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University of California, San Diego

**Temporary Foreign Workers Programmes: Policies,
Adverse Consequences, and the Need to Make Them
Work**

By Martin Ruhs

University of Cambridge, UK
Visiting Fellow, Center for Comparative Immigration Studies

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Martin Ruhs

University of Cambridge, UK
Center for Comparative Immigration Studies (CCIS)

Abstract. This paper comparatively discusses the policies and adverse consequences of six major temporary foreign worker programmes (TFWPs) in five different countries (Germany, Kuwait, Singapore, Switzerland, and the United States). I find that TFWPs have been quite different in design, but rather similar in their adverse consequences. The latter include: (i) the emergence of “immigrant sectors” in the host economy; (ii) the vulnerability of migrant workers toward various forms of exploitation in recruitment and employment; (iii) the tendency of TFWPs to become longer in duration and bigger in size than initially envisaged; (iv) native workers’ opposition against the introduction or expansion of a TFWP; and (v) the emergence of illegal foreign workers who, together with native employers, circumvent the programme. Given that most countries lack viable alternative to TFWPs, I argue that there is an urgent need to develop new types of TFWPs that avoid and learn from the past policy mistakes identified in this paper. The paper concludes with a proposal of seven general policy principles for making TFWPs work.

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1 Introduction

A Temporary Foreign Worker Programme (TFWP) lays down the principles for the temporary admission, residence, and employment of foreign workers. More specifically, the three major policy parameters of a TFWP include: (i) the number of foreign workers to be admitted; (ii) the mechanism for selection and recruitment; and (iii) the bundle of rights to be accorded to foreign workers after admission.

The theoretical rationale of a TFWP is primarily based on the potential economic benefits for all parties involved. Receiving countries may benefit from efficiency gains from an increased supply of labour and human capital. Sending countries may benefit from remittances and the return of more highly skilled workers. Finally, employment abroad offers migrant workers the opportunity to increase their productivity and wages.¹

As with all government programmes, however, there is a danger that the theoretical net-benefits of a TFWP are counter-balanced, and possibly completely offset, by costs arising in the actual implementation of the programme. Due to the relatively complex set of policies involved in a TFWP, one may in fact conjecture that its implementation costs are likely to be significant and subject to a relatively high degree of uncertainty.

Critics of TFWPs have pointed out that two of the major TFWPs to date, the *Bracero* Programme in the United States (1942-64) and the *Gastarbeiter* Programme

in Germany (1955-73), were indeed afflicted with significant adverse consequences (see, for example, Martin and Teitelbaum 2001). Given the lack of a comprehensive comparative study of past and existing TFWPs, it is not clear, however, whether these adverse consequences are generic to all such programmes or specific to the *Bracero* and *Gastarbeiter* programmes. In other words, have most of the world's major TFWPs been afflicted with significant adverse consequences? If so, is the concept of a TFWP inherently flawed and bound to fail wherever and whenever implemented, and should TFWPs therefore be abandoned altogether? Or has the alleged failure of past programmes been due to fundamental flaws in the design of these particular programmes, such that there is scope for a new type of TFWP that avoids these policy mistakes? If so, what are the basic policy principles for making TFWPs work?

In an effort to answer these questions, this paper comparatively discusses the policies and adverse consequences of six major TFWPs in five different countries. The programmes to be studied include (with countries and years of programme operation in parentheses) the *Bracero* Programme (United States, 1942-1964), the *Gastarbeiter* Programme (Germany, 1955-1973), the *H-1B* Programme (United States, 1952-), the *Auslaenderausweis B* Programme (Switzerland, 19??-), the *Kafala - Visa 18* Programme (Kuwait, 1973-), and the *Employment Pass R* Programme (Singapore, 1987-). As summarised in Table A1, these programmes constitute the

¹ For a comprehensive discussion of the major (economic as well as non-economic) outcome parameters in international labour migration, see Ruhs and Chang (2002)

largest programmes for the temporary admission and employment of foreign workers within their respective host countries. Given their geographic distribution, the chosen countries, in turn, constitute a representative set of the world's major and long-standing hosts of temporary foreign workers.

Section 2 reviews how these programmes set their policy parameters and Section 3 discusses their major adverse consequences. Section 4 first explores the implications of the reviewed policies and adverse consequences for the general desirability of TFWPs and then suggests basic policy principles for the design of new and improved programmes.

This paper finds that TFWPs have been quite different in design, but rather similar in their adverse consequences. The latter include: (i) the emergence of “immigrant sectors” in the host economy; (ii) the vulnerability of migrant workers toward various forms of exploitation in recruitment and employment; (iii) the tendency of TFWPs to become longer in duration and bigger in size than initially envisaged; (iv) native workers’ opposition against the introduction or expansion of a TFWP; and (v) the emergence of illegal foreign workers who, together with native employers, circumvent the programme. Given that most countries lack viable alternative to TFWPs, I argue that there is scope and an urgent need to develop new types of TFWPs that avoid and learn from the past policy mistakes identified in this

paper. I conclude with a proposal of seven general policy principles for making TFWPs work.²

2 Policies³

To facilitate a concise comparative analysis of what are bound to be fairly complex programmes, this section comparatively discusses the selected TFWPs by (i) how they regulate the number of annual admissions (section 2.1); (ii) how they select workers from what is generally a surplus pool of applicants (section 2.2); and (iii) what rights they accord to the foreign workers admitted under the programme (section 2.3).

It is important to realise that the reduction of TFWPs to these three policy parameters potentially obscures various contextual differences between both the programmes and countries that administer them (see Table A1). The selected *programmes* significantly differ, for example, in terms of programme size, both absolute and relative to the total labour force. Germany's *Gastarbeiter* Programme is "largest" in terms of annual admissions (958,000 in 1970, the peak year) and in terms of the stock of foreign workers legally present under the programme (2.450 million in 1973, the last year of the *Gastarbeiter* programme). As of 2000, the corresponding figures for Switzerland's *Auslaenderausweis B* Programme were only

² A discussion of the various modes of operationalising these principles in a new type of TFWP is left to another paper.

³ For the sources of the information presented and discussed in this section, see Appendix Tables A1 -A5.

22,000⁴ and 182,000, respectively. Kuwait's *Kafala-Visa 18* Programme is largest in terms of the share of the under the programme legally present foreign workers in the total labour force (57.4% in 1997).⁵ As of 1950, the corresponding figure for the *Bracero* Programme was only 0.4%.

On the other hand, two important differences between the *countries* administering the reviewed programmes include differences between the length and nature of their borders (compare, for example, Singapore's 193 km of all-coastline border to 19,924 km of coastline and 12,248 km of land border in the United States)⁶ and differences between their political systems (e.g. Germany, the US, and Switzerland are liberal democracies, while Kuwait and Singapore are not)⁷.

Due to this section's focus on the major policy parameters of TFWPs, I will not discuss the contextual differences between the programmes and countries reviewed in any detail. As in any comparative analysis, it will, however, be important to keep them in mind.

⁴ This is the current annual quota for the annual admission of foreign workers under the *Auslaenderausweis B* Programme.

⁵ As shown in Table A1, as of 1997, the share of total foreign workers in Kuwait's labour force was 83 percent.

⁶ One may expect the length and nature of the border to have a significant impact on the feasibility of, and required resources for, detecting and preventing the illegal entry and employment of foreigners.

