

# Efficiency and Equity as Goals for Contemporary U.S. Immigration Policy

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**ABSTRACT:** As the United States has entered its postindustrial stage of economic development, mass immigration has again become a distinguishing feature of the U.S. economy. In all of its diverse forms, immigration presently accounts for anywhere from one-quarter to one-third of the annual growth of the U.S. labor force. By the turn of the 21st century, it could conceivably comprise all of such growth.

Immigration is the one aspect of population and labor force growth that public policy should be able to shape and control. Unfortunately, however, the extant public policies that govern the size and composition of the immigrant and refugee flows are largely unrelated to emerging economic considerations.

The revival of mass immigration is not taking place in a vacuum. Indeed, it appears that the labor market is being radically transformed. The demand for labor is increasingly favoring those workers with skill and education. There are diminishing needs for job seekers without these human capital endowments. On the labor supply side, it is unfortunately the case that the United States already has a significant number of adults who are ill-prepared for many jobs that are being created.

To assist in this effort to enhance efficiency, immigration policy should be flexible. It should be capable of responding to changing domestic economic conditions. Currently, the nation's immigration policy is dominated by political motivations that give priority to family reunification and humanitarian goals. Immigration can be a short run means to provide skilled and educated workers to fill critical worker shortages. But in the long run, equity considerations derived from the nation's multiracial and multicultural character of the labor force also come into play. It is imperative that citizen workers be prepared for the high quality jobs in the growth industries of its postindustrial economy. Immigration must not inhibit market pressures from encouraging employers to provide better opportunities for training and employment of citizens.

The obverse is also true. It is essential that immigration does not provide only workers who can be employed in the declining occupations and industries. With a sizeable adult illiteracy problem already, the nation can ill-afford to increase the pool of unskilled and poorly educated workers, which increases the competition among such workers for the shrinking number of jobs available to them.

Since the mid-1960s, mass immigration has once again surfaced as a distinguishing feature of life in the United States. In contrast to all other advanced industrial nations, the United States stands alone in its willingness to admit each year hundreds of thousands of legal immigrants and refugees for permanent settlement as well as to tolerate mass abuse of its laws by an even larger annual number of illegal immigrants. Indeed, a 1986 study of contemporary American society commissioned by three large U.S. corporations and conducted by an international team of scholars proclaimed that "America's biggest import is people" (Oxford Analytica, 1986, p. 20). Its detailed analysis, which generally documents "the decline in American exceptionalism," stated that the one feature to distinguish the current U.S. economy from those of other industrialized nations is that "immigration continues to flow at a rate unknown elsewhere in the world" (Oxford Analytica, 1986, p. 20).

Because the process has gradually occurred over several decades; because the relevant data to monitor the process have ranged from poor to nonexistent; because the importance of a comprehensive research program to assess the on-going economic effects of immigration has never been recognized by Congress as a necessary element in the deliberative process; and because the administration of this element of public policy has been designed by lawyers, (i.e., the judiciary committees of Congress) primarily to benefit other lawyers, the cumulative economic impact of contemporary immigration has been deferred from careful analysis. It would seem, however, that the consequences of this prolonged indifference to the national interest has finally reached the point today where it can no longer be ignored. Having in the 1960s reawakened immigration from its dormant state (where it had rested from the mid-1920s), a belated effort is now underway by the nation's political leaders to find a purpose for having stirred this sleeping economic giant from out of America's past.

## **THE OMNIPRESENCE OF ECONOMIC EFFECTS**

Throughout its history, immigration policy has been called upon to serve a variety of perceived national purposes. In addition to its obvious population role, immigration policy has at times become intertwined with such important public concerns as racial, agricultural, labor, family, human resource development, humanitarian and foreign relations issues. Regardless of the perceived justifications at any particular point in time, there are always economic consequences. The ever present economic role is derived from the fact that, ultimately, most immigrants—no matter under what guise they entered—must find some way to support themselves or to be supported by others. Ideally, the welfare of immigrant workers and their

dependents will also be congruent with the best interests of the nation. But there is no assurance that such will be the case in the emerging postindustrial economy. Domestic economic conditions change over time. Immigrants in mass numbers can themselves be the cause of changes in labor market conditions—for either better or worse for the citizenry of the nation. If, for instance, jobs for citizens are readily available, a case for more liberal admissions of immigrants may be warranted. If jobs are scarce, the opposite may be the case. If only certain types of jobs exist in certain geographical areas, a targeted policy could be beneficial but a general policy might not. If conditions are uncertain, prudence would dictate that restrictive policies be in place until such time as trends can be discerned. There is little rationale for the prevailing blanket admission policy that is oblivious to economic circumstances in either the short or long run.

