Temporary work programs present many challenges and failures. Given the complexity of the market, of labor market shortages, choosing which foreign-born are granted permission to work in such programs, and the mechanisms to be used for regulation, administering temporary work programs pose large institutional challenges to policymakers. How should policies be formed? Should they give greater autonomy to firms or to governments to select workers from abroad? Which government agencies should be responsible for implementing programs? Who should be responsible for managing regulation? Such questions are critical for considering the operation of how temporary programs work.

Cross-country differences in temporary programs in today's global labor market really have to do with the question of whether or not firms or governments should have greater autonomy in the selection of job candidates to work. The United States, for instance, operates with an employer-driven system that allows firms to select job candidates from abroad and sponsor them for employment. Whereas, the UK and the Netherlands both operate on a points-based system in which job candidates from abroad must apply for work permits, and the government determines their ability to enter to work in the destination country. In this system, job candidates do not need an employer to sponsor them to obtain a work permit, but they must have a specific set of skills and are graded on a system of points based on their qualifications.

Each system presents a variety of benefits and costs to the actors involved—policymakers, firms, job candidates, and society as a whole (Refer to Table 3). Some of the costs and benefits are monetary and easily measured. However, many of the costs associated with these programs are not easy to place values on, such as the externalities they generate and the amount of crowding out involved.

Table 3 about here

Below I consider the three case countries in this study and outline how these benefits and costs influence each system—whether the program results in positive social benefits or greater costs. Table 4 shows a side-by-side comparison of work visa and work permit requirements in the United States, the United Kingdom and the Netherlands. While each country has a different historical context, a different kind of labor market, and differences in its structural and legal requirements for temporary workers—a policy preference

toward temporary work programs has been adopted in each case, but countries have experienced different paths to this outcome.

Table 4 about here

### *The United States*

Out of the three countries, the United States has the least regulated temporary system for attracting foreign-born skilled migrants. As the numbers highlight in Table 2, the US attracts more skilled Indian migrants even when compared with the United Kingdom. After the 1990 Immigration Act and the establishment of the H-1B visa, the US has become the choice destination countries for many Indian migrants. The United States has responded to demands for skilled labor by creating a legal structure that is flexible for employers to hire temporary migrants and one that allows citizens to transition to legal permanent residency more easily than countries in the EU. The United States also has the most classically liberal economic system of the three countries. Skilled migrants enter through temporary visas or as permanent residents, both of which are employer-sponsored statuses. Unlike countries in the EU, employers can sponsor a worker for permanent residency at any time. When workers enter the US as H-1B or L-1 workers, their rights while residing in the US are tied to their employer.

The US system of admission is an employer-based, in which firms must obtain labor certifications (LCAs) from the Department of Labor to sponsor a job candidate from abroad. Firms compete for LCAs to sponsor high-skilled job candidates on H-1Bs. These are capped at 65,000 and are selected through a “lottery system.” The cap for skilled workers does not include migrants already in the US on student visas who transition to jobs in which employers sponsor their H-1B. In 2006 the Department of

State received an estimated 150,000 H-1B applications, of which 65,000 were randomly admitted using the lottery system to administer LCAs to employers. This is a form of capping and controlling the number of migrants entering the country.

Some argue that it prevents the US from attracting the most skilled workers. According to this argument is the cap and control mechanism is not the most efficient regulatory policy. Other systems for regulating skilled migration might result in capturing the most skilled labor (Kapur and McHale 2005). Today, however, education levels of migrants in the US remain above those of migrants in other countries (refer to Table 4). As far as annual statistics are concerned, the United States system of temporary admission continues to attract skilled migrants.

What are the costs and benefits of the US system of employment-sponsored temporary migration? The US approach to temporary work has three notable institutional benefits. One, the approach is much more market driven. Firms determine their demand for labor, and can conduct job searches internationally to find the best qualified individuals for their individual positions. Secondly, by requiring that incoming skilled migrants have an employer sponsor, the US eliminates the risk of incoming migrants entering without jobs and not being able find employment once in the country—as compared to the UK and Netherlands systems. Thirdly, by using the cap and control mechanism and requiring the employer sponsor, the US regulates entry of workers and minimizes the need for continuous regulation of its program. Policymakers can survey and monitor the program as needed.