⁷ The political system may impose certain limits on the range of available values for the policy parameters of a TFWP. One may, for example, expect liberal democracies to find it more difficult to restrict the rights of temporary foreign worker (and especially to forcefully deport foreign workers) than countries that do not readily qualify as liberal democracies.

2.1 Number

Depending on the degree and type of government intervention, one may broadly distinguish between three modes of regulating the number of (annual) admissions: quotas, economically-oriented work permit fees, and *laissez-faire* admissions (see Table A2).

In principle, quotas may be set for the country as a whole, for the country's various regions or administrative districts, for certain sectors of the economy, for specified occupations, and/or for individual employers or enterprises (Böhning 1996). Under the *H-1B* programme of the US, for example, quotas are currently set at 195,000 per year (excluding dependents) for the country as a whole. In contrast, the current total annual quota for the *Auslaenderausweis B* Programme is 22,000, comprised of quotas of 10,000 for distribution by the *Bund* (Federal Government) and 12,000 for distribution by the *Cantons* (regional governments). As an example of quotas at the company level, Singapore imposes sector-specific "dependency ceilings"⁸ that specify the maximum share of foreign workers with an Employment Pass R in the total company workforce (except for domestic services where dependency ceilings are not imposed). For example, in 1999, the dependency ceiling in construction was 83%.⁹

⁸ In other words, dependency ceilings differ across industries, but are the same within industries.

⁹ The dependency ceilings in the manufacturing sector were refined in 1991, with lower levies if the lower dependency ceilings has not been reached yet, and higher

While all programmes impose administrative permit fees of some sort (whose magnitude may be negligible, as in Kuwait, or more significant, as in the US), Singapore is the only country that uses economically-oriented fees to influence the annual number of admissions under its *Employment Pass R* Programme. As shown in Table A3, these so-called “foreign worker levies” are flexible¹⁰ and specific to sector and the skill level of the foreign worker. Singapore has used the combination of economically oriented foreign-worker levies and dependency ceilings to “micromanage” the inflow and employment of unskilled foreign workers.

In contrast to the *H-1B* Programme, *Auslaenderausweis B* Programme, and *Employment Pass R* Programme, under the *Bracero* Programme, the *Gastarbeiter* Programme, and the *Kafala– Visa 18* Programme, the annual number of admitted foreign workers is essentially determined by market forces with very little government intervention. Under such a “laissez-faire” approach, the inflow of foreign workers is largely determined by native employers’ demand for foreign workers and thus essentially becomes an “unplanned aggregate of firm-wise decisions” (Bhagwati, Schatz et al. 1984).

levies if the lower (but not the upper) dependency ceiling has been surpassed. This refinement was eventually preferred to the so-called “tender system” proposed by the Ministry of Labour. Under such a system, the employers would bid for extra work permits above the dependency ceiling, with permits issued for two years, and each sector having its own system and market for exchange. The proposal was finally rejected, however, due to opposition from unions, seeking to protect the jobs of their members, and employers who feared uncertainty in labour costs and labour supply (Ruppert 2000).

¹⁰ The Ministry of Manpower revises foreign-worker levies on an annual basis.

With the exception of Singapore, all of the TFWPs reviewed here supplement their admission policies with “labour market tests” that effectively grant native workers a de-facto right to preferential access to the national labour market. While these tests may take on a variety of forms (for a theoretical discussion, see Böhning 1996), they generally involve elements of *attestation* by the employer and *certification* by the relevant authorities (usually municipal and/or federal labour market offices) regarding the unavailability of native workers.

For example, to apply for an H-1B work permit, US employers need to submit a Labour Condition Application (LCA) to the Department of Labor (DOL), attesting that: (i) the employer will pay the temporary worker the higher of the actual wage paid to other workers similarly employed or the prevailing wage for the occupation in the vicinity; (ii) the employer will provide working conditions for H1-B workers that will not adversely affect the working conditions of similarly situated US workers; (iii) there is no strike or lockout in the course of a labour dispute involving the occupational classification at the place of employment; and (iv) the employer has provided notice of the application to the workers’ bargaining representative, or, if the facility is not unionised, has posted a notice in conspicuous locations at the place of employment. “H-1B dependent” employers (i.e. firms with more than a certain share of the workforce who are H1Bs) need to further attest that: (v) no US workers are laid off for the three months before and the three months after hiring of the H-1B, and that (vi) significant efforts have been made to recruit US

workers. If approved, the employer's attestation is certified by the Department of Labor. Labour market tests in Switzerland are similar in scope and sophistication.

In contrast, under the *Bracero* Programme, the *Gastarbeiter* Programme, and the *Kafala-Visa 18* Programme, labour market tests are little more than formalities with little effect in practice. This, of course, may be expected given the *laissez-faire* approach adopted by these programmes. Arguably, the primary reason for adopting a *laissez-faire* approach and for not implementing serious labour market tests in these countries is that they were afflicted with either absolute shortages of labour¹¹ (as it was the case during the Second World War in the United States, and during the post-war recovery in Germany), or with citizens' unavailability for certain jobs (as it is effectively the case in Kuwait, where natives currently refuse to take up employment in the private sector).

2.2 Selection and Recruitment

The main policy variables in the selection and recruitment of foreign workers include restrictions on the skill and nationality of foreign workers, the duties associated with sponsorship requirements, and the institutional framework for linking up employers in the receiving country with workers in the sending country (see Table A4).

¹¹ An absolute labour shortage occurs if the shortage is independent of the wage offered, while a relative shortage implies a shortage of workers that are willing to accept employment at a certain wage (Bohning 1996).

Of the TFWPs under consideration, the American *HI-B* programme is the only programme that explicitly restricts admission to highly-skilled workers for “specialty occupations”, requiring “theoretical and practical application of a body of specialised knowledge along with at least a bachelor degree or its equivalent”. The *Auslaenderausweis B* programme also primarily targets highly skilled workers but not exclusively so (i.e. an *Auslaenderausweis B* may be granted to a semi-skilled foreign worker if no Swiss or EU worker can be found to fill the vacancy). On the other hand, the Singaporean *Employment Pass R* programme explicitly limits admission to semi-skilled workers (R1 Pass) and unskilled workers (R2 Pass) whose monthly income is less than S\$2,000. Similarly, the *Bracero* programme targeted mainly unskilled (farm) workers. In contrast, due to general labour shortages across occupations, the German *Gastarbeiter* programme and the Kuwaiti *Kafala-Visa 18* programme do not explicitly tie eligibility for admission to any particular skill level.

In addition to skill, most TFWPs also select foreign workers based on their national origin. This may be a natural procedure where TFWPs are based on bilateral labour recruitment agreements (as in the *Bracero* programme¹² and *Gastarbeiter*¹³ programme). In this case, admission is naturally restricted to nationals from countries that signed such an agreement with the host country. However, national origin may be a selection criterion even in the absence of bilateral recruitment

¹² The American *Bracero Programme* was based on a bilateral recruitment agreement with Mexico.

agreements. For example, as of 2001, Singapore explicitly restricted the nationalities of Employment Pass R holders to 14 countries, with specific restrictions by sector¹⁴. Similarly, while not explicitly restricting admission to workers from certain countries, admissions under the TFWPs in Switzerland in Kuwait are based on “preference systems”. Switzerland operates a “dual recruitment system”, which gives first preference to citizens of the EU and admits workers from other countries only in exceptional cases. Similarly, since the Second Gulf War, Kuwait has had a clear preference for admitting Asian over other Arab workers. Finally, of the six TFWPs under consideration, it appears that the *H-1B* programme is the only programme that does not directly restrict applicants by their national origin in any significant way.¹⁵

Importantly, all six TFWPs require that a foreign worker be sponsored by his or her employer in the host country. As shown in Table A4, the legal duties of a sponsor vary across programmes, with the greatest differences between sponsor duties under programmes for unskilled workers and programmes for highly skilled workers. Under the former, sponsors are usually required to repatriate the foreign

¹³ Germany struck bilateral recruitment agreements with Italy (1955), Spain and Greece (1960), Turkey (1961 and 1964), Morocco (1963), Portugal (1964), Tunisia (1965), and Yugoslavia (1968).