Immigration is the one aspect of population and labor force growth that public policy should be able to control. To date, however, policymakers in the United States have been unwilling to view it in this light. The design of immigration policy, in all of its forms, is still dominated by the pursuit of purely political objectives. It has yet to be held responsible for its sizable economic consequences (Briggs, 1984). Less than 5% of the immigrants and refugees who are legally admitted to the United States each year are admitted on the basis that the skills and education they possess are actually in demand by U.S. employers. The percentage is considerably less than 1% if illegal immigrants are included in the total immigrant flow.

In all of its diverse forms (i.e., legal immigrants, illegal immigrants, refugees, asylees, and nonimmigrant workers), the flow accounts for anywhere from one-quarter to one-third of the annual growth of the U.S. labor force. The presence of a considerable number of illegal immigrants complicates efforts to be precise. It is highly probable that, when the female labor force participation rates (that have been rising for several decades) eventually stabilize and when the flow of "baby boomers" into the work force begins to ebb (as it soon will), immigration could, by the turn of the 21st Century, comprise all of the annual growth of the nation's labor force. Immigration, therefore, is a vital determinant of the nation's economic welfare—regardless of the reluctance of policymakers to view it as such.

## **IMMIGRATION POLICY AND NATIONAL GOALS**

A comprehensive discussion of the history of the immigration policy of the United States is beyond present purposes. Nonetheless, a brief re-

view of its evolution is essential to understanding the thesis that a change from its present course is desperately needed.

For its first century as an independent nation, the United States had neither ceilings nor screening restrictions on the number and type of persons permitted to enter for permanent or temporary settlement. The nation was in its preindustrial stage of economic development. The economy was overwhelmingly dominated by agriculture (as late as 1880, 70% of the labor force were employed in this industrial sector alone). With a vast amount of land that was largely unpopulated, an unregulated immigration policy was consistent with the nation's basic economic needs. It was also a pragmatic position. The new nation simply did not have the enforcement capacity to effectively restrict immigration along its vast borders even if it had been inclined to try.

When the industrialization process began in earnest during the latter decades of the 19th century, the newly introduced technology of mechanization needed unskilled workers to fill job openings in its urban labor markets. Not all would-be immigrants, however, were welcomed any more. The nation's equity ideals were sublimated during this era. Not only did domestic racial segregation lock-in on the "newly freed" black citizen population of the South, but prejudice against some of the recent ethnic immigrants led to discrimination being institutionalized in the nation's immigration policies toward the outside world. The first ethnic group to feel the reactionary sting were the Chinese who were banned as immigrants in 1882. Similar steps were taken against the Japanese in 1907.

From purely an efficiency standpoint, however, the mass immigration of new ethnic groups during the late 19th century and the first two decades of the 20th century was generally consistent with the basic economic needs of the nation. Agriculture remained the nation's largest single employment sector (accounting for one-third of all employment as late as 1920). The continuing labor needs of agriculture, as well as the rapidly emerging new employment sectors of manufacturing and mining generated jobs that required very little in the way of skills, education, literacy, or fluency in English from the work force. The enormous supply of immigrants who came during these years typically lacked these attributes. Nonetheless, they reasonably matched the effective demand for labor at the time. As late as the eve of the entry of the United States into World War I in 1917, only about 6% of the adult labor force in the United States even had a high school diploma. Workers who actually had college degrees were so scarce as to be considered rare. The technology of that era asked little in the way of human resource endowments from most of the labor force. As the history of American labor clearly shows, the available jobs largely re-

quired blood, sweat, and tears. Most of the immigrants—as well as most of the native born workers—of those times amply provided all three.

Beginning with World War I, however, the nation experienced a sharp contraction in immigration. Following this venture into world affairs, the first quantitative restrictions on the number of immigrants to be admitted in the nation's history were imposed. Moreover, the pervasive negative social reactions to many of the ethnic groups who had entered during the 1890 to 1914 period (i.e., immigrants mostly from Eastern and Southern Europe) led to the adoption of overtly racist immigration reforms. These restrictive actions were embodied in the Immigration Act of 1924 (also known as the National Origins Act). Qualitative screening standards were enacted that favored Western and Northern Europeans; disfavored other Europeans; banned virtually all Asians; and ignored most Africans. By this time, the expanding domestic economy was characterized by the widespread introduction of the assembly-line method of production. Capital intensive mass production techniques no longer required unlimited numbers of workers to do labor intensive work. In those industrial sectors in which unskilled workers were needed, employers turned to domestic labor surpluses. These surpluses were found in the nation's massive rural economy. During the 1920s, over 6 million people moved to urban areas and the rural population declined for the first time since the nation was founded. The most important new supply of workers to respond to these urban opportunities were the black citizens of the rural South who finally began their exodus.