While this approach provides benefits to the US labor market, considerable costs are also involved. Notably, each system of temporary migration involves coordination

failures across different government actors. In the case of the US, the temporary admissions system requires coordination across Department of State, Department of Labor, and the Department of Homeland Security for sustaining the entry of nonimmigrant workers. This coordination—whether in monitoring workers for security reasons or keeping quality data on nonimmigrants who enter—is costly and arguably functions with limited degrees of success.

Moreover, while the system provides a regulatory mechanism in sponsoring incoming workers through the labor certification process, it ties workers to their employers. Indian high-skilled workers are linked to their employer, meaning that they cannot easily switch jobs, and cannot remain in the country if their employment situation does not work out. This not only makes workers more vulnerable to their employers, it creates a situation in which employers may more easily get away with abuses such as paying migrants lesser wages than native born or making them work longer hours. Some such cases of abuses with software engineers have been recorded over the years (CITE example). Lastly, by capping the annual number of worker admitted each year, the US employer-driven system of temporary migration, may not always be reflective of market demand. Some years fewer than 65,000 workers may be needed in the marketplace, but with the cap, up to 65,000 can be admitted (and vice-versa).

While the employer-driven temporary visa system implemented in the United States reduces the direct costs to governments (relative to the points-based systems in the UK and the Netherlands), the costs associated with crowding out effects, externalities and regulation may be higher relative to the points-based systems of the United Kingdom and the Netherlands. Tables 1 and 2 further highlights that as more workers enter the United

States, the temporary program likely has little to no direct or immediate effect on adjustments to legal permanent status. To gauge this, however, much more analysis is needed, and analysis should consider the lagged effect between entry and adjustment.

#### *The United Kingdom—In Transition*

The United Kingdom has recently undergone the process of overhauling its immigration system from one that has been based on work categories to a system that is a points-based system, in which temporary workers are admitted based on their qualifications. In the United Kingdom temporary admissions occur through work permits. Under the points-based system, migrants do not need an employer sponsor but are required to pass a points-based assessment in order to be eligible to apply for a highly-skilled work permit (United Kingdom Home Office 2009). This policy change stands to further encourage Indian migrants to apply for work permits in the UK.

Prior to 2009, the UK's system of migration did not dramatically change much over time. Historically, during the first wave of Indian migration, the UK was the top desired destination country for many Indian migrants (Khadria 2006). During the 1950s and 60s, particularly after the UK introduced more stringent migration laws in 1962 to account for the growing influx of Indian and Pakistani migrants, skilled Indian migrants moved more to the United States and other destination countries. The US and the UK, are an obvious draw for skilled Indian migrants since they are English-speaking countries, and the UK, given its colonial history, has also been a desired choice. Historically temporary migrants in the UK, like in the US, have been largely tied to their employers. Unlike the United States, the UK's system of work permits has had more specific requirements for working and residing in the UK. Workers are required to work

for at least 5 years before being eligible for permanent residency. The overhaul of the UK's system of migration presents a unique time to observe how the transition to a points-based system influences the flows of migrants, and whether the desired goal of the points-based system—to attract the most qualified skilled migrants to meet labor shortages—will indeed be effective.

### *The Netherlands*

The Netherlands has a varied history of temporary work programs, most notably starting in the 1960s. The Netherlands instituted a guest worker program in the 1960s for lesser skilled migrants. While the program was initially successful, recruitment of foreign-born to fill vacancies in lesser-skilled positions was largely stopped after the 1973 oil crisis. Poor economic conditions in the 1970s resulted in a slowing of migration. In the 1980s migrants to the Netherlands were mostly refugees and asylum seekers. The country has only really begun attracting Indian skilled migrants in the last 14 years. In 1996 the Dutch reassessed their migration policy and really began to seek out more skilled migrants, and also migrants from non-Western countries. This was especially the case in the IT sector. During this time period, as Table 2 shows—the number of Indian migrants on work permits in the Netherlands increased from 185 to 1523—growing more than 8 times (Centraal Bureau voor de Statistiek. 2009).