¹⁴ As of 2001, the restrictions of nationalities by sector read as follows: (i) Manufacturing: Malaysia, Hong Kong, Macau, South Korea, and Taiwan; (ii) Construction: Malaysia, PRC, India, Sri Lanka, Thailand, Bangladesh, Myanmar, Philippines, Pakistan, Hong Kong, South Korea, and Taiwan; (iii) Services: Malaysia, Hong Kong, Macau, South Korea, and Taiwan; (iv) Domestic Services: Malaysia, Philippines, Indonesia, Thailand, Myanmar, Sri Lanka, and Bangladesh.

¹⁵ Of course, it should be kept in mind that any restriction on skill implies that nationals from certain countries (whose citizens do not possess the required skills) are effectively excluded from the programme.

worker upon completion of the contract at the employer's expense. To assure employer compliance, the *Bracero* programme and the *Employment Pass R* programme require employers to make security bonds which are confiscated if the employer fails to repatriate a foreign employee at the end of the contract period. TFWPs for unskilled workers also frequently require employers to provide "adequate" housing (as in the *Bracero* and *Employment Pass R* programmes) and sometimes also low-cost meals. On the other hand, TFWPs for semi-skilled and highly skilled workers usually impose fewer duties on the employer. For example, in both the *H-1B* programme and the *Auslaenderausweis B* programme native employers' main duties are to treat their foreign workers in the same way as natives as far as pay, fringe benefits, and working conditions are concerned.

Finally, with regard to recruitment, some TFWPs leave recruitment almost entirely in the hands of private recruitment agents (such as the programmes in Kuwait and Singapore), while other programmes largely rely on public recruitment. Examples of the latter include the *Bracero* programme and the *Gastarbeiter* programme. Under the *Bracero* programme, recruitment centers were set up in Mexico, where applicants were pre-selected by Mexican authorities. In contrast, under the *Gastarbeiter* Programme, recruitment centers abroad were mainly administered by German authorities.

2.3 Migrants' Rights

All of the reviewed TFWPs accord temporary foreign workers rights that are significantly smaller in number and scope than those granted to permanent residents and citizens. This section reviews the various programmes' policies pertaining to the duration of the visa, change of status, family reunion, employment and wage restrictions, savings, and eligibility for social security benefits (see Table A5).

By definition, the visas and work permits issued under TFWPs are all time-limited. There is, however, some variation across programmes in the number of years for which residence and employment are granted. On the one hand, the *H-1B* programme and the *Employment Pass R* programme impose strict limits to the maximum number of years that a foreign worker can spend in the programme (six and four years, respectively). On the other hand, other programmes initially issue relatively short-lived work permits but allow for unlimited renewals (see, for example, the *Gastarbeiter* Programme and the *Auslaenderausweis B* programme).

Closely related to the duration of the visa and work permits are the eligibility for a change in status (to permanent resident) and family reunion. Again, there are considerable differences across programmes. The *Bracero* programme, *Kafala-Visa 18* programme, and the *Employment Pass R* programme explicitly prohibit a change in status and family reunion. In contrast, under the *Gastarbeiter* programme, *H-1B* programme, and the *Auslaenderausweis B* programme, a foreign worker may be granted both the right to permanent residence (after a minimum residence of a certain number of years) and the right to family reunion. Under the *Gastarbeiter*

programme, family reunion was allowed if the worker was able to provide housing “suitable for a family”. Foreign workers with *HI-B* and *Auslaenderausweis B* permits have the right to bring spouses and minor children. In the United States, spouses are permitted to attend school but not take up employment. In Switzerland, spouses of *Auslaenderausweis B* holders may be granted permission to work.

With regard to restrictions on employment, wage, and savings, the reviewed TFWPs are quite similar. All programmes restrict employment of the admitted foreign worker to a specific employer (and thus also to a specific sector). In some cases, a transfer to a new employer (without having to leave the country) is possible after some time but need to be applied for (such as in Kuwait). In countries where native workers compete with foreign workers for employment, wage restrictions are also relatively common. Employers are usually required to treat foreign workers in the same way as natives and pay at least the “prevailing wage” in this occupation.¹⁶ Such restrictions are not in place in Kuwait and Singapore, where native workers are often unavailable for employment in sectors where Visa Number 18 holders and Employment Pass R holders work. Finally, the *Bracero* programme is unique in that it required native employers to withhold 10% of the foreign workers’ earnings for deposit in a Mexican savings fund and payable to the worker upon his return to Mexico.

¹⁶ Of course, the assessment of the “prevailing wage” in a given occupation is a controversial exercise.

Except for countries that do not fit the standard definition of a liberal democracy (Kuwait and Singapore), TFWPs generally offer temporary foreign workers rights to at least a minimum of social security. Highly skilled *H-1B* and *Auslaenderausweis B* permit holders are granted the explicit right to equal treatment with regard to social security. Similarly, *Gastarbeiter* in Germany were also given rights to certain social benefits, including unemployment benefits¹⁷.

Finally, some programmes also impose restrictions on the non-employment related rights of temporary foreign workers. For example, in Singapore, unskilled temporary migrant workers do not have the right to get married to, or cohabit with, a Singaporean citizen or a permanent resident. Female non-resident workers are further required to undergo mandatory pregnancy tests every six months, with the threat of immediate deportation in case of a positive test result. Similarly, in Kuwait, a number of the (relatively strict) regulations protecting workers set out by the Kuwaiti Labour Law can not be implemented as non-Kuwaitis are also (or, arguably, first and foremost) subject to the Aliens' Residence Law with its strict stipulations regarding the sponsor's rights and duties in matters of issuance, renewal, and/or cancellation of residence permits. This dependence on the sponsor (*kafeel*) naturally creates room for violations of the rights of foreign workers.

¹⁷ As will be discussed later in the paper, the extension of unemployment benefits was a major reason why so many of the laid-off *Gastarbeiter* remained in Germany after the recruitment stop in 1973.

3 Adverse Consequences

The discussion in Section 2 suggests that there are a number of quite significant differences between the policies of the TFWPs under consideration. In contrast, their consequences may be argued to be somewhat more similar with each other. In particular, critics of TFWPs can point to a collection of adverse consequences that regularly appear despite widely differing labour markets and policy programmes. These empirical regularities, or “stylised facts”, of TFWPs include”: (i) the emergence of “immigrant sectors” in the host country’s labour market (“immigrant sectors”); (ii) the vulnerability of migrant workers to various forms of exploitation in recruitment and employment (“vulnerability”); (iii) the tendency of TFWPs to become longer in duration and bigger in size than initially envisaged (“bloating”); (iv) native workers’ opposition against the introduction or expansion of a TFWP (“native workers’ opposition”); and (v) the emergence of illegal foreign workers who, together with local employers, circumvent the programme (“circumvention”). This section discusses each of these problems in turn.