The depression decade of the 1930s (with its surplus of unemployed job seekers) was followed by the war years of the 1940s (when previously existing artificial barriers to the employment of women and minority groups weakened to provide new domestic labor supplies). Even the low quotas of the prevailing immigration laws were not met during these years.

In the 1950s, the economy prospered due in large part to the pent-up demand for products and the forced-savings of the war era. It was during this period of general affluence that the United States was finally forced to confront the legacy of racial inequality that had plagued the nation since its inception. The Civil Rights Movement, although it had earlier intellectual antecedents, was launched in earnest with the "bus boycotts" in Alabama in 1957. This movement soon spread throughout most of the South and it culminated in the passage of the Civil Rights Act of 1964 (with its landmark equal employment opportunity provisions).

Just as overt racism could no longer be tolerated within the country, it was only a logical extension of principle that such practices had to be purged from its immigration policies with the external world. Hence, the

adoption of the Immigration Act of 1965 ended the national origins admission system. Immigration levels were sharply increased and a politically popular new admissions system based primarily on the concept of family reunification was adopted. Four of the current six admission preference categories of visas (i.e., 80% of the total) available each year are reserved for various categories of adult and extended family relatives of persons who are already citizens. In addition, immediate family members (i.e., spouses, minor children, and parents) of each visa holder are exempt from all quotas and admitted automatically. Under this admission system, the human capital endowments of legal immigrants are largely accidental with regard to their compatibility with existing labor market needs. Likewise, because the legal system stresses family ties, the geographic settlement patterns are linked more to kinship than to demonstrated local labor market needs.

Unfortunately, in the process of altering the admission process and enlarging the scale of immigration flows in 1965, the fact that the U.S. economy was on the verge of entering a new phase of fundamental employment change was unforeseen.

## **THE CHANGING NATURE OF THE U.S. LABOR MARKET**

Since the mid-1960s, the United States has entered its postindustrial stage of economic development. The goods-producing industries—which had been the major employment sector throughout the history of the U.S.—began to decline (see Table 1). Agriculture has been a negative source of employment every year since the late 1940s. It provides jobs for less than 3 percent of the labor force. Likewise, manufacturing—especially its blue collar occupational categories—has been in sharp relative decline (accounting in the late 1980s for only 20% of the employed labor force). Employment in mining has also fallen sharply. The construction industry has shown modest employment increases but it is an industry that is subject to frequent cyclical fluctuations.

The dramatic fall-off in employment in the goods producing industries has been sparked by the introduction of new forms of computer controlled technology. With computer technology, an electronic "mind" has been created for coordinating, guiding, and evaluating most routine operations. With the introduction of a vast array of mechanical and electrical substitutes for the human neuromuscular system, it is now possible to link these new computer-driven machines together into self-regulating systems that can perform an enormous variety of work tasks.

**TABLE 1**

**Industrial Employment in the United States, Selected Years  
(in thousands of employed persons)**

<i>Industry</i>	1950	1960	1970	1980	1986
Goods-Producing					
Agriculture	9,926	7,057	4,523	3,705	3,138
Mining	901	712	623	1,027	792
Construction	2,364	2,926	3,588	4,346	4,961
Manufacturing	15,241	16,796	19,367	20,285	19,961
Service-Producing					
Transportation and public utilities	4,034	4,004	4,515	5,146	5,285
Wholesale trade	2,635	3,143	3,993	5,275	5,853
Retail trade	6,751	8,248	11,047	15,035	17,976
Finance, insurance, real estate	1,888	2,629	3,645	5,160	6,304
Personal services	5,357	7,378	11,548	17,890	23,073
Government	6,026	8,353	12,554	16,241	16,738

Source: *Economic Report of the President* (Washington, D.C. (U.S. Government Printing Office, 1987).