The Dutch have taken more aggressive steps at attracting Indian migrants than other countries in the European Union. This has included government universities in the Netherlands actively recruiting Indian graduate students in science and technology fields. Similarly, some Dutch Universities, such as Maastricht University have been reaching out to Indian students, setting up teaching and learning centers within India. Aggressive

policies of the Dutch to attract Indian citizens have arguably been effective though small in scale relative to the US and UK.

IT firms, research centers and employers seeking skilled migrant workers in the Netherlands have benefited from the institutional framework and policies created. Dutch work permits do not allow immediate transitions to permanent status. Like the UK and in compliance with EU regulations, migrants must work for at least five years before attaining permanent status. Unlike the UK, however, the Dutch system has a shorter time to apply for citizenship if a migrant is married—only three years as a permanent resident are required. This can be attractive to migrants seeking permanent relocation. The Dutch system offers flexible labor migration policy that aggressively targets skilled migrants using the points-based, regulated system.

The points-based systems of the UK and the Netherlands generate many notable costs and benefits with similarities to one another. However, the social policy issues in these cases are substantially different. The UK, with its colonial legacy and shared history with India, has long been a favored destination of Indian migrants. The Dutch, on the other hand, are just now working to be a desirable destination to the skilled Indian community, and face further difficulties since they are not an English speaking destination country. Institutionally, however, the points-based systems for temporary employment share some similarities. Notably, relative to the employer driven system, job candidates have mobility in the labor market. They are not tied to one single employer. Since interested foreigners can apply for a work permit without having a job first, the system eliminates the necessity of having an employer sponsor, and nonimmigrants in both the UK and Netherlands can now live in the country and find an

employer of choice. This gives freedom and flexibility to highly-skilled migrants, and presents an element freedom that the US system does not provide. This arguably stands to appeal to qualified workers in the Indian community and makes these countries more competitive in attracting qualified skilled workers. Moreover, the system promotes a greater level of transparency in the issuance of work permits since permits are awarded based on worker qualifications and not employer-driven sponsorship. The opportunity for employers to manipulate the institutions responsible for admitting migrants are minimized.

These aspects of the points system may be equally viewed for the costs they generate. By allowing migrants to enter without jobs, the UK and Netherlands also run the risk that those on work permits may not find gainful employment and may become social burdens. In the UK this issue is receiving substantial attention as can currently be observed in the 2010 run up to the spring parliamentary elections in which migration is a key issue on the policy table between the Conservative and Labor parties.

Also, the points-based system places the selection of foreign workers in the hands of government. This results in increased costs of regulation and requires much more oversight of individuals who enter. The increased costs of bureaucratically controlling migrant entry at an individual level, ultimately may lead to greater costs to society as they increase the costs of monitoring and evaluation required of government. The points-based system, like the US cap, ultimately leaves a great deal of choice to the government to determine market demand. While the Netherlands ran a pilot of the points-system in 2009 with the goal of attracting more high-skilled, their system did not meet its intended targets. It is unclear whether this is the case as a result of the recession or other reasons.

The Netherlands continues to actively recruit labor through the points-based system, but most workers entering come through the pre-existing knowledge-based scheme in which they have an employer before entering. The cap in the United Kingdom's system is set to vary with the market—giving it more flexibility than the US cap—the ultimate number of migrants is not set by the labor market but by the decision of government bureaucrats.

Each case—the US, UK and Netherlands—highlights a particularly different historical context with respect to admission of Indian migrants, but in each context, Indian migrants have come to dominate temporary admissions. Where the institutional structure has been more flexible, the numbers of Indian migrants have increased more drastically. The flexibility allotted by the points-based system appears to be attracting migrant labor at higher rates than in the United States, but the United States has a more institutionalized structure for attracting labor.