3.1 Immigrant Sectors

TFWPs have often been accompanied by the segmentation of the host country’s labour market and the emergence of “immigrant sectors”, understood as sectors that employ primarily or exclusively foreign workers. Importantly, the causal relationship between segmented markets and the employment of foreign workers

appears to be of the two-way (feedback) type in which one re-enforces the other. On the one hand, a segmented labour market and the existence of what is often perceived as ‘undesirable work’ in “undesirable sectors” that natives do not want to take up any more have constituted a major *reason for* the inflow and concentrated employment of foreign workers in these sectors. On the other hand, the restriction of the employment of foreign workers to certain sectors and/or occupations of the host economy has led, or at least contributed, to the desertion of these sectors/occupations by native workers, thus giving rise to (or at least exacerbating) the (further) segmentation of the labour market and the emergence of immigrant sectors.

Kuwait and Singapore are the best and most extreme cases in point. With the increasing inflow and employment of foreign workers since the rise in oil-prices in the mid-1970s, Kuwaiti citizens have effectively become unavailable for work in all types of economic activities and occupations in the private sector. As a result, private sector employment in Kuwait is now heavily dominated by foreign workers who, as of 1988, constituted 98% of the entire private sector workforce (see Table 1). Despite the lack of comparable data for 2000, there is every reason to believe that the situation has not changed. As a result, encouraging Kuwaitis to take up employment in the private sector remains one of Kuwait’s major policy challenges (see Godfrey and Ruhs, forthcoming).

Although less extreme than in Kuwait, the prevalence of immigrant sectors in Singapore is also considerable and continuously increasing. While the overall share of Employment Pass R holders in the total labour force increased from 16.2% in

1990 to 29.23% in 2000, the concentration of the employment of foreign workers especially notable and rapid in construction, where the share of Employment Pass R holders in the total workforce increased from 38.2% in 1990 to 67% in 2000 (see Table 1).

Table 1 Distribution and Percentage Shares of Temporary Foreign Workers Across and Within Selected Economic Activities and Occupations in Kuwait and Singapore*

Kuwait Visa 18 Holders in private sector only			Singapore Employment Pass R Holders ("Non-Residents") in all sectors		
By Economic Activity			By Economic Activity		
	1988	1996		1990	2000
W/R Trade, Res.+Hotels	39.82 (96)	57.66	Construction	18.92 (38.20)	30.04 (67.04)
Construction	24.95 (99)	10.62	S/S/P Services	26.83 (22.22)	26.92 (36.43)
S/C/P Services	10.38 (99)	11.55	Manufacturing	43.00 (24.03)	23.94 (33.65)
Total	100 (98)	100	Total	100 (16.20)	100 (29.23)
By Occupation			By Occupation		
	1988	1996		1990	2000
Production and Related	57.51 (95)	63.51	Production and Related	46.99 (24.63)	36.74 (44.02)
Service Workers	10.21 (99)	8.28	Cleaners and Labourers	36.32 (39.11)	38.24 (69.92)
Total	100 (98)	100	Total	100 (16.20)	100 (29.16)

*Shares of foreign workers within economic activities and occupations in parentheses

Sources: author's computations based on data provided by the Kuwaiti Ministry of Planning (*Annual Statistical Abstract*, various issues) and the Singapore Department of Statistics (*SINGSTAT*)

Similarly, the share of *Braceros* in the Californian Agricultural labour force gradually increased from about 2% in 1949 to about 27% in 1959 (see Table 2). Notably, *Braceros* primarily replaced non-local US workers (i.e. "dustbowlers" from Southwestern States such as Oklahoma) rather than local (Californian) US workers.

Table 2 Composition of Labour Force in Californian Agriculture, 1949 & 1959

	Locals	Non-Locals*	Braceros
1949 - August	123,700 (69.1%)	52,000 (29.1%)	3,300 (1.8%)
1959 - August	122,000 (54.5%)	41,000 (18.3%)	60,700 (27.2%)

* Non-Locals refer to out-of-state US workers who migrated to California for work

Source: Galarza 1964, pages 96-97

Due to the rapid economic growth during post-war recovery, the emergence of immigrant sectors appears to have been less of a problem during the operation of the *Gastarbeiter* programme in Germany. However, as discussed in more detail in section 3.5, the employment of *Gastarbeiter* did not stop with the official end of the programme in 1973 and there has been at least some concentration in the employment of former *Gastarbeiter* who chose to remain in Germany after 1973.

Importantly, there is evidence that immigrantisation of certain sectors of production also occurs, at least to some extent, under programmes that exclusively or primarily target highly-skilled foreign workers (such as the *H-1B* programme and the *Auslaenderausweis B* programme). As shown in Table 3, between 1980 and 1990, there was a notable increase in the share of foreign-born engineers and scientists employed in the American high-technology industry.

Table 3 Foreign-born (FB) Engineers and Scientists Employed in the High-Technology Industry in States with High-Technology Regions, 1980 and 1990

	California		Massachusetts		Texas		North Carolina	
	Total	% FB	Total	% FB	Total	% FB	Total	% FB
1980								
Engineers	77,580	16.8	17,040	9.2	15,620	7.2	3,680	2.7
Mathematicians and computer scientists	17,200	10.9	5,560	6.1	5,780	6.6	1,060	7.5
Natural scientists	2,260	19.5	500	36.0	320	6.3	80	0.0
Total	97,040	15.8	23,100	9.0	21,720	7.0	4,820	3.7
1990								
Engineers	98,972	23.7	18,123	14.2	26,932	11.5	5,622	7.5
Mathematicians and computer scientists	47,055	21.5	15,238	15.2	15,581	9.8	3,594	6.7
Natural scientists	2,233	23.2	238	0	445	11.5	75	0
Total	148,260	23.0	33,599	14.5	42,958	10.9	9,291	7.1

Source: Bureau of the Census, 1992; as given in Alarcon (2001), p. 242.

There are two main problems with the emergence of immigrant sectors. First, in a segmented labour market, such sectors are often afflicted by lowered wages and

deteriorating working conditions.¹⁸ As a result, the sectors which have been targeted for temporary migrant worker programmes eventually develop a “structural demand”¹⁹ for foreign workers and thus suffer from permanent versions of the very shortages of natives the migrants were imported to cure.

A second and related problem is that immigrant sectors may lead, or at least contribute to, social exclusions and marginalisation of the foreign workers employed in these sectors. The presence of a separate social class of migrant workers may generate and fuel intolerance and xenophobic sentiments within the native population.

¹⁸ In Kuwait, for example, real wages in manufacturing (where 95% of all workers are Non-Kuwaitis) fell by more than 30% in the period 1983-1997. In the construction sector (where 99% of all workers are Non-Kuwaitis), real wages fell by as much as 46% during the same period (Godfrey and Ruhs 2002). To give another example, Weinstein (2000) discusses how the rising share of foreigners among science PhD students and post-doctoral fellows in the US drives down wages and working conditions, thereby discouraging native Americans to enter these field of study and employment.

