

INTERNATIONAL MIGRATION
PAPERS

35

UNITED STATES POLICIES FOR
ADMISSION OF PROFESSIONAL
AND TECHNICAL WORKERS:
OBJECTIVES AND OUTCOMES

Philip Martin, Richard Chen and Mark Madamba

International Migration Branch
INTERNATIONAL LABOUR OFFICE GENEVA

INTERNATIONAL MIGRATION
PAPERS

35

UNITED STATES POLICIES FOR
ADMISSION OF PROFESSIONAL AND
TECHNICAL WORKERS:
OBJECTIVES AND OUTCOMES

Philip Martin, Richard Chen and Mark Madamba
University of California

International Migration Branch
INTERNATIONAL LABOUR OFFICE GENEVA

Table of contents

Foreword	v
1. Summary	1
2. Introduction	3
3. Permanent admission of PTK workers: immigrants	4
3.1 Evaluation of labour certification system.	8
3.2. Proposed changes: programme electronic review management	10
3.3. Permanent: investor visa programme.	11
4. Temporary admission: non-immigrants.	13
5. H-1B professionals	16
6. Evaluation of HB programme	18
6.1. Outlook on H-1B policy	20
6.2. Final considerations	22
References and bibliography	24
Tables	
Table 1. Annual earnings and approved employer petitions for immigrant visas, 1992-97	8
Table 2. US guest worker programmes: employer and worker rules	14
Table 3. Average annual earnings and approved employer petitions for H-1B workers, 1992&1997	21
Appendix	
Data	25
Table A1. INS non-immigrant admission to the US: FY1990-96	26
H-1B private programme	27
International Migration Papers	28

Foreword

The International Migration Papers (IMP) is a Working Paper series of the International Migration Branch devoted to making available to ILO's constituents as early as possible the product of its recent research on global migration trends, the conditions of employment of migrants, and the impact of state policies on migration and the treatment of migrants.

This paper of Martin et al. looks at the experience of the United States in regulating the admission of foreign professionals and technical workers. It offers fresh insight into the problems of an industrial democracy in implementing an immigration programme with complex and multiple policy goals. Martin et al. argue that the present system is not working as it has been intended because it relies on a questionable administered system for establishing labour market shortages. In its place they propose that employers be made to pay taxes or fees for each foreign worker they are allowed to employ.

Readers' comments on these IMP papers are most welcome since they are meant to stimulate discussion particularly of the scope and limits to state policy interventions in the field of migration.

Geneva, September 2000

M.I. Abella,
Chief,
International Migration Branch

1. Summary

This paper examines the US policy of admitting foreigners with professional and speciality skills. It considers two questions: (i) are efforts by the United States Department of Labor (DOL) to manage the sometimes competing goals of admitting needed foreign professional, technical and kindred (PTK) workers and protecting United States workers successful; and (ii) what programme features or enforcement mechanisms make the management of these goals easier or harder?

The United States and most other industrial democracies have programmes under which employers may hire foreign professionals temporarily or permanently. There are four major reasons why increasing the supply of workers via immigration might be preferable to the wage-induced adjustments that would bring labour demand and supply into balance:

- the desire to avoid wage inflation in one industry, occupation or area that has spillover effects in other labour markets or leads to rising consumer prices;
- the belief that the labour demand and supply gap is only temporary because of, for example, students in training, and that the industry may be needlessly hurt by labour shortages until supply catches up with demand;
- the feeling that some labour-short industries have a multiplier or strategic value that might be lost if (part of) the industry migrated abroad or expanded slowly owing to lack of labour;
- the fact that in some industries most production is overseas, and thus the experienced professional and skilled workers abroad can be made available to United States firms in the United States via immigration. Some multinationals argue that they need to have temporary foreign workers admitted or to receive permission to hire foreign graduates of United States universities so that they can develop a global labour force for their global operations, i.e. they need multinational teams in each location.

United States immigration law does not spell out explicitly goals such as those referred to above, although much of the debate over quotas and admissions rules reflects the desire of policy-makers to help United States employers while protecting United States workers.

The labour market for PTK workers has similarities and differences with regard to other labour markets. As in other labour markets, we would expect rising wages or earnings to dampen (the growth of) demand and to increase supply. The major difference between PTK and unskilled labour markets lies in the lag in increasing supply due to training. For example, in the engineering labour market, there is typically a four- to five-year training lag, so that when beginning engineering salaries rise suddenly, and students shift towards engineering, it can take four to five years before newly trained engineers enter the labour market. By then, conditions may have changed, producing a familiar shortage–glut pattern in the labour market.

This paper focuses on two major United States programmes:

1. the five EB-visa categories, admitting up to 140,000 permanent immigrants (including family members) per year under employment-based preferences;
2. the H-1B programme, admitting up to 115,000 professional and speciality workers in fiscal year 1999 (FY99) and FY00, 107,500 in FY01 and a scheduled 65,000 in FY02.

Quotas for permanent employment-based immigrants are not fully used, while quotas for H-1B workers are oversubscribed. A total of 90,607 immigrants and family members were admitted under employment-based preferences in FY97, down from 117,499 in FY96. The entire quota of H-1B visas was used in FY98, and the 115,000 quota was fully used by May 1999, well before the end of FY99 on 30 September 1999.

The United States uses three mechanisms to achieve the goals of admitting mutually beneficial foreigners and protecting United States workers: personal characteristics, employer certification and employer attestation.

1. *Personal characteristics.* Up to 40,040 priority workers¹ (including family members) and up to 40,040 professionals with advanced degrees or extraordinary ability (including family members) may be admitted as permanent immigrants on the basis of their personal characteristics, i.e. without a labour market test.
2. *Employer certification.* Certification requires the United States employer to obtain written confirmation from the United States DOL, before the foreigner arrives, that (i) United States workers are not available to fill the vacant job, and (ii) the presence of the foreigner in the job will not adversely affect United States workers.
3. *Employer attestation.* Attestation is a process under which the United States employer asserts or attests that United States workers are not available at prevailing wages; enforcement, if any occurs, after admission.

The first mechanism is a supply-side approach, i.e. admission depends on personal characteristics, while the other two are demand-side approaches, i.e. admission depends on an employer's preferring a foreign worker he has identified.

The United States is moving from certification to attestation, despite criticism that attestation does not protect United States workers. There are two major reasons for this shift. First, certification — or supervising a United States employer's recruitment of United States workers after the employer has requested a foreigner — is costly and rarely results in the employer finding a United States worker to fill the job. Second, the President's FY00 budget proposes shifting responsibility within the DOL for the admission of economic/employment foreigners from the Employment and Training Administration, whose primary responsibility is to provide employment services and job training, to the Employment Standards Administration, whose mission is labour law enforcement. Under current proposals, the Employment Standards Administration would shift to employer attestation to regulate admissions and develop an income-tax enforcement model to ensure compliance, selectively auditing suspicious employer attestations rather than supervising each employer recruitment.

¹ Priority workers are foreigners with extraordinary ability, outstanding professors and researchers, and certain multinational executives and managers.

We conclude that the most effective strategy for managing the competing goods of facilitating the entry of needed immigrants and temporary foreign workers may be to design programmes that include economic incentives that help to bring labour supply and demand into balance on a continuing basis. With a minimum wage and effective enforcement of standard labour laws, an employer-paid levy or user fee would encourage employers to look continuously at the United States labour market for workers, and would generate funds that could be used by employer, worker and government representatives to find alternatives to the continued use of foreign workers in particular industries and occupations.²

2. Introduction

Relatively few foreigners are admitted to the United States solely for economic or labour market reasons. In FY96, for example, the most recent year for which complete data are available, 915,900 immigrants were admitted, but only 56,500 (or 6 per cent) were admitted because they were foreigners with extraordinary ability (11,000), professionals holding advanced degrees (8,900), other professionals and skilled workers (30,300), unskilled workers (6,000) and employment creation investors (300). The maximum number of immigrants admitted for economic/employment reasons is 140,000 per year, including spouses and dependants. In FY96, some 117,500 immigrants admitted under the economic/employment preferences, i.e. 52 per cent of economic/employment admissions, were family members.³

In addition to immigrants, the United States admits non-immigrant foreigners for employment with 19 different visas, which range from A for ambassadors to TN for professionals from the countries of the North American Free Trade Agreement (NAFTA). About 395,000 foreign workers were admitted in FY96 under the 14 major non-immigrant visa categories that permit employment of foreign workers by United States employers for United States wages, i.e. that lead to these foreign workers being considered United States workers in the United States labour market. Another 640,000 foreigners were admitted as students or exchange visitors; a large but unknown number of foreign students or exchange visitors are also employed by United States employers for United States wages in the United States labour market.