Thus, the new technology means that high paying jobs for poorly skilled and inadequately educated workers are largely a thing of the past. As former Secretary of Labor William E. Brock aptly said in 1987, "The days of disguising functional illiteracy with a high paying assembly line job that simply requires a manual skill are soon to be over. The world of work is changing right under our feet" (Brock, 1987, p. 8). The new technology is creating new jobs but the growth is concentrated in occupations that reward extensive training and education (Cyert & Mowery, 1987, Chapter 4). It is unlikely in the foreseeable future that there will be an abundance of unskilled jobs. But, unless public policy changes dramatically with regard both to labor force preparativeness and immigration admissions, there is likely to be a chronic excess supply of unskilled job seekers and, worse yet, persons discouraged from seeking employment in the legitimate labor market (Uchitelle, 1987, p. F-1 and F6; Wilson, 1987).

In the wake of the sharp declines in employment in the goods producing sector, there have been dramatic increases in the service producing industries. Responding to major shifts in consumer spending patterns that are a distinguishing feature of a postindustrial economy, almost 70% of the

U.S. labor force is employed in services in the late 1980s. The U.S. Department of Labor projects that 90% of the new jobs that will be created in the remainder of the 20th century will be in the service industries and that the service sector will account for 75% of all employment by the year 2000 (Personick, 1987). Thus, the demand for labor is being radically restructured. The supply of labor is slowly adapting but the adjustment process is not as easy or as automatic as it was in earlier eras.

As previously discussed, the displaced workers from the agricultural sector in the early 20th century had little difficulty qualifying for newly created jobs in the burgeoning manufacturing sector. They only had to relocate and, when immigration flows were sharply reduced between the 1920s through to the 1960s, they tended to do so. But the emergence of the service economy has imposed an entirely different set of job requirements on the actual and potential labor force. While the technology of earlier periods stressed physical and manual skills for job seekers, the service economy stresses mental, social, linguistic, and communication skills. As a consequence, the shift to services has meant declining job opportunities for those who lack quality educations and good skills. Tragically, a disproportionate number of those who are vulnerable to such adverse employment effects are racial minorities, women and youths (Cyert and Mowery, 1987, Chapter 5).

Even within the service sector, the growth in employment opportunities has been quite uneven. Four industry subsets—eating and drinking, retail trade, business services (which includes such things as building cleaning, temporary help, consulting, computer processing, computer software development, and security guards), and medical services (which includes doctors, dentist services, laboratories, and hospital care)—accounted for 43% of all of the nation's job growth since 1959; 47% since 1969; and 65% since 1979 (Kutscher, 1986, p. 8).

Related to these dramatic trends in industrial employment patterns are the derivative changes in occupational patterns. Between 1972 to 1982, over one-third of the growth in employment occurred in the professional, technical and related workers classifications (see Table 2) (Kutscher, 1986; Leon, 1982). Other broad occupational groups experiencing substantially faster-than-average growth over this period were managers, administrators, and service and sales workers. The greatest decline in employment was among operatives, farmers, farm laborers, and private household workers. The U.S. Department of Labor projects that, for the period of 1986 to 2000, occupational growth will continue to be extremely uneven (see Table 3). Occupations expected to experience the most rapid growth over this period are those that require the most highly educated workers. These

TABLE 2

**Employment in the U.S. by Major Occupational Group, 1972–1982**  
(thousands)

Occupational Group	1972	1982	1972–1982	
			Absolute Change	Percent Change
Total, all occupations	81,702	99,526	17,824	+21.8
Professional, technical and kindred workers	11,459	16,951	5,492	+47.9
Managers and administrators	8,031	11,493	3,462	+43.1
Sales workers	5,354	6,580	1,226	+22.9
Clerical and kindred workers	14,247	18,446	4,199	+29.5
Craft and kindred workers	10,810	12,272	1,462	+13.5
Operatives, except transport	10,340	9,429	-911	-8.8
Transport operatives	3,209	3,377	168	+5.2
Laborers, except farm	4,217	4,518	301	+7.1
Farmers and farm laborers	3,069	2,723	-346	-11.3
Service workers, ex. household	9,529	12,694	3,165	+33.2
Private household workers	1,437	1,042	-395	-27.5

Source: Robert Kutscher, *Employment growth in the United States*. In Howard Rosen (Ed.), *Job generation: U.S. and European perspectives*, p. 15 (Salt Lake City: Olympus, 1986).

include executives, administrators, and managers; professionals; and technicians and related support workers. Collectively, these three occupational categories accounted for 25% of total employment in 1986 but are expected to constitute 40% of the nation's employment growth for the remainder of the century (Silverstri & Lukasiewicz, 1987). Absolute declines are projected for the lower skilled occupations in farming and private household work, and only marginal growth is expected in the operative and laborer occupations.