¹⁹ Most explanations of the structural demand for immigrant labor are based on the dual labor market hypothesis (for a review see Berger and Piore 1980). It suggests that the overall labor market is divided into a primary and secondary segment, with native labor working predominantly in the former, and migrants confined to the latter. Due to the lack of restrictions and regulations in the secondary labor market, migrant workers may essentially be laid-off whenever required. The argument is that there is a fundamental dualism between capital and labor in the production process. While labor can be laid off, capital is a fixed factor which can only be ‘idled’. Hence, where overall demand can be divided into permanent and temporary portions, native workers will be employed in relatively capital-intensive methods to satisfy the permanent demand, and migrant labor will be required and employed in relatively labor-intensive methods to meet the temporary (seasonal) demand (Piore 1979, p. 36).

3.2 Vulnerability

Having left their home countries, temporary foreign workers are inherently more vulnerable to deprivation of even the most basic human rights than the citizens (and permanent residents) of both the sending and receiving countries.²⁰ The main problem is the absence of an institutional entity that accepts, and is in a position to assume, full responsibility for the legal protection of temporary foreign workers' rights in the receiving country. On the one hand, the sending country generally does not have any legal jurisdiction outside its territory. The host country, on the other hand, is often reluctant to assume full responsibility unless migrant workers are permanent residents or become citizens (see the discussion in section 2.3). Finally, as reflected by the disappointingly low numbers of ratification of the three global legal instruments developed for the protection of migrant workers²¹, the efforts by international organisations to effectively represent and protect the rights and interests of migrant workers have so far had only very limited success.

²⁰ The various forms of vulnerability of migrant workers have been recently summarised in a special edition of *International Migration* (Quarterly Review, Volume 38, Number 6, Special Issue 2/2000).

²¹ They include the Migration of Employment Convention of 1949 (ILO Convention No.97), the Migrant Workers (Supplementary Provisions) Convention of 1975 (ILO Convention No.143), and the International Convention on the Protection of the Rights of All Migrant Workers and the Members of their Families, adopted by the UN General Assembly in 1990 (MWC). ILO Convention No. 97 (which came into force on 22 January 1952) has been ratified by 42 member states, while ILO Convention No. 143 (which came into force in 1978) has been ratified by only 18 member states. The MWC has so far been signed by 19 state members and therefore not come into force yet (for which 20 ratifications are required). Importantly, the few countries that have ratified migrant workers conventions are predominantly migrant-sending rather than migrant-receiving countries.

Vulnerabilities mainly arise in the private recruitment and employment of foreign workers. In principle, the involvement of private recruitment agents may be an efficient way of linking employers in the receiving country with foreign workers in the sending country and there are good arguments for arranging recruitment through private rather than public recruitment agencies. For example, some governments may not have the financial and personnel resources to organise public recruitment. Private recruiters may also have greater incentives to actively search for as many clients and possible, rather than just wait for clients as it is often the case with public recruitment offices (Böhning 1996). However, some recruitment agents have taken advantage of migrant workers' limited information about working and living conditions in the host country by misinforming them and charging excessive fees that bear little resemblance to the actual recruitment and placement costs incurred by these agencies. In Kuwait, for example, foreign workers who migrate through (and base their wage expectation on the information provided by) recruitment agencies incur significantly higher recruitment costs (and receive significantly lower wages) than the costs incurred (and wages received) when migrating through (and basing wage expectations on) other recruitment channels such as friends and relatives or direct contact with employers (see Table 4).

Table 4 Foreign workers' recruitment costs, actual wages and expected wages in the private business sector in Kuwait, by mode of recruitment and basis of wage expectation (units: Kuwaiti Dinar, unless indicated otherwise)

	I: Average of all modes of recruitment	II: Recruitment through Visa/Recruitment Agency (%share in I)
Travel costs (average)	159.33	475.00* (298%)
Visa costs (average)	396.18	442.27 (112%)
Other recruitment costs (average)	111.48	271.25 (243%)
Total costs (average) [excluding travel costs]	666.99 [507.66]	1,188.52 (178%) [713.52 (141%)]
	III: Average of all bases of expectation	IV: Expectation based on promise from recruitment agency/sponsor/employer (*share in III)
Current monthly wage (average)	162.73	115.70 (72%)
Expected monthly wage (average)	161.56	135.97 (84%)
Current wage / Expected wage	1	0.85

* Less than five observations

Source: ILO Survey (2001) of Foreign Workers in Kuwait's Private Business Sector (N=300).

Temporary foreign workers in Singapore face similar vulnerabilities to exploitation in the recruitment process. Due to the great supply of foreign workers and intense competition between recruitment agencies, there have been reports that recruitment agencies in Singapore need to pay employers to “reserve” work permits for foreign workers. This “kick back fee” has been estimated to be about S\$1,500 per employment pass holder. Furthermore, some recruitment agencies have also been reported to offer free recruitment services for employers (Atipas 2000). This has further contributed to keeping recruitment fees for foreign workers high.²²

²² In her survey of Thai workers in Singapore, Atipas (2000) finds that the total recruitment fee for unskilled Thai workers amounted to about 50,000 Thai Baht, of which it has been estimated that one third goes to the employer, one third to the Singaporean agent, and one third to the Thai agent. Importantly, at the time of the survey, the official commission charges set by the Ministry of Labour and Social Welfare in Thailand amounted to 22,500 Baht which included a month's wage, typically about 8,000 Baht, plus expenses of about 15,000 Baht (Atipas 2000, p.7).

Although generating considerably fewer vulnerabilities for temporary foreign workers, TFWPs with public recruitment mechanisms (such as the *Bracero* programme and the *Gastarbeiter* programme) and/or mainly highly skilled workers as their target groups (such as the *H-1B* programme and *Auslaenderausweis B* programme) have shown to be not immune to vulnerabilities in recruitment. For example, *Braceros* sometimes had to bribe Mexican recruitment authorities to be considered for employment in the US (Galarza 1964, p.81). One can easily see how similar problems emerged under the *Gastarbeiter* Programme, where German recruitment agencies abroad maintained “priority lists” as part of a system of rather long “waiting lists” (Miller and Martin 1982).

Vulnerabilities in employment mainly arise because of the sponsorship requirement (see section 2.2) that often results in employers gaining excessive control over sponsored foreign workers that they do not exert over comparable native workers (mainly through the constant threat of deportation). This may include late wage payments, contract substitution²³ leading to lower than initially agreed wages and unreasonable work expectations, restrictions on movement, and sometimes even physical or sexual intimidation. There is evidence that, while varying in degree,

²³ “Contract substitution” refers to a practice whereby, despite having signed an authorised contract prior to departure, upon arrival in the country of employment, the migrant worker is issued with a new contract specifying lower conditions of work, pay, and so on (ILO 1999).

these problems are relatively regular occurrences of TFWPs, especially of programmes for unskilled workers.²⁴

Importantly, vulnerabilities in employment are not necessarily restricted to unskilled foreign workers. For example, there have been increasing instances of abuse of the *H-1B* programme, where workers are brought into the United States to work, but are not employed and receive no pay until jobs become available (a practise known as “benching”). Furthermore, 99 investigations by the US Department of Labour in the period 1996-2000 revealed that \$2,380,440 was due in back wages, involving 620 employees. A 1996 report found that 19% of H-1B workers were paid wages that were lower than specified on the LCA. Finally, employers have also been found to withhold wages from employees who have voluntarily left for employment elsewhere (source).