Since 1965, United States immigration law has presumed that immigrants are not needed for United States employment (Aleinikoff, Martin and Motomura, 1995, p. 193). Under the 1965 amendments to United States immigration law, employers were usually required to obtain certification from the DOL (DOL) that United States workers were unavailable for each vacancy that they wanted to fill with a foreigner before the foreigner was admitted to the United States. The Immigration Act of 1990 (IMMACT) more than doubled the number of visas available for permanent immigrants entering the United States for economic or employment reasons — from 54,000 to 140,000. IMMACT also changed the H-1B programme, easing employer access to professional foreign non-immigrants and simultaneously imposing a cap of 65,000 visas a year. In addition, it created the

² The tax or levy approach has been used successfully to deal with, for example, air pollution in the Los Angeles area. Instead of firm or industry quotas being set, an overall goal is set, firms are given "pollution permits" reflecting their pollution at the time the programme is implemented, and the permits are then traded. The value of permits has risen, encouraging firms that can adjust at the lowest cost to do so, and firms that find it cheaper to expand without reducing pollution to buy permits to do so.

³ Some of the spouses and children of economic/employment immigrants undoubtedly joined the United States labour force.

non-capped O, P, Q and R visa programmes for, among others, foreign entertainers and athletes.

The rationale for these changes was set out in a 1990 report of the House Judiciary Committee (quoted in Aleinikoff, Martin and Motomura, 1995, pp. 221–2):

“The US labor market is now faced with two problems that immigration policy can help to correct. The first is the need of American business for highly skilled, specially trained personnel to fill increasingly sophisticated jobs for which domestic workers cannot be found...The second problem concerns the skills gap in the current and projected US labor pool...it is unlikely that enough US workers will be trained quickly enough to meet legitimate employment needs...immigration can and should be incorporated into an overall strategy that promotes the creation of the type of work force needed in an increasingly competitive global economy without adversely impacting on the wages and working conditions of American workers.”

The H-1B programme was modified in 1998. The American Competitiveness and Workforce Improvement Act (ACWIA) increased the number of H-1B visas available from 65,000 a year to 115,000 in FY99 and FY00, and to 107,500 in FY01. The 115,000 limit for FY99 was reached in May 1999. Despite the wishes of many high-tech employers, the H-1B cap is not likely to be raised again in 1999.

3. Permanent admission of PTK workers: immigrants

The United States admits immigrants for economic or employment reasons under five preferences, each of which is numerically limited:

- first, priority workers — maximum 40,040 per year (including families) — who are foreigners with extraordinary ability, outstanding professors and researchers, and multinational executives and managers;
- second, professionals with advanced degrees or persons of exceptional ability — maximum 40,040 per year plus visas not used in higher preferences (including families);
- third, skilled and other workers — maximum 40,040 per year plus visas not used in higher preferences (including families, but with an annual limit of 10,000 visas for unskilled workers);
- fourth, special immigrants — maximum 9,940 per year (including families, with a maximum of 5,000 religious workers);
- fifth, employment-creation investors — maximum 9,940 per year (including families).

Information on the availability of visas is updated monthly in the Department of State's *Visa Bulletin*. In May 1999, there was no wait for visas in four of the five preferences, except for first-preference priority workers from China and second-preference professionals and third-preference skilled workers from China and India. Those waiting longest were other or unskilled third-preference workers; they had to have applied before September 1992 to have an immigrant visa

available in May 1999.⁴

Most foreigners seeking to enter the United States as immigrants for economic or employment reasons must obtain an offer of permanent full-time employment from a United States employer. There are four important points regarding immigrants admitted for economic and employment reasons:

1. The number of immigrants, including families, is less than the maximum of 140,000 a year, e.g. 90,607 in FY97, 117,500 in FY96, 85,336 in FY95 and 123,291 in FY94.
2. Most immigrants admitted for economic or employment reasons are already in the United States and adjust their status from that of illegal or non-immigrant foreigner to that of immigrant. In FY96, about 90 per cent of the principals "admitted" under economic and employment preferences were already in the United States and adjusted their status.
3. In FY96 United States employers submitted 40,401 new petitions for labour certifications. The most common occupations for which the DOL certified the need for immigrants were software engineer and computer programmer (13 per cent), speciality and other cooks (12 per cent) and college professor (3 per cent).
4. In March 1999 there was a backlog of employer requests for the certification of about 144,000 foreigners: 110,000 of these are in state employment offices and 34,000 are in regional DOL offices. About 300 staff in employment services offices are responsible for monitoring employer recruitment, and there is a 9- to 24-month delay between an employer's filing of a request for certification and a decision by the DOL that the immigrant is or is not needed.

Employers and their lawyers complain about the delays and costs in proving that the foreigners they want have extraordinary ability, or that there are no United States workers available. There are two main complaints: (i) delays often lead to complications because, for example, a foreigner whose immigration status the employer wants to adjust may acquire an illegal status owing to delays in obtaining the desired immigrant visa; and (ii) most employers feel compelled to hire immigration lawyers to help them through the labour certification process, with a consequent increase in their costs. For instance, Hewlett-Packard estimated in May 1996 that labour certification on average costs \$15,000 and takes 22 months when the company wants, for example, to sponsor a non-immigrant H-1B worker for immigration.

Most recent policy recommendations suggest a trade-off: expedited employer access to immigrants in exchange for employer-paid fees. The purpose of fees is (i) to demonstrate the employer's "need" for the immigrant and (ii) to generate funds to administer and enforce the programme and train United States workers so that immigrants are not needed in the future. For example, the Commission on Immigration Reform recommended in 1995 that foreigners obtain immigrant visas under employment preferences after their United States employers have paid \$10,000 per immigrant into a fund that would support the training of United States workers for the jobs now taken by immigrants.

The United States permanent labour certification system operates on the basis of Schedule A and

⁴ Investors from China had to apply before September 1998 to have a visa available in May 1999.

B occupations. Schedule A occupations are those for which the DOL has determined "that there are not sufficient United States workers who are able, willing, qualified...and that the wages and working conditions of United States workers similarly employed will not be adversely affected by the employment of aliens in Schedule A occupations" (CFR 656.10), i.e. the DOL is signalling that United States employers are likely to have requests to certify the need for such workers approved. The three Schedule A occupations are physical therapists, professional nurses, and college and university teachers "of exceptional ability".

There are 49 occupations on the Schedule B list, ranging from assemblers to yard workers, for which the DOL has determined that there are generally sufficient United States workers, and where the presence of foreign workers would adversely affect United States workers. The DOL states that:

"work occupations listed on Schedule B require little or no education or experience, and employees can be trained quickly to perform them satisfactorily...many of these occupations are entry [level]...for high school graduates and other US workers who otherwise would have difficulty finding their first employment and gaining experience...there is generally a nationwide surplus of US workers who are available for and who can qualify for Schedule B job opportunities which offer prevailing wages and working conditions" (CFR 656.23).

Thus, the burden of proof is on the employer to show that, contrary to these DOL findings, he or she cannot find United States workers.

United States employers seeking labour certification to sponsor a foreigner for immigration must apply by submitting:⁵

1. a statement of the qualifications of the alien, signed by the alien;
2. a description of the job to be filled by the alien, including the wage offered;
3. a statement of the steps taken to recruit United States workers, including a copy of recruitment advertisements, and the number of United States applicants and the reasons they were not hired.

The DOL reviews these employer applications or petitions, filed on Form 750 of the Employment and Training Administration (Application for Alien Employment Certification), to ensure that (i) there are not sufficient United States workers who are able, willing, qualified and available at the time of the alien's application for a visa and admission into the United States and at the place where the alien is to perform the work; and (ii) the employment of the alien will not adversely affect the wages and working conditions of United States workers similarly employed.

The DOL sends written notice of its certification decision (Notice of Findings) to the employers, who have 35 days in which to submit additional information before, for example, a "no" decision becomes the Final Determination on the application for certification. If the application is rejected, the employer may appeal to the Board of Alien Labor Certification Appeals, which normally hears

⁵ Special rules apply for United States employers requesting certification for non-immigrant shepherders employed as H-2A workers for at least 33 of the preceding 36 months.

cases in panels of three. When an application is rejected, the employer may not usually file another petition for six months. In the mid-1990s the DOL was spending about \$60 million a year on labour certification activities.

The number of professionals whom United States employers sponsored for immigrant status were in most occupations between 1992 and 1997, but rose sharply in computer-related occupations (Table 1). It should be noted that there is no correlation between changes in annual earnings and employer petitions; this suggests that (i) any "labour shortages" are highly localized or that (ii) hiring foreigners is a network process, and that employer preferences and network recruitment, not labour market conditions, determine entries. Network-driven hiring means, for example, that a hospital in the United States develops a relationship with a particular training institution in, for instance, Canada or the Philippines, finds the graduates to be very useful and returns to that institution to recruit every year, rather than looking outside its local area in the United States. Some United States school districts follow this policy in recruiting bilingual teachers from particular educational institutions in Mexico.

There were petitions for 11,305 workers in 1997, in a United States labour market with 130 million employed workers, including at least 33 million with a Bachelor of Arts degree or more. For example, the United States had 1.5 million computer systems analysts in 1997, 600,000 computer programmers and 400,000 computer operators. It is hard to imagine how 5,300 foreign computer experts could resolve a labour shortage in a field with 2.5 million employees, which is growing by over 10 per cent (or 250,000) a year. For many analysts the surprise is why wages are not increasing faster in computer-related occupations, given such a rapid expansion of employment.