## CONCLUSION

In the case of assessing high-skilled Indian migrants in three receiving countries—the United States, United Kingdom, and the Netherlands—the outcomes of this paper suggest that the benefits and costs of each case are dependent on the context of the country under consideration. Some institutional similarities exist. Notably, as a result of the points-based system in the United Kingdom and the Netherlands, alongside the more flexible labor market structures in these countries, they appear to be attracting temporary migrants at much higher rates than in the United States. While the United States remains a top destination choice for highly-skilled Indians, the nuanced policies of the UK and Netherlands are developing competition for qualified workers abroad. Secondly, while the employer-driven temporary visa system implemented in the United States reduces the

direct costs to governments (relative to the points-based systems in the UK and the Netherlands), the costs associated with crowding out effects, externalities and regulation may be higher relative to the points-based systems of the United Kingdom and the Netherlands.

Drawing from country-level data of skilled temporary and permanent migrants, I have further sought to shed light on the flow of Indian migrants and the institutional benefits and costs of temporary work programs in each country. Outcomes of this research largely suggest that opportunities of skilled Indians have increased dramatically in recent years and more flexibility is needed in temporary programs to attract Indian-born migrants to migrant-receiving countries. In terms of policy, permanent residency may be less desirable in destination countries than it is perceived to be by migrant receiving countries.

More research is needed (1) considering determinants of how the economic growth of India influences migrant choices to stay in India or go abroad and (2) econometrically calculating the relationship between changes in temporary and permanent admissions over time. Once these factors are accounted for, we can gain a better overall assessment of the trends associated with highly-skilled migration in each of the destination countries. In the interim, each case may be compared and independently analyzed as presented here.

## WORKS-CITED

- Castles, Stephen, Heather Booth and Tiana Wallace. 1984. *Here for Good? Western Europe's New Ethnic Minorities*. London: Pluto Press.
- Centraal Bureau voor de Statistiek. 2009. "Centraal Bureau voor de Statistiek."  
<http://www.cbs.nl/nl-NL/menu/home/default.htm>, Accessed 26 June, 2009.
- Chakravartty, Paula. 2001. "The Emigration of High-Skilled Indian Workers to the United States: Flexible Citizenship and India's Information Economy" in *The International Migration of Highly Skilled: Demand, Supply, and Development Consequences in Sending and Receiving Countries*, eds. Wayne Cornelius, Thomas J. Espenshade, and Idean Salehyan, San Diego: Center for Comparative Immigration Studies.
- Department of Justice (DoJ). 2008. "Immigration Act of 1990."  
<http://www.usdoj.gov/crt/cor/byagency/doj1255a.htm> (accessed June 15, 2008).
- Docquier, Frederic and A. Marfourk. 2006. "International Migration by Educational Attainment (1990-2000)." In *International Migration, Remittances and Development*, eds. Ozden and Schiff, New York: Palgrave Macmillan, Chapter 5.
- Docquier, Frederic, O. Lohest, and A. Marfourk. 2007. "Brain Drain in Developing Countries."  
*World Bank Economic Review* 21(2007): 193-218
- Department of Justice (DoJ). 2008. "Immigration Reform and Control Act of 1990."  
<http://www.usdoj.gov/crt/cor/byagency/doj1255a.htm> (accessed June 15, 2008).
- Government of India (GoI), MOIA report. 2006. *Annual Report*, Ministry of Overseas Indian Affairs, Government of India, New Delhi.
- Heritage Foundation. 2009. "Immigration, Citizenship and Border Security."  
<http://www.heritage.org/research/immigration/>, Accessed 29 August, 2009
- Hollifield, James. 2007. "The Politics of International Migration: How Can We Bring the State Back In?" In *Migration Theory: Talking Across the Disciplines*, eds. Bettrell and Hollifield. New York: Routledge.
- Kapur, Devesh and John McHale. 2005. *Give Us Your Best and Brightest: The Global Hunt for Talent and Its Impact on the Developing World*. Washington DC: Center for Global Development.
- Khadria, Binod. 2006. "India: Skilled Migration to Developed Countries Labour Migration to the Gulf." Asia Research Institute, National University of Singapore,

<http://meme.phpwebhosting.com/~migracion/modules/ve7/2.pdf> (accessed June 15, 2008).