3.3 Bloating

Bloating refers to the initially-unforeseen prolongation of a TFWP and the initially-unanticipated increases in the *legal* intake of foreign workers²⁵.

Once in place, TFWPs tend to be difficult to terminate. Foreign workers who have initially attested to intending a temporary stay tend to adjust their expectations

²⁴ For evidence of these vulnerabilities, see, for example, Galarza (1964) for the *Bracero* Programme; Dale (1999) for the *Gastarbeiter* programme; Atipas (2000) for the *Employment Pass R* programme; and Longva (1997) for the *Kafala-Visa 18* programme.

²⁵ The inflow of illegal workers is discussed in section 3.5.

to a longer stay, permanent residency, and/or citizenship. This change in expectations may be voluntary or forced.

On the one hand, having lived and worked in the country for a certain number of years, migrant workers may simply abandon their original plans of returning home and prefer to remain in the host country instead. For example, following Germany's recruitment stop in 1973, many *Gastarbeiter* preferred to remain (unemployed) in Germany, where they were eligible for unemployment benefits, to returning home. Alternatively, those workers who do return home after the cessation of their contract (or of the whole TFWP) may do so with an increased probability of returning to the receiving country for further employment, either legally or illegally. Massey and Liang (1989) provide econometric evidence for this hypothesis for the case of *Braceros*.

On the other hand, unanticipated exploitation, especially lower than expected income and thus savings, may force foreign workers to stay and work in the country much longer than initially intended. Münz and Ulrich (1997) suggest that many *Gastarbeiter* found that they could not save enough money to return home and thus had to prolong their stay. Similarly, the lower than expected wages received by some foreign workers in Kuwait (see Table 2) are likely to be major reasons for the decision to remain in Kuwait for a much longer period than initially intended.²⁶

²⁶ A recent ILO survey of 300 foreign workers employed in Kuwait's private sector found that, on average, foreign workers intend to stay in Kuwait for 5.34 years, but end up staying for at least 8.12 years.

There may also be significant pressure for prolongation of the TFWP from stakeholders in the host country, especially from employers and recruitment agents. As discussed in section 3.1, the segmentation of labour markets may make jobs in “immigrant sectors” of the economy unacceptable to native workers, even in times of unemployment.²⁷ Having developed a permanent dependence on foreign labour, native employers in these sectors may thus be very reluctant to agree to end the TFWP.²⁸

Furthermore, where the operation of a TFWP has led to the emergence of a “labour immigration industry” that generates significant income for private recruitment agents and providers of various private services to foreign workers, the termination of a TFWP may not only be politically difficult but also economically costly.

In a similar vein, the detection and forceful repatriation of foreign workers without valid work permits has proven not only difficult and costly to implement, but also politically difficult to carry out in liberal democracies. As a result, the cessation of TFWPs sometimes leads to either permanent settlement of former temporary

²⁷ For example, efforts by Southeast Asian countries to fill the vacancies resulting from foreign worker repatriation drives following the outbreak of economic crisis in 1997 failed spectacularly. It soon became clear that unemployed native workers were not willing to take up employment in “immigrant sectors”, especially in rice milling and fisheries. As native employers showed little willingness to make these jobs more attractive to natives by raising wages or improving working conditions, the scale of migrant worker repatriations actually carried out in the end was much smaller than initially suggested by the government.

foreign workers with the government's consent (as it happened with the *Gastarbeiter* programme in Germany), or to the creation of a large pool of illegal foreign workers (as it happened with the *Bracero* programme in the United States).

A second aspect of bloating concerns initially unplanned increases in the size of the legal intake. This mainly happens because of the above discussed interests of native employers and recruitment agents as well as domestic and international pressures to grant foreign workers who have stayed in the receiving country for a relatively long time the right to family reunification.²⁹ For example, following and despite the official recruitment stop in 1973, the total number of resident foreigners in Germany kept increasing from about 4 million in 1973 to 4.4 million in 1985, with the overall activity rate of foreigners in Germany falling from about 62% in 1973 to 36% in 1985. While part of the increase in the number of foreigners was due to increased inflows of asylum seekers (especially during 1979-1981), the bulk of the increase was accounted for by family reunification and significant "natural increases" due to high birth rates (Ruhs 2001). Similarly, in the United States, it has been argued that issuances of temporary *H-1B* visas supports "expectations of permanency". It is estimated that 47% of the entering *H-1B* cohort of 1993 have adjusted to permanent status (Lowell 2000).

²⁸ In addition, employers are also likely to have a strong preference for keeping the same worker for an extended period, rather than having to assimilate a new batch of workers every few years.

²⁹ Again, the prevalence of domestic pressures is usually confined to liberal democracies.

The recently much-discussed network effects and the self-perpetuating nature of migration flows (i.e. initial migration flows generate further flows) may further contribute to unplanned increases in the inflows of foreign workers. The empirical importance of the presence of friends and relatives in the receiving country as a major determinant of migration is now well established (see Massey 1993, 1994 for a general overview and presentation of the evidence³⁰).

The main problem with bloating is that it reduces policy-maker's control over the policy parameters (especially over the size) of the TFWP.³¹ This creates the danger that the programme "takes on a life of its own" and develops into something that looks very different, and generates very different consequences, from what it was initially designed to be and do. For example, where bloating is primarily driven by the political influence of native employers and recruiters, wages and working conditions may be driven down to levels that are undesirable not only from the migrants' point of view but even to policy-makers in the host country. This is especially true for countries in which policy-makers have chosen to implement TFWPs as a tool of selective and sector-specific industrial policy (as it is the case,

³⁰ Also see Atipas (2000) for the importance of networks as a determinant of migration to Singapore; Shah (2000) for migration to Kuwait; and Massey and Liang (1989) for migration of the descendants of *Braceros*.

³¹ It is important to point out that the prolongation and expansion of TFWPs may, in fact, lead to highly desirable consequences for all sides. However, the point of the discussion here is that it is desirable that any quantitative or qualitative changes to TFWPs are, at least to the furthest extent possible, intended and under the control of policy-makers.

for example, in Singapore).³² In particular, where one of the objectives of industrial policy is to encourage innovation and labour-saving technical change, policy-makers may strictly dislike wages that are so low that they discourage native employers' efforts to explore other possibilities for labour-saving technical change (such as mechanisation).

In addition to the adverse economic effects of bloating programmes, the loss of control over the number and the period of stay of (supposedly temporary) foreigner workers entering and taking up employment in the country also raises broader concerns about the impact of a "seemingly uncontrollable" inflow of foreign workers on the host country's society at large. In particular, the notion that the government has "lost control" over the size of the TFWP, may fuel xenophobic sentiments³³ and security concerns³⁴ among the native population which may result

³² Chang (1994) defines industrial policy as 'a policy aimed at particular industries (and firms and their components) to achieve the outcomes that are perceived by the state to be efficient for the economy as a whole' (p.60). To put it into the context of TFWPs, assuming that calls for immigrant workers are based on efficiency considerations at the micro level, i.e. on the profit-maximization calculus of firms, the critical industrial policy question is whether the satisfaction of individual and sectoral demands induces static and dynamic efficiency at the macro level, i.e. of the economy as a whole. While the basic 'horizontal-policy' question is whether to admit immigrants (to all sectors) or not, a possible vertical policy would be to prohibit/restrict the employment of foreign workers in some industries, while at the same time tolerate or even facilitate the employment of immigrants in other sectors. Also, as employer demand for foreign labor generally persists over an extended period of time, the 'timing' and 'sequencing' of granting strategic industries differential access to immigrants may be of significant importance for the overall development of the economy.