One must be careful in interpreting changes in annual earnings by occupation because many occupations in which foreigners play significant roles are relatively small and include unusual employment arrangements, such as significant self-employment. For example, there are 61,000 technical writers, many of whom are self-employed persons who work by the job, so that it can be very hard to interpret annual earnings and changes in annual earnings. Overall, foreigners represented 1 per cent of the stock in only one field of employment — architecture, engineering and surveying — and this may simply reflect the fact that many engineers are included in engineering rather than architecture.

Table 1. Annual earnings and approved employer petitions for immigrant visas, 1992–97

Permanent labour certifications Occupational category	Annual earnings		Change (%)	Approved employer petitions			Employment 1997 (000)	Petition %
	1992	1997		1992	1997	Change		
Computer-related occupations	\$40,894	\$48,811	19	1,065	5,313	399	1236	0.43
Art	\$33,678	\$36,932	10	110	103	-6	251	0.04
Managers and officials	\$51,954	\$53,557	3	1,214	1,112	-8	18,440	0.01
Medicine and health	\$63,406	\$66,301	5	745	611	-18	2,886	0.02
Administrative occupations	\$38,093	\$42,848	12	950	753	-21	4,604	0.02
Entertainment and recreation	\$58,026	\$32,301	-44	97	71	-27	136	0.05
Writing	\$34,567	\$33,635	-3	91	65	-29	61	0.11
Social sciences	\$36,362	\$39,034	7	261	166	-36	441	0.04
Professional, technical and managerial	\$30,061	\$29,901	-1	124	56	-55	4,604	0.00
Religion and theology	\$24,299	\$26,494	9	29	13	-55	350	0.00
Museum, library and archival sciences	\$36,833	\$31,730	-14	97	38	-61	188	0.02

Architecture, engineering and surveying	\$40,395	\$45,008	11	4,703	1,830	-61	169	1.08
Law and jurisprudence	\$59,681	\$62,701	5	93	31	-67	885	0.00
Education	\$34,934	\$40,681	16	2,772	736	-73	4,798	0.02
Life sciences	\$32,029	\$34,111	7	933	153	-84	106	0.14
Mathematics and physical sciences	\$39,842	\$40,928	3	1,585	254	-84	144	0.18
Total	\$40,717	\$47,724	17	14,869	11,305	-24	39,299	0.03

Source: Lowell (1999), from DOL, *Administrative Data (1992, 1997)* and Bureau of Statistics.

3.1. Evaluation of labour certification system

There are four major criticisms of the United States labour certification system for United States employers seeking immigrants: these relate to sham recruitment, the absence of guarantees, national interest, and inadequate balancing of employer and national interests. The problem most frequently cited by outside evaluations of the labour certification system is that many United States employers use economic/employment immigrant visas to sponsor aliens already employed illegally or as non-immigrants. This means for many observers that the United States employer does not want a United States worker: the recruitment of United States workers supervised by the DOL is often a sham, since the employer already has at work a foreigner who he believes is the best worker for the job.

For example, the DOL's Inspector General found that 99 per cent of the 24,000 foreigners sponsored by United States employers for economic/employment visas in FY93 were already working for the employer who requested them, including about 4,000 who were unauthorized foreign workers. When the sample United States employers advertised the 24,000 jobs, as required for labour certification, they attracted 165,000 applications from United States workers — about seven applicants per job — but in virtually every case the United States workers were found not to be qualified, and the foreigner already at work was certified as needed and was thus sponsored by the employer for immigration.

A second criticism of the labour certification process is that once a person has been admitted as an immigrant who is best qualified to fill a particular job vacancy, there is no legal requirement that he or she ever fill or remain on the job — the person can take another job or switch jobs after receiving an immigrant green card. Since economic/employment visas are not probationary, there is no guarantee that immigrant visas issued to fill jobs deemed to be in the national interest are actually used to fill such jobs.

A third criticism of the labour certification process is that too many immigrants are admitted whose admission is difficult to consider as being in the national interest. For example, between 1988 and 1996, the United States admitted as economic/employment immigrants some 40,000 housekeepers, nannies and domestic workers, 15,000 cooks and chefs, 3,000 auto repair workers, 252 fast-food workers, 199 poultry dressers, 173 choral directors, 156 landscape labourers, 122 short-order cooks, 77 plumbers, 68 doughnut makers, 53 baker's helpers and 38 hospital janitors. In many cases, employment-based immigration is used to reward loyal nannies or to unify families if the relative in the United States has a business that can sponsor relatives for admission as needed workers.

A fourth criticism is that fraud is widespread. Efforts to make the process employer-friendly inevitably lead to abuse by some employers who want to legalize illegal or non-immigrant workers, or to sponsor relatives and friends for admission. On the other hand, a bureaucracy that double-checks each employer statement on the certification form causes delays for employers, including those who have made a genuine effort to find United States workers. The DOL faces a significant challenge in balancing the competing goods of assisting employers who genuinely need foreign workers and minimizing fraud that may hurt United States workers.⁶

Proposals made to reform the admissions system for economic/employment immigrants in the mid-1990s had several features in common, including the substitution of employer-paid fees for detailed DOL oversight of employer-recruitment activities. The Commission on Immigration Reform (CIR) recommended in September 1995 that employers be permitted to have up to 100,000 economic/employment immigrants admitted per year, including family members, down from the current 140,000, but above the FY94 demand for permanent immigration visas granted on the basis of achievement and work.⁷ Under the CIR's recommendations, instead of applying to the DOL for labour certification, employers wanting to sponsor foreign workers for admission would pay a \$7,000 to \$10,000 fee per immigrant into a private fund that would train United States workers to fill vacant jobs identified by employer requests for immigrants. Employers willing to pay these fees would be presumed to have searched and failed to find United States workers, and would thus save the up to \$10,000 they currently pay lawyers to complete the labour certification process.

Senator Alan K. Simpson (Republican, Wyoming) introduced a bill — the Immigration in the National Interest Act — which was patterned after the CIR recommendation, but would have reduced the number of immigrants admitted for economic/employment reasons from 140,000 to 75,000. It would also have required United States employers to pay permanent immigrants admitted to fill vacant United States jobs at least 10 per cent more than the prevailing wage, and to pay 30 per cent of the first year's salary paid to the immigrant into a United States fund dedicated to training United States workers to fill vacant jobs. Simpson's proposal was not fully debated in Congress. In March 1996, comprehensive bills that proposed reforms to the legal immigration system and new efforts to reduce illegal immigration were separated. The efforts to reduce illegal immigration became the IIR Immigration Reform Act of 1996; the legal immigration reform proposals are still pending in 1999.

3.2. Proposed changes: programme electronic review management

Labour certification for economic/employment immigrants and non-immigrant H-2B (unskilled workers) is currently done by the Employment and Training Administration (ETA), the largest of the DOL divisions and the one that works most closely with local employment services offices. The President's FY00 budget proposed that labour certification be moved from the ETA to the Employment Standards Administration (ESA), transferring about 98 FTE and \$35 million from one

⁶ There are enough stories about employer requests to suggest that abuse will occur without certification, as illustrated by the case of a New York church that wanted to sponsor an immigrant to be a missionary on the streets of New York, claiming that Americans "lacked enthusiasm and determination" for such work. The DOL refused to certify the church's need for the alien.

⁷ In FY94, about 123,000 permanent immigrants were admitted under employment preferences. However, 30,000 of them were Chinese students who were allowed to adjust their status, plus unskilled immigrants. The 38,000 "principal workers" admitted for employment reasons in FY94 would have generated \$380 million for the training fund had a fee of \$10,000 per worker been charged.

DOL agency to another.⁸ Services and enforcement would be combined in the ESA, and employers seeking to have their need for foreign workers certified would have to pay for DOL certification services with a new set of fees.

The proposed new system, known as the Program Electronic Review Management (PERM) system, is scheduled to become operative on 1 October 1999. It is to be used to review employer requests for permanent immigrants and H-2B non-farm workers, but not H-2A farm workers. The key concept embodied in PERM is the substitution of a quasi-attestation process for the current labour certification process, reducing the old 11-step certification process to a usual four-step process, and reducing the time between application and certification to one to two weeks.

An employer application for permission to sponsor an immigrant (EB) or request a temporary unskilled foreign worker (H-2B) would be scanned into a computer, and the data submitted by the employer would be compared with DOL thresholds, so that applications with data exceeding critical thresholds could be identified for audit. Other employer applications would be deemed satisfactory, and the employer would be allowed to have the foreigner admitted, although all employers would be subject to random audits. The PERM system would have one national set of threshold data, which would mean uniform acceptance/investigation criteria throughout the United States.

The purpose of switching from an examination of each employer application to a tax-type audit model is threefold:

1. to greatly reduce the number of staff, currently 300, who supervise the required recruitment of United States workers for jobs that United States employers want to fill with foreigners;
2. to expedite approvals for employers; and
3. to concentrate limited enforcement resources on problem cases.

The ESA would conduct post-admission enforcement, both random and in response to complaints, to ensure that the assurance provided in order to secure certification was in fact being provided to the foreign workers.

All enforcement systems based on voluntary compliance, such as the PERM system, must consider the algorithm that triggers audits, the percentage of persons who are audited and the punishment that is meted out to violators. Most tax systems have a variety of algorithms that trigger audits of particular types of tax payers, and most have a low percentage of audited returns (usually less than 2–3 per cent), but very high penalties for violations, including criminal sanctions such as fines and prison terms. It is not clear how long it would take the ESA to develop a similar system of effective algorithms and penalties to ensure employer compliance.