Khadria, Binod. 2001. "Shifting Paradigm of Globalization: The Twenty-first Century Transition towards Generics in Skilled Migration from India." *International Migration* 39 (5).

Kosinki and Elahi 1985

Koslowski, Ray. 2008. "Models for Immigration Management Schemes: Comparison and analysis of existing approaches and a perspective for future reforms" Immigration Paper Series, German Marshall Fund, [http://www.gmfus.org/doc/GMF6657-ImmigrationPaper\\_1210\\_Final.pdf](http://www.gmfus.org/doc/GMF6657-ImmigrationPaper_1210_Final.pdf), Access 15 August, 2009.

Lowell, B. Lindsay, ed. 1999. *Foreign Temporary Workers in America: Policies that Benefit the U.S. Economy*.

Nair, Janaki. 2005. *The Promise of the Metropolis: Bangalore's Twentieth Century*, Delhi: Oxford University Press.

Newland, Kathleen and Dovelyn Agunias. 2007. "Circular Migration and Development: Trends, Policy Routes, and Ways Forward." Washington DC: Migration Policy Institute.

Pritchett, Lant. 2009. *Let Their People Come: Breaking the Gridlock On Global Labor Mobility*. Washington DC: Center for Global Development.

Rudenberg, Hans, Rob Euwals, and Harry ter Rele. 2003. *Immigration and the Dutch Economy*. The Hague: CPB Netherlands Bureau for Economic Policy Analysis.

SOPEMI. 2008. *International Migration Outlook*. OECD.

Thelen, Kathleen and Christa Van Wijnebergen. 2003. "The Paradox of Globalization: Labor Relations in Germany and Beyond," *Comparative Political Studies* 36(8): 859-880.

United Kingdom Home Office. 2009. "Border Agency." <http://www.ind.homeoffice.gov.uk/workingintheuk/tier1/general/>, Accessed 30 August 2009.

USCIS. 2009. "Immigration through Employment." <http://www.uscis.gov/portal/site/uscis/menuitem.5af9bb95919f35e66f614176543f6d1a/?vgnextoid=84096138f898d010VgnVCM10000048f3d6a1RCRD&vgnnextchannel=4f719c7755cb9010VgnVCM10000045f3d6a1RCRD>, Accessed 29 August 2009.

Van der Veer, P. 2005. "Virtual India: Indian IT Labor and the Nation-State," in Hansen T.B. and F. Stepputat, eds., *Sovereign Bodies: Citizens, Migrants, and States in the Postcolonial World*. Princeton: Princeton University Press.

Wadhwa, Vivek, AnnaLee Saxenian , Richard Freeman and Gary Gereffi. 2009. “America’s loss is the world’s gain: America’s New Immigrant Entrepreneurs, Part IV.” *Draft Paper and Survey Data*.

Table 1.

Indian Skilled Visa Issuances and Legal Permanent Residents in the United States<sup>†</sup>

Year	LPR (total)	H-1s Issued	L-1s Issued
1971	5644	84	
1972	15035	87	
1973	12484	166	
1974	13579	160	
1975	16033	113	
1976	17882	170	
1977	18613	188	
1978	20753	194	
1979	19708	282	
1980	22607		
1981	21522		
1982	21738		
1983	25451		
1984	24964	629	
1985	26026	640	
1986	26227	997	
1987	27803	1340	
1988	26268	1671	
1989	28517	2215	
1990	28679	2583	
1991	31165	4232	
1992	34629	5641	
1993	40021	7773	
1994	34873	11360	
1995	34715	15693	
1996	44848	19271	
1997	38061	31684	1628
1998	36482	31686	2276
1999	30237	40247	4206
2000	42044	55062	9306
2001	70290	61530	11908
2002	71105	52771	17812
2003	50372	44012	18124
2004	65472	42245	20648
2005	84681	63737	24926
2006	61369	53579	31787
2007	65353	64887	41001
2008	63352	83464	40139

<sup>†</sup> H-1 Visa Issuances between 1971 and 1979 estimated using a ratio imputation technique and derived with ratios between admissions and spot issuance years for which data are available.