Without unduly belaboring the obvious, the critical conclusion is best summarized by a Department of Labor study of anticipated occupational demand projections up to the year 2000: "It should be pointed out that the occupational clusters projected to decline or grow slowly are generally those requiring the least amount of education and training and those projected to grow the fastest require the most education and training" (Silverstri & Lukasiewicz, 1987, p. 62). Thus, the occupational trends of the present and the near future are apparent. The question is the ability of the supply of labor to adequately respond.

**TABLE 3**

**Employment by Broad Occupational Group, 1986 and Projected to 2000 and Percent Change in Employment for Selected Periods (numbers in thousands)**

<i>Occupation</i>	<i>1986</i>		<i>Projected 2000</i>		<i>Percent change</i>			
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>1972-79</i>	<i>1979-86</i>	<i>1972-86</i>	<i>1986-2000</i>
Total employment	111,623	100.0	133,030	100.0	20.3%	10.9%	33.4%	19.2%
Executive, administrative, and managerial workers	10,583	9.5	13,616	10.2	34.9	28.7	73.7	28.7
Professional workers	13,538	12.1	17,192	12.9	29.8	21.4	57.5	27.0
Technicians and related support workers	3,726	3.3	5,151	3.9	39.9	24.7	74.5	38.2
Salesworkers	12,606	11.3	16,334	12.3	24.3	24.4	54.6	29.6
Administrative support workers, including clerical	19,851	17.8	22,109	16.6	23.5	9.5	35.2	11.4
Private household workers	981	.9	955	.7	-23.0	-11.5	-31.9	-2.7
Service workers, except private household workers	16,555	14.8	21,962	16.5	25.7	16.0	45.9	32.7
Precision production, craft, and repair workers	13,924	12.5	15,590	11.7	21.7	6.5	29.6	12.0
Operators, fabricators, and laborers	16,300	14.5	16,724	12.6	8.7	-9.2	-1.3	2.6
Farming, forestry, and fishing workers	3,556	3.2	3,393	2.6	-5.1	-5.6	-10.4	-4.6

The projected data is based on the moderate alternative model used by the U.S. Department of Labor.

Source: U.S. Department of Labor.

## A POSITIVE ROLE FOR IMMIGRATION POLICY

By the late 1980s, the industrial and occupational employment needs of the U.S. economy are crystal clear. As immigration policy is a way of affecting the size and composition of the supply of workers, it should admit only the number and types of persons who complement emerging labor demand patterns.

It is estimated that about 75% of the unemployed persons in the United States have reading and writing problems (Hearings, 1985, p. A-10). It is also believed that there may be as many as 23 million functionally illiterate adults in the U.S. population and an equal number who are only marginally illiterate (Kozol, 1985). One of the major contributing factors to the growth of adult illiteracy is immigration—especially by illegal immigrants and refugees (Hearings, 1985, p. A-10). Thus, with the possible exception of legitimate political refugees, there is no reason to admit legally or to tolerate illegal entry by persons who can only qualify for low skilled jobs that require minimal education. To the contrary, immigration should admit only people who have a high probability of finding employment in growth sectors and who are trained, educated, and who have experience in occupations for which shortages presently exist. For those granted refugee and asylee status, there should be a parallel obligation by the federal government to entitle all such persons to training, education, and language assistance if they lack such skills. Such policies would facilitate their entry into the labor force. Such adjustment burdens should not fall on local and state governments who have no say in the entry of such persons. It also goes without need for elaboration that there should be strict enforcement of the Immigration Reform and Control Act of 1986 with its strictures against illegal immigration. The gaping enforcement loopholes in this legislation that do not provide adequate identification measures to give true meaning to this Act should be closed.

With an abundance of unskilled and poorly educated adults, the last thing that the nation needs is to continue to allow unskilled and poorly educated persons to immigrate into the United States. It is always possible for more highly skilled and educated persons to do unskilled work. It is seldom possible for unskilled workers to do skilled work. Hence, in the *unlikely* case that all of the experts on labor force trends and projections are wrong and the future demand is for unskilled workers with a contraction of need for skilled workers, the operation of normal market forces should be able to guide the excess supply of skilled workers to vacant unskilled jobs. This assumes, of course, that the operation of the market is not sabotaged by an immigration policy designed to admit unskilled non-immigrant

workers or that continues to tolerate illegal entry. But the reverse is *not* possible. If skilled and educated workers are needed, they cannot readily be created. Unskilled workers cannot fill skilled jobs except at great financial cost associated with significant time delays for retraining and relocation or with significant productivity losses for the economy due to inefficient operations. In many instances, the lack of sufficient educational foundations will prevent many unskilled adults from ever being trained for the types of jobs that are projected to be most in demand in the next decade.