³³ In her study of the determinants of the evolution of right-wing extremism in six Western European countries, Knigge (1998) finds that, together with public

in an immigration back-lash that may both adversely affect all foreign workers in the country and reduce or even eliminate the benefits of the original TFWP to the host country.

3.4 Opposition

In liberal democracies, the introduction and implementation of a TFWP is generally preceded and accompanied by heated debates over policy parameters. Most debates are consequentialist in nature and discuss the desirable choice of policy parameters in terms of their impact on economic efficiency, distribution, national identity, and the rights of citizens. While the debates about the non-economic effects on national identity and citizens' rights are usually country-specific, discussions about the economic impact of TFWPs are very similar across countries and programmes. On purely economic grounds, the introduction or expansion of a TFWP is typically opposed by native workers who are going to compete with foreign workers over jobs and wages.³⁵ Competing native workers thus *perceive* the

dissatisfaction with the political regime, rising levels of immigration significantly facilitate right-wing extremism.

³⁴ This is especially true for countries with very high shares of foreigners in the total population. In Kuwait, for example, current efforts to “localise” the workforce are a direct result of increasing security concerns stemming from what is perceived to be an excess supply of foreign workers in the country.

³⁵ This is generally true in countries with a small or only modest number of illegal labour migrants. Where illegal migrants constitute a large share of total labour immigration, and where it is thought to be impossible to significantly curb illegal immigration through increased measures of law enforcement, such as in Italy or in Spain, native workers (trade unions) have actually shown some support for more legal admissions (see, for example, Watts 2000). The simple rationale of native

employment of foreign workers as a threat to their economic security.³⁶ Johnson (1980) suggested a simple economic model that rationalises these popular perceptions at a theoretical level (see Figure 1).

Figure 1: Effects of Immigration on Wages and Employment

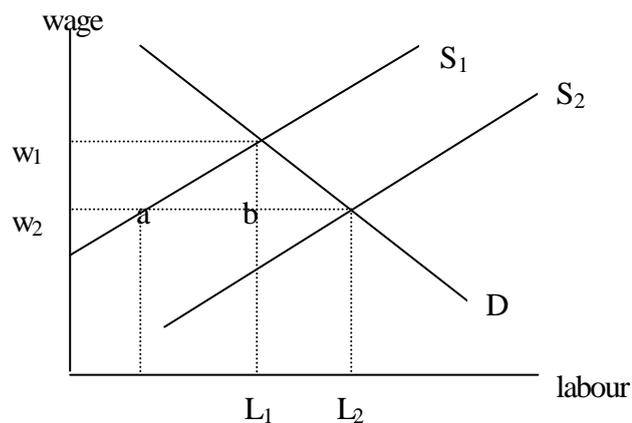


Figure 1 depicts a labour market with elastic supply curves. The inflow of $L_2 - L_1$ foreign workers shifts the labor supply curve from S_1 to S_2 , wages fall from w_1 to w_2 , and native employment in this sector is reduced by $b - a$. In this model, the reduction in native employment (known as the ‘replacement effect’ of immigration) critically depends on the elasticity of labour supply. If labour supply is completely inelastic, then the rate of labour market replacement (β) equals zero. On the other

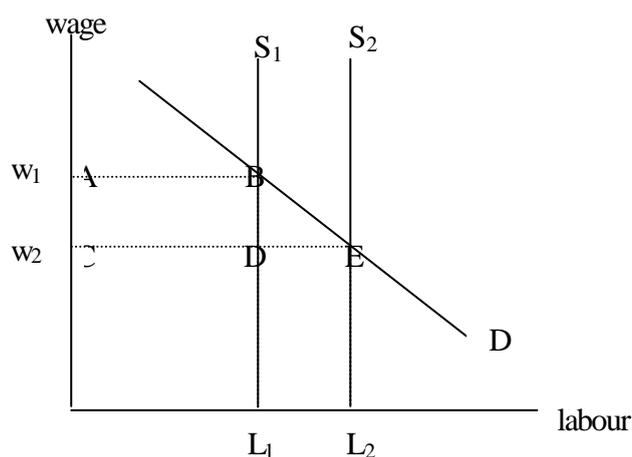
workers is that legal foreign workers exert less pressure on wages and working conditions than illegal foreign workers.

³⁶ For example, in his analysis of the determinants of public attitudes toward immigration policy in the United States, Kessler (2001, p.24) finds that “measures of skill that appropriately link immigration induced changes in the labor market to wage and employment prospects of citizens are strongly associated with positions on immigration policy” (p.24).

hand, if labour supply is completely elastic, there is one-for-one replacement ($\beta=1$). In all other cases, i.e. if the supply curve is up-ward sloping, β depends on the elasticities of labour demand and supply, and the share of immigrant workers in total unskilled labour (Johnson 1980).

On the other hand, TFWPs are typically supported by native employers who are perceived to gain from labour immigration at the expense of native workers. The perception that immigration benefits native employers at the expense of native workers is theoretically rationalised by a simple model proposed by Borjas (1995). This model is identical to that underlying Figure 1 except that the labour supply curves are now assumed to be completely inelastic (such that possible replacement effects of immigration are ignored).

Figure 2: Effects of Immigration on Efficiency and Distribution



In Figure 2, the inflow of L_2-L_1 foreign labour shifts the labour supply curve from S_1 to S_2 , thereby lowering wages from w_1 to w_2 . Two welfare effects of labour

immigration may be distinguished. First, the inflow of migrant workers increases national income (defined as the total income accruing to citizens of the receiving country) by the triangular area BDE (the “efficiency effect”). At the same time, however, labour immigration redistributes income (captured by the area ABCD) from native workers to native employers (the “redistribution effect”).³⁷ In other words, this model suggests that, without any redistributive measures, labour immigration is likely to generate only a *potential* Pareto efficiency gain for the citizens of the host economy. A potential efficiency gain is an outcome in which there are winners and losers but total gains outweigh total costs such that, in principle, losers could be compensated by winners (Hicks 1939, Kaldor 1939).³⁸ In this context, the winners are native employers and the losers are native workers – hence the latter’s opposition to labour immigration.

To be sure, the way the described models perceive labour immigration (namely, as nothing more than an increase in the supply of homogeneous labour) is very limited and does not capture all the actual policy components of a TFWP. In truth, we often know very little about the effects of migrants on economic efficiency

³⁷ Importantly, the redistribution effect is likely to significantly outweigh the efficiency effect. Assuming that labor’s share of income is 70 percent, that the factor price elasticity is 0.3, and that immigrants make up 10 percent of the US workforce, Borjas’s (1995) back-of-the-envelope calculations of the welfare effects of immigration for the US economy suggest that immigration increases GDP by 0.1%, raises capital income by 2% of GDP, and lowers labour income by 1.9% of GDP. These results imply that the distributional effect is almost twenty times as large as the efficiency effect.

³⁸ Note that it is not required that compensation actually takes place, but only that, if it takes place, a Pareto efficient outcome could be achieved.

and distribution as migrants' various economic impacts are numerous, inter-related and difficult to isolate. Nevertheless, Johnson's (1980) and Borjas's (1995) simple models neatly capture and explain native stakeholders' empirically-observed positions in labour immigration debates.