The ESA indicates that it would probably audit all new users applying to sponsor immigrants and H-2B non-immigrants, so that employers understand their responsibilities. It would also like to audit applications from employers, for example employers that are already employing the

⁸ The DOL's labour certification budget was cut from \$50 million in FY95 to \$30 million after a critical Inspector General's report; the current budget is \$35 million a year.

foreigners that they are requesting. The ESA can normally impose only civil monetary penalties, and these are frequently negotiated downwards in settlements. One suggested penalty is that employers found to have violated the promises on their applications would automatically be audited each time they applied for immigrant or non-immigrant workers.

Most employer groups favour the substitution of attestation and expedited processing for labour certification. However, most employers do not favour the consolidation of enforcement and services in the ESA, or new employer-paid fees: they point out that the Clinton Administration is proposing that enforcement and services be divided within the Immigration and Naturalization Service (INS), while being consolidated within the DOL. Worker advocates protest that the DOL will no longer monitor the recruitment of United States workers.⁹

3.3. Permanent: investor visa programme

The United States investor visa programme, created by IMMACT, offers immigrant visas to foreigners who invest at least \$500,000 and create or preserve 10 United States jobs. Relatively few foreigners have applied for investor visas: 59 were admitted (with family members) in FY92, the first year the programme was in effect, 583 in FY93, 444 in FY95 and 936 in FY96. In FY96, 295 (31 per cent) of those admitted were investors; the remainder were dependants.

Aggressive marketing and innovative financial packages were created by United States intermediary firms to entice foreigners into applying for investor visas with the outlay of relatively little money, as little as \$125,000 in the case of AIS (formerly American Immigration Services), a firm managed by former INS senior officials. The foreign investor then signed a \$375,000 promissory note to be paid over five years for the balance of the \$500,000 investment needed to obtain an investor visa. AIS used the foreigners' funds to create limited partnerships that owned or operated United States businesses. The foreign investor made small payments every few months to keep his investments active, and after two years the conditional immigrant visa became a regular immigrant visa; the foreign investor received his investment back, sometimes with interest and dividends, depending on the performance of the partnership.

United States consulates abroad began to challenge some of the petitions being submitted for immigrant investor visas that involved financial arrangements in which much of the foreigners' money was not at risk, and the foreigners were not involved in the management of the United States investment that created or preserved United States jobs. In December 1997, the INS suspended applications for investor visas, and stated that conditional visas granted to foreigners who did not put the full \$500,000 at risk would not be converted into permanent visas.

On 26 February 1999 the *Wall Street Journal* profiled a German couple who had invested \$125,000 with AIS, and then learned that the INS had decided that their temporary visas would not be made permanent because their money was not at risk in the United States as required. The couple's money was sent by AIS to Corporate Personnel Services Inc., a Louisiana firm that recruits employees for waste or garbage collection firms.

Canada and Australia also have immigrant investor programmes, and both tightened rules in 1999.

⁹ The DOL responds that most recruitment of United States workers by United States employers requesting certification of their need for foreign workers is a sham, since the United States employer wants the foreign worker, not the United States worker.

Beginning on 1 April 1999, Immigration Canada took over the immigrant investor programme for all provinces except Quebec. Under the revised Canadian programme, foreigners seeking immigrant visas must have a personal net worth of at least C\$800,000 and must invest at least C\$400,000 directly with the Receiver-General of Canada; this money is repaid without interest after a certain period of time. The Federal Government then allocates the investment funds generated by foreign investors to the provinces on a formula basis. Quebec requires a C\$400,000 investment, but foreigners are allowed to borrow a large portion of that sum and are paid interest on their investment.

Immigrant investor visa programmes are proliferating;¹⁰ for example, searching for immigration and investment in May 1999 generated almost 50,000 web pages, most maintained by law firms and others offering to help foreigners with investable funds to obtain immigrant status (e.g. <http://www.visausa.com>; <http://www.usimmigration.com>).

4. Temporary admission: non-immigrants

Non-immigrants are in the United States for a specific purpose during planned temporary stays. The purpose of non-immigrant employment visas is to permit temporary foreign workers to temporarily fill United States jobs, add to the supply of United States talent, facilitate United States business, enrich United States life with foreign athletes and entertainers, and permit foreign students to work and learn in the United States. In the 1990s the United States has developed a number of new foreign worker programmes, each targeted on a narrow segment of the labour market, and each with distinct rules of admission and terms for workers.

There are three important background considerations that apply to non-immigrants:

1. United States immigration law assumes that foreigners applying for non-immigrant visas are intending immigrants, and places the burden on the foreigner to prove that he or she will abide by the terms of the non-immigrant visa being sought. Two separate agencies — the Department of State, with consular offices abroad, and the INS at United States ports of entry — have the authority to decide that a temporary visitor is in reality an intending immigrant, and to deny that person admission, even if his or her United States employer has received certification to employ that person temporarily.
2. There are generally no limits or quotas on the number of non-immigrant visas available; the major exceptions are for H-1B workers (an annual quota of 115,000 in FY99 and FY00) and H-2B workers (an annual quota of 66,000). Most non-immigrants may bring family members with them to the United States; for example, there were 50,100 admissions of H-4 visa holders in FY96 (H-4 visas are granted to spouses and children of H-1, H-2

¹⁰In 1997 Thailand began to offer permanent residence status to foreigners who invest 10 million baht (\$400,000) in the country, making the foreigners probationary immigrants for the first three years. Thailand offers a one-year visa and work permit to foreigners who invest at least \$80,000.

and H-3 workers and trainees).¹¹

3. The United States allows most non-immigrant workers to be treated as employees in the United States labour market, to be protected by minimum wage and union-organizing laws on the same basis as United States workers, and to adjust their status to that of permanent resident or immigrant while in the United States.

The fact that non-immigrant workers can adjust their status to that of immigrant sometimes makes non-immigrant programmes "probationary immigrant" programmes, in the sense that if a foreign student or foreign worker proves to be valuable to a United States employer, the latter may sponsor the foreigner for immigrant status. In recent years, over 90 per cent of the immigrants "admitted" for economic or employment reasons were already in the United States, and simply adjusted their status, often from that of non-immigrant to that of immigrant, as a result of United States employers sponsoring their "admission".

Non-immigrant programmes can be compared in respect of two major dimensions: the requirements that employers must satisfy in order to employ foreign workers, and the relationship between foreign workers and United States employers after the workers' arrival. The three major types of guest worker programmes can be contrasted with illegal immigration, where employers satisfy no government requirement before admission and the workers are free agents with an unauthorized status after admission. In Table 2 employer requirements are listed in the rows, and worker–employer relationships are in the columns.

Table 2. US guest worker programmes: employer and worker rules

Employer & worker rules	Contractual worker	Free agent worker
Certification	(1) H-2A/B	(3) –
Attestation	(2) H-1B	(4) Pilot student, AgJobs
No employer requirements	(5) NAFTA, J-1 visitors	(6) Unauthorized

1. *Certification/contractual worker.* Traditional guest worker programmes fall into cell (1), with employers obliged to obtain certification of their need for foreign workers from the DOL, and with foreign workers tied to the employer who received certification with a contract. If the employer dismisses a contractual foreign worker, he or she must normally leave the country. The contract between the employer and the foreign worker is binding; for example, workers can sue in order to enforce contract clauses.
2. *Attestation/contractual worker.* Attestation means that employers file letters with the DOL "attesting" that they have tried and failed to find United States workers while offering prevailing wages and working conditions. This attestation permits the foreigner to enter the United States and go to work for the United States employer, i.e. an employer's attestation opens the border gate. In the H-1B programme, the foreign worker has a

¹¹ The spouses of temporary foreign workers are generally not permitted to work in the United States, a rule that several organizations are trying to change. On the other hand, Australia, Argentina, Hong Kong (China) and the United Kingdom reportedly permit the spouses of such workers to work. In 1998 Canada launched a pilot programme to permit spouses of PTKs to work.

contract with the United States employer that spells out wages and working conditions; an H-1B worker in the United States must receive government permission to change jobs or employers.

3. *Certification/free agent worker.* The United States has no certification/free agent worker programmes. If an employer was certified as needing a foreign worker to fill a vacant job, but the foreign worker was not tied to the job vacancy with a contract, the purpose of the certification process would seem to be defeated.
4. *Attestation/free agent worker.* Employers file letters with the DOL "attesting" that they have tried and failed to find United States workers while offering prevailing wages and working conditions, and they then become eligible to hire free agent foreigners, i.e. the foreigner is free to leave his or her job and retains the right to remain in the United States and seek employment with another employer who has filed an attestation. The United States currently has no attestation/free agent temporary worker programmes, but did have such programmes between 1992 and 1996 under the pilot student employment which ended on 30 September 1996. Section 221 of the IMMACT of 1990 permitted employers who unsuccessfully tried to recruit United States workers for at least 60 days at prevailing wages to hire foreign students who had completed at least one academic year of study in the United States.