On the positive side, immigration can be used as a means of providing the types of experienced workers that are actually needed. Under present circumstances, these workers are those that already have skills and education and, for whatever reason, voluntarily wish to leave their homelands. Such is especially the case of workers who are in fields that involve computer technology; conduct scientific research and; provide higher education itself. It is in this capacity that immigration can find a justifiable purpose. Immigration policy can serve as a *short run* method to fill these types of jobs until the nation can enact the human resource development policies capable of meeting this emerging demand.

Largely by means of circumvention, the current immigration system is trying to perform this function despite the self-defeating burdens imposed on it by the disproportionate priority given to family reunification principles and massive refugee accommodation. The non-immigrant system is becoming the new immigrant route into the country for skilled and educated workers (Farley, 1988; Briggs, 1986). Indeed, it is very likely that the topic of non-immigrant workers (or "temporary foreign workers") will be the major domestic labor policy issue of the 1990s. Non-immigrant policy is supposed to allow for the admission of foreign workers to fill temporary spot shortages. Eventually, they are expected to return to their homelands. It is not intended to be an avenue for permanent immigration or a means of long term worker dependency. But because the legal system is hindered by misguided family reunification objectives and massive backlogs in the two occupational preference categories that are based on labor market needs (but which account for only 20% of the annually available visas), the non-immigrant system seems to be the new way for American employers to find experienced workers that are otherwise unavailable or for whom they do not wish to actively compete to hire or to train from the citizen-born pool. This is, of course, a perversion of this element of immigration policy. For most of the relevant non-immigrant categories, there are no annual ceilings and some categories permit workers to remain in the country for many years. Thus, it is conceivable that non-immigrant workers could

soon become as or more important than the legal immigrant system in terms of its labor supply implications.

## **IMMIGRATION POLICY AND THE HIGHLY EDUCATED LABOR FORCE**

No where, for example, is the skill shortage more obvious than in the case of the training and preparation of workers with Ph.Ds for jobs in research, development, and university teaching. In a report issued in 1987 by the National Research Council, it was disclosed that the number of Ph.Ds awarded in 1986 (a total of 31,770) has remained virtually the same since the mid-1970s and well below the high for any one year of 33,755 set in 1973. Of even greater significance than the steady state of Ph.D. production is the fact over the past 25 years (especially the last 10 years) the proportion of doctorates awarded to citizens has declined dramatically (from 85.6% in 1962 to 72.3% in 1986) (National Research Council, 1987, p. 6). As shown in Table 4, the sharpest declines have been in the fields of engineering (from 76.5% in 1962 to 40.8% in 1986) and the physical sciences (from 84.8% in 1962 to 62.5% in 1986). Many of these new doctorate recipients are foreign nationals on temporary visas who will return to their homelands. Some of these non-immigrant Ph.D. recipients, as shown in Table 5, do find jobs in the United States. A growing number of Ph.Ds in every field are being granted to people who have permanent visas (i.e., resident aliens). Most of these persons will stay and seek jobs in the U.S. although, as also shown in Table 5, there is a small counter trend for some of them to leave as well. The explanation for the declining number of citizen doctorate recipients cannot be explained by population demographics (See Figure 1). The problem is rooted in the attractive job alternatives available to qualified undergraduate students immediately after they receive their degrees; the high financial indebtedness of many undergraduates when they graduate; and the inadequate educational preparation of many undergraduates who cannot qualify for graduate study (especially when in competition with foreign student applicants).

## **THE PARALLEL NEED TO TAILOR POLICY TO ASSURE EQUITY OPPORTUNITIES FOR CITIZENS**

A shift to a labor market oriented immigration policy does have its dangers. It must be a flexible policy that can readily adjust both the level