Table 2. Permanent and Temporary Flows of  
Indian Migrants in the United States, United Kingdom and Netherlands

Year	United States		United Kingdom		Netherlands	
	LPR (total)	H-1s Issued	Migrant Permanent Settlements	Work Permits	Permanent Residents	Work Permits
1996	44848	19271		2679	407	185
1997	38061	31684			249	215
1998	36482	31686			234	340
1999	30237	40247			235	340
2000	42044	55062			242	277
2001	70290	61530	7280	16981	309	292
2002	71105	52771	8005	18999	250	237
2003	50372	44012	11460	19964	138	241
2004	65472	42245	11870	26939	117	209
2005	84681	63737	17540	29261	187	494
2006	61369	53579	12030	35809	214	986
2007	65353	64887			214	1523
2008	63352	83464				

Source: Centraal Bureau voor de Statistiek; US Department of State: USCIS; Home Office, Government of the United Kingdom; PROMINSTAT

Table 3. Costs and Benefits in Employer-Driven and Points-Based Systems

	Employer-driven	Points-based
Benefits	More market driven: Firms determine their demand for labor and areas of shortage	More government driven: Migrant workers are directly linked to government. They have mobility in the labor market and are not tied to one single employer.
	Firms directly select job candidates of choice from abroad	Less coordination across actors: Eliminates necessity of firm involvement in government selection of migrant workers
	Fire Alarm Oversight: Government regulates with cap and control, but does not require constant oversight	Flexibility of labor to enter based on skill-qualifications—may attract more skilled, desirable workers from abroad
Costs	Coordination between Departments of Labor, Homeland Security, State, and Firms	Coordination between Departments of Labor, Homeland Security, State, and nonimmigrants with work permits
	Less transparency across departments	Police Patrol Oversight: Constant oversight of government via candidates admitted. Government is responsible when candidates do not find employment.
	Workers are tied to firms that employ them--need a firm sponsor.	Results in more government management--increased costs of regulation result in higher costs to society
	Government caps may not always reflect market demand, but require national legislation to change.	Government is left to determine market demand.

Temporary Work Programs in the United States, United Kingdom and the Netherlands

	United States	United Kingdom	Netherlands
Historical Context	Classical Settler	Colonial History	New immigration
Labor Market	Liberal	Liberal	Corporatist
Temporary Program	Employer-driven	In transition to point-based	Point-based
Allows transition to permanent status	Yes	Not Direct	Not Direct
Separate Resident Permit Required	No	No	Yes
Time needed to gain permanent residency	None required- But w/backlog	5 Years	5 years
Transition from Permanent Status to Citizenship	5 years	6 years	5 years

Source: USCIS; Home Office, Government of the United Kingdom; Centraal Bureau voor die Statistiek

Table 4. Percentage of Indian Migrants with Post-Secondary Education

Host Country	1990	2000
United Kingdom	15.6	31.7
Germany	36.8	12.3
Canada	54.4	56.7
United States	76.7	79.8
Australia	61.2	70.8