Under the Agricultural Job Opportunity Benefits and Security Act (AgJobs) programme of 1998, approved by the Senate in July 1998 on a 68-31 vote but not enacted into law, the DOL would have been required to create a system of registries in which legally authorized United States farm workers could register their availability for farm jobs. Employers would have applied to the registry for farm workers at least 21 days before they were needed, and the DOL would have been required to refer registry workers or agree that the farm employer needed his requested number minus the number of registry workers sent to the farm. Under *AgJobs*, the Department of State/Immigration and Naturalization Service would issue to foreign farm workers renewable H-2A work visas valid for up to ten months, and they could remain in the United States continuously for up to three years. The workers would be referred to farms with vacancies, but would not be obliged to work on one of those farms. President Clinton threatened to veto any bill containing *AgJobs* in 1998.

5. *No employer requirements/worker contracts.* The NAFTA TN visa permits Canadians and Mexicans with "at least a baccalaureate degree or appropriate credentials demonstrating status as a professional" to go to a United States port of entry, show a passport, a Bachelor of Arts degree credential and an offer of "temporary" employment from a United States employer, and then receive a renewable TN work visa good for one year¹² at the United States border entry point. The offer of "temporary" employment becomes the contract between the employer and the worker. There is no numerical limit on how many professionals can cross the border between the United States and Canada, but the number of Mexican professionals who can enter the United States under NAFTA provisions is limited to 5,500 per year until 2003. There were 27,000 TN admissions in FY96, and 7,700 admissions of dependants of TN-visa holders.

¹² The TN visa can be extended in one-year increments indefinitely. TN is the visa for professionals coming from NAFTA countries.

The J-1 exchange visitor programme is similar. This programme, administered by the United States Information Agency, permits foreigners to go to the United States as part of a cultural exchange programme. One such programme is the au pair programme; this is intended to provide an educational and cultural exchange, “with a child-care component”, particularly for foreign youth. Under regulations adopted in 1995, the United States households in which the au pairs live and work must pay the foreign youth at least \$155 weekly — for a maximum of 45 hours of responsibility per week — and au pairs caring for children under the age of 2 must be at least 21 years of age. Au pairs must complete at least six units of college work while in the United States for one year, with host families paying up to \$500 a year for tuition. There must be criminal checks on each au pair, and each must have at least 40 hours of training in child care. The families “hosting” au pairs are normally screened by private United States agencies that typically recruit young European women. The women have contracts with the agencies, and the agencies have contracts with the host families.

6. *No employer requirements/worker contracts.* The sixth type of employer–worker arrangement is one under which employers do not have to satisfy any special government requirements before hiring foreign workers, and those workers are free agents in the United States labour market. Unauthorized workers are an example of this type of arrangement: they typically have no individual contracts with the employers who hire them, although they are covered by the provisions of the same protective labour laws that apply to all workers employed in United States labour markets, including being paid the minimum wage and having unemployment insurance contributions made on their behalf. Unauthorized workers may be prevented from receiving remedies under some labour laws, including unemployment insurance benefits if they are laid off (jobless workers collecting such benefits must be available for work) and reinstatement and back pay if dismissed because of, for example, protected union activities.

There is no “best” type of foreign worker programme. Worker advocates and government agencies generally prefer certification and contractual programmes in order to maximize government control over admissions. Employers generally prefer attestation to certification, i.e. post-admission rather than pre-admission government inspections, and their preference for contracts versus free agents often depends on the number of foreign workers admitted or available. If foreign worker programmes aim to fill truly small gaps in the labour market, employers may prefer certification, so that they are assured of foreign workers to fill vacant jobs. If they anticipate a large number of foreign workers, employers may prefer free agent workers who can be hired and dismissed at will.

5. H-1B professionals

The Immigration Act of 1990 changed the previous H-1 programme into the H-1B programme at a time when it was believed that there would be significant increases in the employment of PTK workers, especially in the computer industry. To satisfy unions, an annual limit of 65,000 H-1B visas was set, which was raised temporarily to 115,000 a year. Ironically, the H-1B programme was approved just after the end of the Cold War, which led to many lay-offs of scientists and engineers.

The H-1B programme allows employers to secure and employ professional non-immigrants in order to fill specialized jobs in the United States on an attestation basis, i.e. the programme admits non-immigrants to fill specified job vacancies for the United States employer who requests the H-

1B worker after attesting that he has tried and failed to find United States workers. H-1B foreigners must have at least a Bachelor of Arts degree, and must fill United States jobs that require such a degree. In order to employ H-1B workers, employers file a Labor Condition Attestation (Form ETA 9035) with the DOL for the admission and employment of H-1Bs that provides assurances regarding three factors:

1. The employers are offering the prevailing wage.
2. The working conditions offered to the H-1B foreigner do not adversely affect United States employees' working conditions.
3. No strike or lockout exists with regard to the position being filled by the H-1B.

The Labor Condition Attestations do not have to include the name of the H-1B worker whom the employer wishes to employ, and the DOL generally cannot investigate employers who request or employ H-1B workers unless it receives a complaint. H-1B visas are valid for up to three years, and can be renewed once for another three years. Spouses and children of an H-1B visa holder are granted H-4 visas, which permit them to attend school in the United States but not to accept employment.

The number of H-1B approvals was capped at 65,000 a year until 30 September 1998, but each H-1B visa holder was permitted to remain in the United States for up to six years, so that a maximum of 390,000 H-1B workers could be employed in the United States at any time.¹³ Efforts to increase the annual quota began in 1997. Since most H-1B workers are employed in the computer industry, that industry took the lead in persuading Congress that more foreign professionals were needed in the United States. After a year-long debate in 1997–98, amid claims that there were shortages of several hundred thousand computer professionals, and counterclaims that high-tech companies usually hire fewer than 10 per cent of applicants for computer jobs and discriminate against older workers, the H-1B programme was modified by the American Competitiveness and Workforce Improvement Act (ACWIA) of 1998. The ACWIA was billed as a grand bargain that increased the number of H-1B visas available by 142,500 over a period of three years and also provided new protections for United States workers.

The major new concept introduced by the ACWIA to protect United States workers was "H-1B-dependent employers", generally United States employers whose workforces are composed of 15 per cent or more H-1B workers.¹⁴ These 100 to 200 United States employers, and only these employers, must document their efforts to recruit United States workers and certify that United States workers were not laid off to make room for the H-1B workers in the previous 90 days, and that United States workers will not be laid off for 90 days after the arrival of the H-1B workers. Non-H-1B-dependent employers do not have to search for United States workers before hiring H-1B foreigners, and they can lay off United States workers to create vacant jobs that are filled with H-1B workers. The 1998 amendments require H-1B workers to receive the same fringe benefits as United States workers.

¹³ The annual cap applies to approvals for bringing H-1B workers into the United States. INS data record admissions of foreigners holding H-1B visas, so that a foreigner making several trips would be counted each time. Beginning in FY93, when 93,000 H-1B visa holders were admitted according to INS data, the admissions have risen steadily, reaching 144,000 in FY96.

¹⁴ H-1B workers with a master's degree or more, or earning \$60,000 or more, are not included in calculating dependence.

Early in 1999, the DOL estimated that 50,000 United States employers would request 250,000 H-1B workers each year, i.e. the higher 115,000 H-1B visa quota would be fully used. The DOL was correct — as of May 1999, the quota for FY99 had been fully subscribed. In FY98, about 46 per cent of the 115,000 H-1B visas were issued to Indians, followed by 10 per cent to Chinese and 4 per cent to Canadians. The United States employers that requested the most H-1B visas in FY98 were Mastech (11 per cent), Tata Consultancy (7 per cent), Computerpeople (6 per cent) and Oracle (5 per cent).

Labour shortages represent gaps between demand and supply, gaps that are filled in most markets by wages adjusting: if wages rise, demand is expected to fall (or increase at a slower pace) and supply is expected to expand. The argument most frequently advanced for raising the annual quota of H-1B admissions is that demand is rising faster than supply because of the explosive growth of high-tech industries, and that the United States should not allow temporary labour shortages of several hundred thousand computer professionals, due to demand rising faster than students can be trained, to slow the growth of a key twenty-first-century industry. The argument against increasing the quota is that there is no shortage of computer professionals in the United States, only shortages of young foreign computer professionals who are willing to work long hours for entry-level wages that are much higher than can be earned at home in the hope that their employers will sponsor them for immigrant visas.

Conceptually, the ACWIA attempts to close the gap between demand and supply by:

- increasing supply — most United States employers must pay a \$500 fee per H-1B application filed, and these fees are to be used for scholarships to support Americans studying in computer-related fields (universities and some research institutes do not have to pay the \$500 per application fee);
- putting restrictions on the demand for H-1B workers generated by H-1B-dependent employers ("body shops"), employers whose workforces consist primarily of H-1B workers and who send the H-1B workers they import around the United States on short-term assignments.

6. Evaluation of HB programme

The H-1B programme illustrates a general trend in foreign worker programmes: drafting very detailed legislation covering one or a few industries, and then having at least three fights between advocates of more and fewer temporary foreign workers — one in the Congress over the law, a second as the implementing agencies issue regulations to implement the law, and then a third over the extent and nature of enforcement of the law. The history of the H-2A farm worker programme shows that funds spent on lobbying for enactment, drafting implementing regulations and then studying enforcement and its effects can account for a significant fraction of the wages earned by foreign workers. If the trend towards "rifle" rather than "shotgun" guest worker programmes continues, more controversies that use a vocabulary familiar only to specialists can be expected, i.e. the debate can become the domain of specialists.