**TABLE 4**

**Percentage Distribution of Doctorate Recipients, by Citizenship  
and Broad Field, 1962–1986\***

Field	Year of Doctorate						
	1962	1966	1970	1974	1978	1982	1986
Total, All Fields							
U.S. Citizens	85.6	83.4	84.5	79.7	81.9	78.4	72.3
Permanent Visas	2.4	3.5	5.3	5.5	4.4	3.9	4.5
Temporary Visas	10.8	10.6	8.7	10.2	11.1	13.5	16.6
Physical Sciences							
U.S. Citizens	84.8	82.0	82.2	73.8	76.3	72.7	62.5
Permanent Visas	2.2	3.4	6.3	7.5	6.1	4.7	5.0
Temporary Visas	11.9	11.9	10.1	14.8	15.4	19.5	26.2
Engineering							
U.S. Citizens	76.5	73.4	73.2	55.7	52.0	44.2	40.8
Permanent Visas	4.9	6.3	12.5	16.4	13.4	11.2	10.2
Temporary Visas	17.9	16.7	13.7	22.4	31.7	38.9	40.6
Life Sciences							
U.S. Citizens	79.8	77.3	80.2	74.3	79.9	80.8	75.9
Permanent Visas	2.7	3.3	5.2	6.4	4.3	3.2	3.6
Temporary Visas	16.7	18.0	13.9	14.7	13.3	13.1	15.2
Social Sciences							
U.S. Citizens	85.4	83.4	85.1	82.7	84.8	82.2	77.9
Permanent Visas	2.1	3.7	4.9	3.6	3.5	3.4	3.8
Temporary Visas	10.5	10.2	8.7	8.8	8.1	9.2	11.5
Humanities							
U.S. Citizens	90.7	88.3	89.6	87.4	89.3	84.9	78.8
Permanent Visas	2.4	4.3	4.7	4.3	3.3	3.9	4.4
Temporary Visas	4.6	4.5	3.8	4.2	4.7	6.4	9.3
Education							
U.S. Citizens	94.5	94.6	94.6	90.6	90.3	86.6	84.7
Permanent Visas	0.8	1.0	1.2	1.4	1.8	2.0	2.5
Temporary Visas	4.3	3.5	3.4	4.2	5.7	7.9	7.1
Professional and Other							
U.S. Citizens	82.5	81.9	78.2	80.3	80.0	76.5	70.8
Permanent Visas	2.2	3.9	5.5	4.8	3.9	3.7	4.8
Temporary Visas	13.3	9.6	12.7	9.5	13.7	14.0	15.6

\*Details do not add to 100 percent where citizenship is unknown.

Source: National Research Council. *Survey of earned doctorates: Summary Report 1986*, p. 6.

TABLE 5

**Percentage of Doctorate Recipients with Employment Commitments  
in the U.S., by Citizenship and Broad Field, 1977 and 1986\***

Field	U.S. Citizen		Permanent Visa		Temporary Visa	
	1977	1986	1977	1986	1977	1986
Total, All Fields	94.9	92.4	85.4	74.5	23.7	35.6
Physical Sciences	97.1	96.0	84.0	80.9	25.5	49.6
Engineering	96.3	95.3	94.1	84.3	48.6	53.7
Life Sciences	94.1	93.9	75.4	56.1	9.2	13.1
Social Sciences	94.3	92.6	85.1	74.7	21.6	28.2
Humanities	92.7	89.6	87.3	74.2	21.1	27.1
Education	95.2	90.8	62.2	52.8	8.1	8.2
Professional Fields	95.5	92.8	85.4	80.0	21.4	48.4

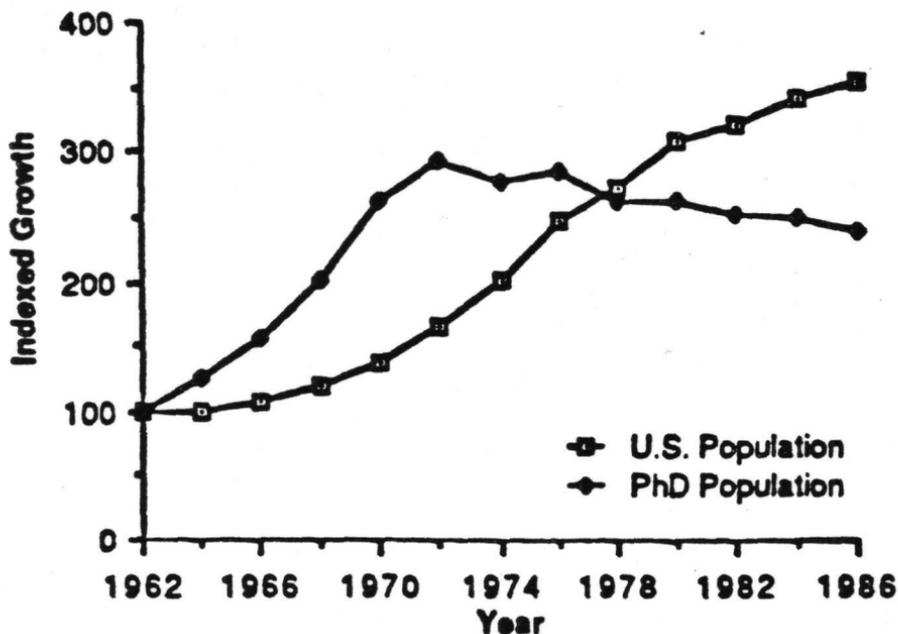
\*Percentage based on total reporting definite postgraduation plans (17,215 doctorate recipients in 1977 and 15,981 in 1986).