Source: Docquier and Marfouk 2006 data

Figure 1

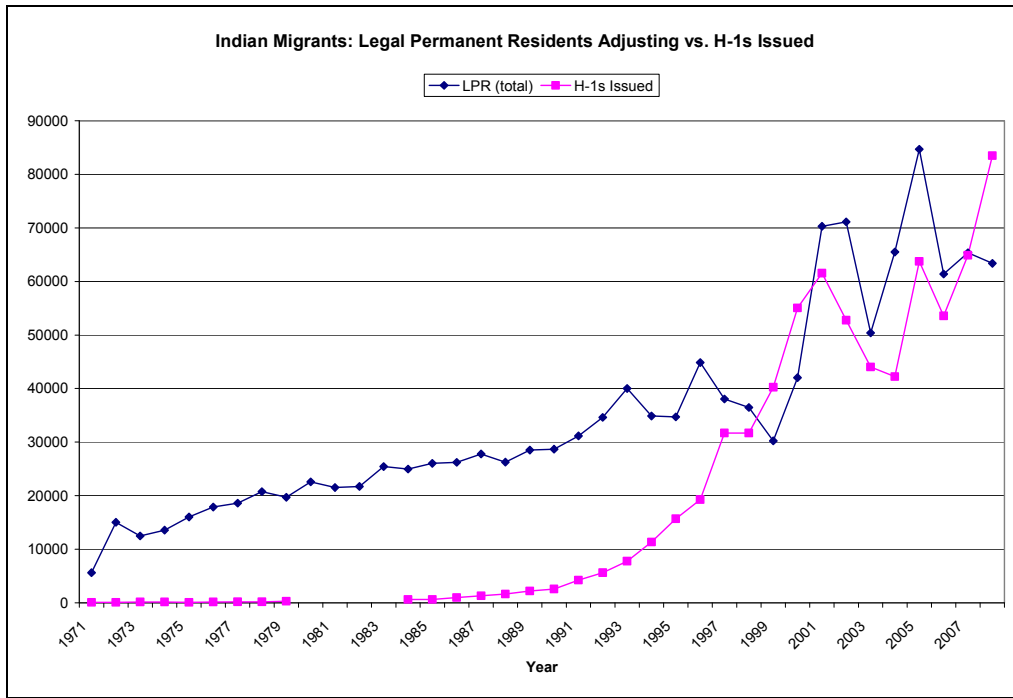


Figure 2

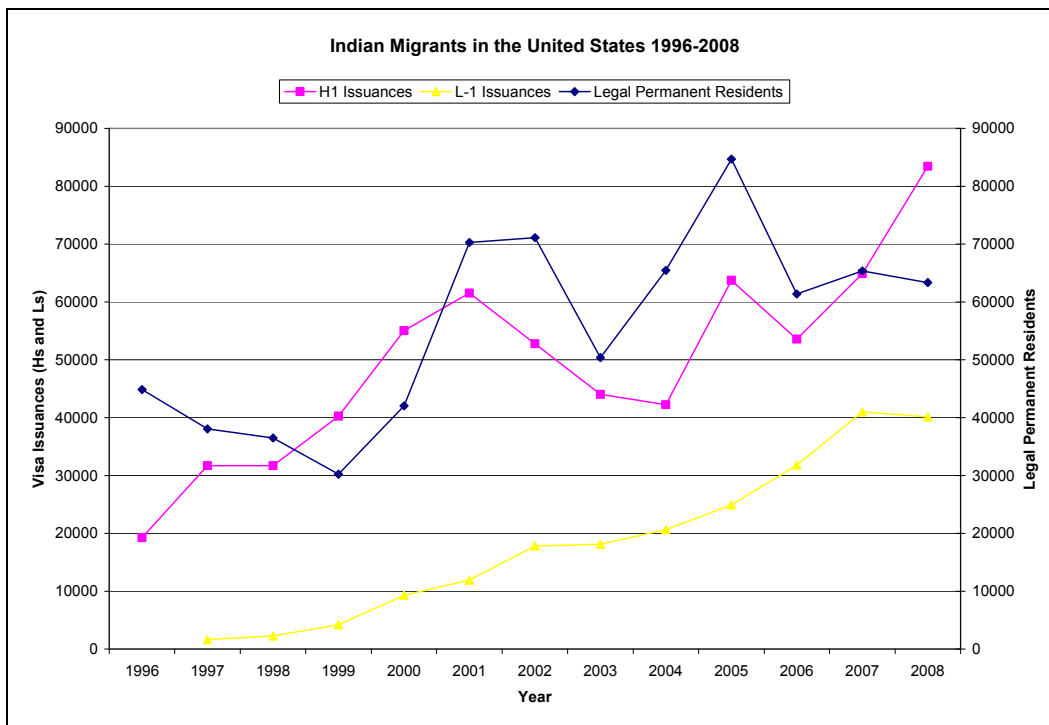


Figure 3.