The H-1B programme can be evaluated at a number of levels. Does the employer really need H-1B foreign workers? Is the employer paying prevailing wages and not adversely affecting similar

United States workers? Are tougher penalties for H-1B-dependent workers likely to be effective? Will employer-paid fees that fund scholarships help to close the gap between supply and demand?

Those who investigate the H-1B programme often conclude that United States employers frequently file Labor Condition Attestations for H-1B workers they are already employing. This means that the H-1B programme is a means of legalizing the status of student interns and unauthorized workers, not the last resort of a United States employer who has tried and failed to find United States workers. The consultants who file many of the Labor Condition Attestations for employers are skilled in drafting employer requests in a manner that evades effective enforcement: one immigration lawyer advised employers to describe "the relevant job opening tightly enough that the INS recognizes an American probably isn't readily available for the position, but not so tightly that the INS suspects the description is being tailored for a specific foreign individual" who may already be employed.

Once a United States employer files a Labor Condition Attestation for an H-1B worker, it is rarely withdrawn because a United States worker is recruited. In one study, only once in 200 times in 1995 was a United States worker hired after a foreign worker was requested (McGraw, 1995). In May 1996, the DOL's Inspector General issued a report that concluded that the H-1B programme "serves as a probationary try-out employment program for illegal aliens, foreign students and foreign visitors to determine if they will be sponsored for permanent status". The Labor Secretary, Robert B. Reich, testified in 1995: "We have seen numerous instances in which American businesses have brought in foreign skilled workers after having laid off skilled American workers, simply because they can get the foreign workers more cheaply. [The H-1B programme] has become a major means of circumventing the costs of paying skilled American workers or the costs of training them" (*Migration News*, 1996).

In 1999 the ETA launched an Automated Fax-In/Fax-Out System for processing Labor Condition Applications for H-1B non-immigrants, open to United States employers and their representatives seeking H-1B workers. Employers file Form ETA 9035, fax it to (215) 596-1052 or (415) 975-4964, and receive approval or reasons for rejection within three to four days.

By design, the H-1B programme is based on facilitating the entry of foreign workers for employers who are presumed to be obeying the law and implementing regulations. If an inspection finds that an employer is violating the law or the implementing regulations, the penalty imposed by the DOL is generally the requirement that the employer pay what should have been paid to workers in the first place. For example, Exotic Granite & Marble Inc in southern California hired an engineer, an accountant and a sales manager from India under the H-1B programme and paid them salaries of \$24,000 to \$30,000. The DOL received a complaint and conducted an inspection, and concluded that the salaries paid by Exotic to these H-1B workers were far less than prevailing wages. It calculated that Exotic should have paid about \$66,000 more to one H-1B worker and \$33,000 more to another. After a year of litigation, Exotic agreed to pay these back wages, and another \$3,000 in civil monetary penalties to the DOL.¹⁵

There is widespread agreement that, in the long run, the gap between demand and supply in professional and speciality labour markets must be closed by training United States workers to fill the jobs now filled by H-1B workers. President Clinton reflected this perspective in a speech on

¹⁵ Nancy Cleeland, "Sun Valley firm to pay federal labor penalties", *Los Angeles Times*, 6 April 1999.

30 March 1999 to the Electronic Industries Alliance: "over the long run, the answer to this problem of the lack of skilled workers cannot simply be to look beyond our borders —surely a part of it has to be to better train people within our borders to do this work".

The major mechanism for closing this gap in the fields in which H-1B workers are hired is the \$500 fee that an employer must pay, beginning in 1999, to request a H-1B worker. The first fellowships funded by these employer fees were announced in April 1999: the National Science Foundation (NSF) made available up to \$21 million to fund 8,000 one-year scholarships of up to \$2,500 each to low-income students who are United States citizens or legal immigrants studying for degrees in computer science, engineering or mathematics. The \$21 million will be given to 100 two-year community colleges, and undergraduate and graduate institutions, and each will be able to award a total of 80 scholarships to their enrolled students (i.e. 40 students during each of the two years of the grant), beginning in January 2000. Disadvantaged status is determined by Department of Education criteria used for Pell Grants.¹⁶

Lindsay Lowell (1999) compiled data on changes in annual earnings and employer petitions filed in 1992 and 1997 (Table 3), and found the largest increases in employer petitions to be in computer-related occupations — a tenfold increase.¹⁷ There is no apparent correlation between annual earnings changes and approved employer petitions for H-1B workers: petitions for those workers increased in every occupation faster than annual earnings.

Sharply higher H-1B admissions are one reason why average earnings do not increase even faster. It has been suggested that many H-1B foreign workers want to find a United States employer to "sponsor" them for a permanent immigration EB visa; thus, as H-1B workers they are more willing to work long hours for lower pay than United States workers. In FY94, it was estimated that about 40 per cent of H-1B workers were able to obtain some type of permanent immigration visa, versus 17 per cent for F-1 students; this suggests that changes to immigrant status are more common for H-1B workers than for other non-immigrants.¹⁸

6.1. Outlook on H-1B policy

The H-1B visa limit for FY99 — 115,000 — was reached in May 1999, but it is doubtful that Congress will raise the cap further in 1999, because of concerns about fraud, age discrimination, and a growing appreciation of the complexity of determining whether H-1B workers are needed and their long-term impacts on United States students, workers and labour markets.

¹⁶ Many of those expected to receive these scholarships are Blacks and Latinos, who are very under represented in the United States high-tech industry. A 1998 NSF report estimated that Blacks and Latinos accounted for 3 per cent of United States scientists and engineers.

¹⁷ The United States had 1.5 million computer scientists in 1997.

¹⁸ F-1 students are most likely to become immigrants in the United States through marriage. H-1B workers are more likely to become immigrants by finding a United States employer to sponsor them.

Table 3. Average annual earnings and approved employer petitions for H-1B workers, 1992 & 1997

Labor Condition Attestations	Annual earnings			Approved employer petitions		
	1992	1997	Change	1992	1997	Change
Occupational category						
Computer-related occupations	\$39,750	\$49,178	24	5,732	63,468	1007
Art	\$35,479	\$39,535	11	336	1,876	458
Administrative occupations	\$38,514	\$42,508	10	2,132	11,225	427
Writing	\$37,212	\$37,613	1	235	1,092	365
Professional, technical and managerial	\$49,910	\$52,563	5	895	3,741	318
Architecture, engineering and surveying	\$42,188	\$49,643	18	4,520	18,279	304
Social sciences	\$42,449	\$42,826	1	808	3,153	290
Managers and officials	\$62,706	\$59,072	- 6	1,919	6,613	245
Medicine and health	\$43,891	\$55,903	27	4,114	12,569	206
Fashion models	\$134,583	\$115,000	-15	4	11	175
Museum, library and archival sciences	\$29,309	\$36,562	25	98	255	160
Entertainment and recreation	\$37,953	\$39,637	4	135	348	158
Law and jurisprudence	\$64,605	\$67,499	4	342	818	139
Education	\$33,945	\$36,302	7	4,878	8,226	69
Life sciences	\$33,673	\$35,678	6	2,120	3,482	64
Religion and theology	\$25,980	\$32,090	24	50	77	54
Mathematics and physical sciences	\$40,217	\$46,189	15	2,093	3,178	52
All these occupations	\$41,244	\$48,390	17	30,411	138,411	355

Source: Lowell (1999), from DOL, Administrative Data (1992, 1997).

Note: Data are for full-time work, annual earnings and approved employer petitions for H-1B workers.

Fraud is the major issue in the debate over whether to raise the H-1B cap further in mid-1999, with critics arguing that if the number of unqualified workers was reduced, there would be sufficient visas for legitimate United States employers. During Congressional hearings in May 1999 the American consulate in Chennai, India, which processed applications for 20,000 H-1B workers in 1998, reported that 21 per cent of a sample of 3,200 H-1B visa applications were fraudulent, and that with regard to another 25 per cent of applicants, the consulate could not verify the workers' level of education and training.

Fraud takes many forms, and seems to be facilitated by the fact that there is no investigation of United States employer petitions unless a complaint is made. The most common types of fraud involve United States companies (i) attesting that they need H-1B workers even though they do not have a specific job for a worker to fill once the foreigner reaches the United States; and (ii) falsifying the educational qualifications of H-1B workers sent to the United States. In some cases, United States subsidiaries of foreign companies that are little more than a United States post-office box apply for visas for bogus "employees", permitting foreigners to enter the country and live legally for six years. Some companies advertise in India as employment agencies, promising six-year United States work permits in exchange for fees. In an effort to better monitor the H-1B programme, the INS plans to compile data from employer applications for H-1B workers on wages, education qualifications and jobs filled in the United States, beginning on 1 October 1999.

There seems to be a growing consensus in the United States that many computer firms are

discriminating against older workers and minorities. Numerous studies and surveys find that most United States high-tech firms require applicants to apply by computer, screen applicants for age and skills, and hire fewer than 5 per cent of those who apply, including very few applicants over the age of 40. Most of the complaints filed under anti-discrimination laws are filed by middle-aged men who complain of terminations or demotions based on their age; but it is much harder to prove that a worker was not hired because he was too old.