Source: National Research Council. *Survey of earned doctorates: Summary Report 1986*, p. 7.

and the composition of the immigrant flows to changing economic conditions. Great care must also be taken, however, to assure that a labor market oriented immigration policy does not forestall training and education of native citizens for these quality jobs. Given the increasingly multicultural and racial character of the U.S. labor force, it is essential for equity reasons that minorities in particular be given opportunities to prepare and to qualify for these emerging high skilled jobs. The social cohesion of the nation in the future will depend directly upon the avoidance of an occupational polarization of the labor force along racial lines. Hence, the importation of skilled immigrant labor should be administered in a flexible fashion by a responsible administrative agency and not by fixed statutory provisions or by arbitrary rulings of courts. It must be a policy that is capable of being coordinated with other human resources development policies and equal employment opportunity objectives.

The most likely candidate for this administrative mission would be the U.S. Department of Labor which, in fact, did have responsibility for the implementation of immigration policy from 1914 to 1940. This function was shifted to the U.S. Department of Justice as a national security measure just prior to the entry of the United States into World War II. The suggested administrative change would also have the effect of transferring the congressional responsibility for oversight of immigration matters to the la-

FIGURE 1. Trends in the number of U.S. and permanent-resident Ph.D.s and in the comparable U.S. population, 1962-1986.



NOTES: Index year = 1962. Comparable U.S. population = 25- to 34-year-olds having 16 or more years of education.

Source: National Research Council, *Survey of earned doctorates: Summary Report 1986*, p. 7.

bor and human resource committees of Congress. These committees are far better prepared to understand the economic role of immigration policy than are the judiciary committees who seem to view it as purely a political toy.

Obviously, the nation should be preparing its native born citizens for the high skilled, high paying, and high status jobs that the postindustrial economy is generating. But human resource development requires a long term perspective to be successful. Providing qualified teachers, adequate facilities, and up-to-date instructional aids and equipment are all critical educational problems in the United States. Unfortunately, the findings of the numerous presidential commissions on the status of education in the nation in the 1980s have already concluded that the nation is failing at

every educational level (National Commission on Excellence, 1983; Sizer, 1984; National Board of Inquiry, 1985; Association of American Colleges, 1985; Boyer, 1983; National Institute, 1984; National Science Board, 1983; National Commission on Student Financial Assistance, 1983). There is no greater national priority other than to reverse these trends and to address these educational deficiencies. But at this juncture, sad to say, the nation must look elsewhere for a way to fill many of the jobs that require high skills and advanced education.

## CONCLUDING OBSERVATIONS

The United States needs to formulate an immigration policy that is consistent to its rapidly changing labor market trends. If congruent, immigration policy can provide a valuable tool to national efforts to enhance economic efficiency and to achieve societal equity. If contradictory, immigration policy can present a major barrier to the accomplishment of either or both goals.

The United States needs to shift the priorities of its immigration system to provide highly skilled and educated immigrants. In certain occupations and industries, the U.S. economy desperately needs such workers. Due in part to its own negligence in the development of its human resources, the high technology economy that the U.S. aspires to maintain requires higher educational and training standards than the nation is willing or capable of imposing on its extant education and training system. Eventually this will change but, at the present, it is the reality. There is an old saying that "logical consequences are the beacons to wise men and the scarecrows of fools." The immigration system at this point in time can be a beacon—a way of showing the nation how to acquire the workers it needs (the skilled and educated) and how to keep out those that it does not (the unskilled and uneducated). A flexible immigration admission system that could respond to changing economic situations could end the "fools paradise" that best describes the existing immigration system with its nepotistic, mechanistic, and legalistic characteristics and its highly political orientation.

The luxuries of allowing immigration policy to continue to be determined on purely political criteria (i.e., to placate special interest groups) and to achieve idealistic social dreams (i.e., to pursue diversity for simply its own sake) can ill be afforded. Making immigration policy a human resource development policy would give immigration policy what it now lacks: economic accountability for what it does.

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