The third issue that has slowed the push for raising the H-1B cap is the complexity of the interaction between students' educational goals and the high-tech labour market. Many United States students avoid high-tech careers because they fear that they will have short careers. The Clinton Administration took the position in June 1999 that the United States high-tech industry must find alternatives to ever more H-1B workers: "We just raised the caps dramatically on a short-term basis. Now the industry needs to take the long-term steps to address worker training".

6.2. Final considerations

The type of guest worker programmes in the industrial democracies has changed over the past quarter of a century — programmes that add workers in shotgun fashion to the labour force of an entire sector, such as construction, mining, agriculture or manufacturing, have been replaced by narrowly targeted programmes that, in rifle fashion, aim to fill a narrow range of labour market vacancies. This shift from shotgun to rifle guest worker policies means, for example, that changes in macroeconomic policies have less effect on employer demands for guest workers, since only a small proportion of all employers participate in any particular guest worker programme. For example, during the 1960s, when European currencies were undervalued relative to the DOLLar, local savings were invested in Europe along with foreign savings, thus generating jobs across European economies in industries from construction to manufacturing to services. When the United States devalued the DOLLar in the early 1970s, and oil price increases led to recession, the incentive to invest in Europe diminished, and the demand for foreign workers fell throughout the economy.

The guest worker programmes of the 1990s, such as the H-1B programme, aim to fill a narrower range of vacancies in the labour market. At the same time, the capacity of government-run employment services to credibly determine whether there is a genuine need for foreign workers has eroded, setting the stage for conflict over an employer's "need" for foreign workers and the effect of foreign workers on United States workers and the trajectory of work in the affected sector in both the short and long terms; for example, does the presence of foreign workers in some labour market segments discourage Americans from going into certain fields or slow needed labour-saving mechanization? Changes in macroeconomic policies rarely have significant effects on the employer requests for foreign workers in the niche labour markets that are requesting guest workers.

How can governments manage guest worker programmes that aim to fill niches in the labour market? One approach is to do what the United States is doing, i.e. substitute employer attestation for DOL certification. Attestation relies on the honour system: it trusts employers to make honest efforts to find United States workers, and to hire foreign workers only as a last resort. This system saves the DOL resources, since staff are not needed to monitor employer recruitment, but invites fraud, as some employers use the attestation system to bring friends and relatives into the country or to pay foreign workers less than United States workers.

A better approach may be to rely on economic incentives. Employers who request permission to employ guest workers currently pay for the privilege in the form of (i) fees to lobbyists to make the regulatory hurdles between the foreign worker and the United States job as low as possible, (ii) fees to lawyers to navigate the regulatory labyrinth, and (iii) production lost due to the time that a position remains unfilled as regulatory requirements are met. The result is often perverse: once employers have learned to negotiate the regulatory system, anticipating lawyers' fees of several thousand DOLLars per worker and waiting times of several months, they tend to avoid serious searches of the local labour market or the quest for alternative ways to get work done, and become ever more reliant on foreign workers.

Another way to regulate the admission of foreign workers for niche labour markets would be to impose taxes or fees on employers in exchange for giving them easier access to foreign workers. A fee system represents a trade-off between two competing goods: the first good is easy access to foreign workers for employers to maintain their profits, and the second one is protection for United States workers as well as policies to maintain the competitive edge of industries. Under a fee system, employers would prove that they had made a good-faith effort to recruit local workers by paying fees, and the fees collected from employers would be used to cover the cost of enforcement of labour laws in affected industries, to train and retrain United States workers, and to develop productivity-increasing technologies.

A fee system, combined with a minimum wage so that the employer could not require the foreign worker to pay the fee, would encourage employers to look continuously to the United States labour market, since hiring a United States worker would enable the employer to avoid the fee. Furthermore, employer-paid fees could be spent in a manner that reduces the litigation and controversy that accompany the admission and employment of foreign workers today. If the employer-paid fee consisted of an upfront fee and a percentage payroll tax equivalent to the pension and unemployment taxes from which most guest workers would not derive benefits, and was administered on the same narrow labour market basis that the guest worker programme was targeting, a series of sector, industry or regional funds could be established and administered by representatives of employers, workers and government. This would permit representatives of those closest to the labour market that employs foreign workers to decide on the optimal way in which to spend the funds collected, and should reduce the adversarial nature of foreign worker admissions and employment.

References and bibliography

- Borjas, G. 1996. "The new economics of immigration". *Atlantic Monthly*, November; <http://www.theatlantic.com>
- Lowell, L. 1999. "Skilled temporary specialty workers in the United States". *People and Place*, Vol. 7, No. 1, pp. 24–32.
- Lowell, L. (ed.). 1998. *Foreign Temporary Workers in America: Policies that benefit America*. New York, Quorum Press; <http://www.greenwood.com>
- Matloff, N. 1998. "Debunking the myth of a desperate software labor shortage". Testimony to the US House Judiciary Committee Subcommittee on Immigration, 21 April; <http://heather.cs.ucdavis.edu/itaa.real.html>
- McGraw, M. 1995. "Boon or boondoggle? Visa programs hurt U.S. workers, foster abuse". *Kansas City Star*, 16 July.
- Newman, B. 1999. "INS clampdown on visa program for the rich creates controversy". *Wall Street Journal*, 26 February.
- United States DOL, Office of the Inspector General. 1996. *The Department of Labor's Foreign Labor Certification Programs: The System is Broken and Needs to be Fixed*. Report No. 06-96-002-03-321, 22 May; http://www.oig.DOL.gov/public/reports/oa/1996/foreign_labor_cert.pdf
- United States Department of State. *Visa Bulletin* (monthly); <http://travel.state.gov>

Appendix

Data

There are three major sources of data, particularly on non-immigrant visas that permit employment in the United States: DOL data on the number of employers requesting workers and the number of workers they request; Immigration and Naturalization Service data on admissions, with double counting for foreigners who enter three or four times within a year on, for example, an H-1B visa; and Department of State data on the number of each type of visa issued. The latter data are an undercount because (i) some foreigners adjust their status with the INS while in the United States and (ii) some foreigners extend their stay in the United States with the INS.

Table A1. INS non-immigrant admissions to the US: FY90–96

INS non-immigrant admissions to the US: FY1990–96									
Category – fiscal year ending 30	1990	1991	1992	1993	1994	1995	1996	Dist:9 96%	Change 92-96%
All	17,574,055	18,920,045	20,910,880	21,566,404	22,118,706	22,871,209	24,852,503	100	19
Temporary visitors	16,079,666	17,234,400	19,229,066	19,879,443	20,318,933	20,887,329	22,880,270	92	19
1 Business	2,661,338	2,616,335	2,788,069	2,961,092	3,164,099	3,275,796	3,770,326	15	35
1/1 Business			294,065	640,397	786,739	942,538	1,370,452	6	
2 Pleasure	13,418,328	14,618,065	16,440,997	16,918,351	17,154,834	17,611,533	19,109,944	77	16
1/2 Pleasure			4,528,112	8,624,006	8,969,404	9,407,254	11,192,978	45	
3 Transit aliens (C1 to C4)	306,156	364,456	345,930	331,208	330,936	320,333	325,538		-6
4 Treaty traders (includes families)	147,536	155,049	152,385	144,644	141,030	131,777	138,568		-9
1 Traders	78,658	76,952	71,796	65,362	60,196	53,557	54,289		-24
2 Investors	68,878	78,097	80,589	79,282	80,834	78,220	84,279		5
Students and dependants	355,207	374,420	401,287	403,272	427,721	395,120	426,903	100	6
1 Academic students	319,467	335,623	360,964	362,700	386,157	356,585	418,117	98	16
11 Vocational students	6,797	7,615	7,722	7,920	7,844	7,635	8,786	2	14
2 Spouses/families	28,490	30,499	31,988	32,103	33,071	30,489	32,485		2
12 Spouses/families	453	683	613	549	649	411	507		-17
2 Deps of international orgs (G1 to G5)	61,449	64,451	69,947	72,755	74,722	71,982	79,528		14
1/4 International org. employees	43,104	46,913	50,674	52,856	53,768	51,410	53,656		6
1/5 Attendants/servants	1,603	1,638	1,524	1,543	1,596	1,466	1,447	0	-5
3 Temporary workers and	139,587	159,714	163,262	162,976	185,988	220,664	227,440	100	39
1A Registered nurses		2,130	7,176	6,506	6,106	6,512	2,046	1	-71
1B Speciality occupations	100,446	114,467	110,223	92,795	105,899	117,574	144,458	64	31
1/2 Unskilled	35,973	39,882	34,442	29,475	28,872	25,587	23,980	11	-30
1/2A Agricultural	18,219	18,440	16,390	14,268	13,185	11,394	9,635	4	-41
1/2B Non-farm workers	17,754	21,442	18,052	14,847	15,687	14,193	14,345	6	-21
1/3 Industrial trainees	3,168	3,235	3,352	3,126	3,075	2,787	2,986	1	-11
1/1 Extraordinary ability workers			456	3,105	5,029	5,974	7,177	3	1474
1/2 Assistants of OI			258	964	1,455	1,813	2,112	1	719
1/1 Int'l recog. athletes/entertainers			3,548	17,109	22,500	22,397	25,968	11	632
2 Other artists/entertainers – reciprocal			90	422	613	660	1,727	1	1819
3 Artists/entertainers – unique culture			1,131	4,036	4,942	5,315	5,938	3	425
1/1 Int'l culture exchange programmes			9	994	1,546	1,399	2,056	1	
1/1 Religious workers			2,577	4,444	5,951	6,742	8,992	4	249
1/2 Spouses and children of temp. workers and trainees	28,687	34,803	40,009	39,704	43,207	53,582	53,572		34
1/4 Families of H1, H2, H3	28,687	34,803	39,155	37,833	40,490	43,247	50,106		28
1/3 Families of O1, O2			1	322	549	751	877		
1/4 Families of P1, P2, P3			152	498	562	592	667		339
2 Families of R1			701	1,051	1,606	1,790	1,922		174
1 Foreign media reps(includes	20,252	21,073	21,695	21,032	27,691	24,220	33,596		55
1 Exchange visitors	174,247	182,693	189,485	196,782	216,610	201,095	215,475		14
2 Exchange visitor families	40,397	40,737	41,807	42,623	42,561	39,269	41,250		-1
1 Intracompany transfers	63,810	70,505	73,315	82,606	98,189	112,124	140,457		92
2: Families of intra company	39,375	42,529	45,464	49,537	56,048	61,621	41,250		-9
C NAFTA professionals	5,293	8,123	12,531	16,610	5,031	121			
N NAFTA professionals					19,806	23,783	26,987		
D: Families of TN					5,535	7,202	7,694		
Others (unknown)	189	51,576	1,354	446	878	779	310		
Subtotal: Foreign Workers:	208,690	238,342	249,108	262,192	309,014	356,692	394,884		59
Subtotal: TC/TN									
Subtotal: Foreign Students,	500,511	525,931	558,171	567,402	610,611	565,315	642,378		15
Exchange Visitors									

Source: INS, *Statistical Yearbook*, 1996. Persons admitted several times are double counted.

H-1B private programme

The agenda reproduced below illustrates the trend in temporary foreign worker programmes towards drafting legislation that can be interpreted only by experts.

New York AILA Chapter Immigration Law Symposium, 16 April 1999

9:00 am – 10:30 am

H-1B Professionals: Changes Under The New Law

- * The New Law — An Overview
- * H-1B "Dependent" Employers: Definition, Calculations, and Other Obligations
- * New Recruitment and Layoff Attestations
- * Avoiding H-1B Dependent Status: Creating "H-1B Exempt" Workers?
- * New DOL Regulations: Increasing Burden on Employers and Other Related Issues
- * New Filing Fees and Computation of Prevailing Wage for Certain Institutions
- * Will the Cap be Reached Despite Increased Numbers?
- * Representing H-1Bs Nearing Their Sixth Year With No Green Card In Sight
- * The Future: What is Being Done and What Has to Be Done?

10:30 am – 12:00 pm

Latest Developments in Labor Certification Practice

- * Overview of Procedures and Delays in DOL Region II
- * When to File an RIR and When Not to File an RIR
- * How to Prepare an RIR Application in DOL Region II
- * Limited Review: Can You Get It?
- * Prevailing Wage Considerations: How to Get Around DOL's Unrealistic Wage System?
- * Coping with Applications Filed Prior to GAL 1-97 and Matter of Kellogg
- * Strategies for Expediting Cases Before Client Runs Out of Time
- * Will the Labor Certification Program Be Reformed?

**CAHIERS DE MIGRATIONS INTERNATIONALES
ESTUDIOS SOBRE MIGRACIONES INTERNACIONALES**

1. Adjustments to labour shortages and foreign workers in the Republic of Korea
M.I. Abella; Y.B. Park; W.R. Böhning, 1995.
2. Consumption and investments from migrants' remittances in the South Pacific
Richard P.C. Brown, 1995.
3. Training abroad: German and Japanese schemes for workers from transition economies
or developing countries,
Christiane Kuptsch; Nana Oishi, 1995.
4. Discrimination against migrant workers and ethnic minorities in access to
employment in the Netherlands
F. Bovenkerk; M.J.I. Gras; D. Ramsoedh, with the assistance of M. Dankoor and A.
Havelaar, 1995.
5. Orderly international migration of workers and incentives to stay - options for
emigration countries
M.I. Abella; K.J. Lönnroth, 1995.
6. From outlawing discrimination to promoting equality: Canada's experience with anti-
discrimination legislation
C. Ventura, 1995.
- 7 G. Arbeitsmarkt-Diskriminierung gegenüber ausländischen Arbeitnehmern in
Deutschland
A. Goldberg; D. Mourinho; U. Kulke, 1995.
- 7 E. Labour market discrimination against foreign workers in Germany
A. Goldberg; D. Mourinho; U. Kulke, 1996.
- 8 E. The integration of migrant workers in the labour market: Policies and their impact
W.R. Böhning; R. Zegers de Beijl, 1995.
- 8 F. L'intégration des travailleurs migrants sur le marché du travail: Les politiques et leur
impact
W.R. Böhning; R. Zegers de Beijl, 1996.
- 9 S. La discriminación laboral a los trabajadores inmigrantes en España
Colectivo IOE: M.A. de Prada; W. Actis; C. Pereda, y R. Pérez Molina, 1995.
- 9 E. Labour market discrimination against migrant workers in Spain
Colectivo IOE: M.A. de Prada; W. Actis; C. Pereda, y R. Pérez Molina, 1996.
10. The jobs and effects of migrant workers in Northern America - Three essays.
J. Samuel; P.L. Martin; J.E. Taylor, 1995.

11. The jobs and effects of migrant workers in Italy - Three essays.
L. Frey; R. Livraghi; A. Venturini; A. Righi; L. Tronti, 1996.
12. Discrimination against racial/ethnic minorities in access to employment in the United States: Empirical findings from situation testing
M. Bendick, Jr., 1996.
13. Employer des travailleurs étrangers: Manuel sur les politiques et les procédures plus particulièrement applicables aux pays à bas ou moyen revenus
W.R. Böhning, 1996.
14. Protecting (im)migrants and ethnic minorities from discrimination in employment: Finnish and Swedish experiences
K. Vuori, with the assistance of R. Zegers de Beijl, 1996.
- 15F. Les migrations en provenance du Maghreb et la pression migratoire: Situation actuelle et prévisions
D. Giubilaro, 1997
- 15E. Migration from the Maghreb and migration pressures: Current situation and future prospects
D. Giubilaro, 1997
16. The documentation and evaluation of anti-discrimination training activities in the Netherlands
J.P. Abell; A.E. Havelaar; M.M. Dankoor, 1997
17. Global nations. The impact of globalization on international migration
P. Stalker, 1997
18. Anti-discrimination training activities in Finland
K. Vuori, 1997
19. Emigration pressures and structural change. Case study of the Philippines
A. Saith, 1997
20. Emigration pressures and structural change. Case study of Indonesia
D. Nayyar, 1997
21. The evaluation of anti-discrimination training activities in the United Kingdom
P. Taylor; D. Powell; J. Wrench, 1997
22. Pratiques de formations antidiscriminatoires en Belgique
F. Castelain-Kinet; S. Bouquin; H. Delagrangé; T. Denutte, 1998
- 23E. Discrimination in access to employment on grounds of foreign origin: the case of Belgium
P. Arriijn; S. Feld; A. Nayer, 1998
- 23F. La discrimination à l'accès à l'emploi en raison de l'origine étrangère : le cas de la Belgique
P. Arriijn; S. Feld; A. Nayer, 1998
24. Labour immigration and integration in low- and middle-income countries: Towards an

- evaluation of the effectiveness of migration policies
J. Doomernik, 1998
25. Protecting migrants and ethnic minorities from discrimination in employment: the Danish experience
N.-E. Hansen, I. McClure, 1998
 26. Illegal migration and employment in Russia
Eugene Krassinets, 1998
 27. The effectiveness of integration policies towards immigrants and their descendants in France, Germany and The Netherlands
Jeroen Doomernik, 1998
 28. Approche juridique de la discrimination à l'accès à l'emploi en Belgique en raison de l'origine étrangère
B. Smeesters, sous la direction de A. Nayer, 1999
 29. The documentation and evaluation of anti-discrimination training in the United States
M. Bendick, Jr., M.L. Egan, S. Lofhjelm, 1999
 30. Illegal labour migration and employment in Hungary
J. Juhász with contributions from M. Cosmeanu; I. Ramond; J. Gmitra, A. Bácskai, 1999.
 31. Foreign labour in Lithuania: Immigration, employment and illegal work
A. Sipaviciene, in cooperation with V. Kanopiene, 1999.
 32. Legal and illegal labour migration in the Czech Republic: Background and current trends.
Milada Horáková, 2000.
 33. Migrant labour - An annotated bibliography
R. Chen; M. Madamba, 2000.
 34. Settlement and integration policies towards immigrants and their descendants in Sweden
Charles Westin, 2000.