As mentioned before, opposition to TFWPs on economic grounds is generally confined to native workers who compete with foreign workers in the same labour market. Where this is not the case, such as in certain sectors in Singapore (e.g. construction) and Kuwait (e.g. the private sector), such opposition is less prevalent.³⁹

In addition, the extent of native workers' opposition is typically negatively correlated with economic growth and labour demand. For example, although concerned about adverse impacts on wages and working conditions, German trade unions showed only moderate opposition to the introduction of the *Gastarbeiter* programme during the high-growth years following the Second World War.⁴⁰ However, when oil prices began to rise in the early 1970s, opposition to the continued employment of foreign workers grew much stronger and eventually led to the formal cessation of the programme in 1973. Similarly, the National Agricultural

³⁹ Note that, in addition to having largely non-competing native workers, Kuwait and Singapore are also the only countries under consideration that are not liberal democracies.

⁴⁰ However, unions did make it clear that a labour immigration programme would only be acceptable if foreign workers were given guarantees of equal wages and working conditions, such that the wages and working conditions of natives would not be undermined. The trade unions were eventually closely involved in the formulation of the guest-worker programme and their demands were eventually satisfied. This has been interpreted as evidence of the highly consensual policy-making at the time (Hollifield 1992).

Workers Union in California played a relatively small role in the establishment and early phases of the *Bracero* programme during the early 1940s (when agricultural labour was in high demand due to the on-going war). However, it became much more vocal in its opposition to the *Bracero* Programme in the late 1950s and early 1960s, when it had become clear that the employment of *Braceros* was adversely affecting the wages and working conditions of American farm labour (Griego 1983).

Finally, native worker opposition to TFWPs is not only confined to programmes that target unskilled workers. The best example is the recent heated discussion surrounding the decision of the US Congress to significantly raise the cap on H-1B workers.

Native workers' opposition is a major reason for keeping the size of TFWPs in most countries relatively small. It thus prevents TFWPs from realising their full potential of benefiting all sides involved, including a much greater number of potential migrant workers than are currently admitted and employed in the existing programmes.

3.5 Circumvention

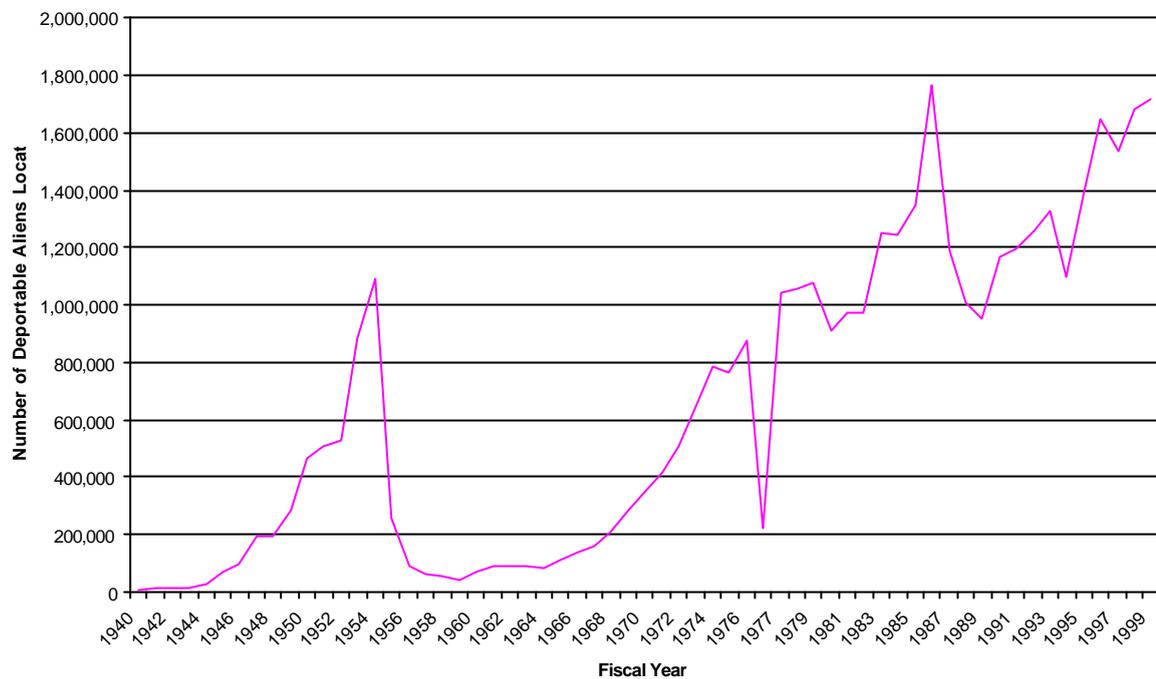
As with all laws and government programmes, TFWPs may and have been circumvented – either through illegally entering and taking up employment in the host country without joining the programme (if one exists), or through initially joining the programme but eventually exiting without returning home.

Circumvention of a TFWP naturally leads to the presence of illegal migrant workers. Observers of global migration flows frequently suggest that illegal migration flows are, in fact, gaining in importance vis-à-vis legal migration flows. Of course, the increase in illegal migration cannot be directly related to circumvention of TFWPs alone, as illegal migration often takes place in response to the complete absence of a TFWP (i.e. in response to a closed-border policy). Nevertheless, a significant share of illegal migrants reside and work in countries that do operate TFWPs.

All of the six TFWPs under consideration have generated at least some illegal immigration. The extent of illegal immigration has probably been most significant in the United States. As shown in Figure 3, the *Bracero* programme was accompanied by massive illegal immigration between 1946 and 1956. By the late 1960s, the government had managed to more or less contain the problem through a number of policy measures, including large-scale regularisation exercises (“Drying out the Wetbacks”) and strict border control and internal enforcement (“Operation Wetback”). However, there has been a rapidly increasing inflow of illegal foreign workers since the late 1960s (after the end of the *Bracero* Programme in 1964). In fact, the emergence of a large pool of illegal migrant workers has been frequently described as the primary legacy of the *Bracero* Programme (see, for example, Martin and Teitelbaum 2001).⁴¹

⁴¹ Recent analyses of Census Bureau Data and Labour Department records revealed that the number of undocumented foreign workers in the United States might be as high as 11 million, rather than six million as estimated by the US Immigration and Naturalization Service (INS).

Figure 3: Deportable Aliens Located in the United States, 1940-1999
(Source: see Table A6)



While not a major problem at the time, there have been reports of some illegal immigration and employment during the *Gastarbeiter* recruitment period in Germany. For example, because of long waiting lists, many Turks did not want to wait and entered Germany as tourists and took up employment “illegally”, mainly in construction and restaurants.

Importantly, even countries that introduced very harsh measures against circumvention of their TFWPs, such as Singapore and Kuwait, have not been immune to the problem. In Singapore, a recent Immigration Amendment Act (1998) significantly increased the punishment of all agents involved in illegal immigration. The maximum punishment for illegal entry was revised to six months’ jail and three

strokes of the cane, with traffickers and those who abet illegal immigration and departure also liable to caning and six to 24 months of jail. The Act also raised the penalty for employing an irregular immigrant to S\$20,000 and stipulated that company chiefs would be held personally liable.⁴² There are now also strict punishments for harbouring an illegal immigrant.⁴³

Although data are scarce and probably not indicative of the actual extent of illegal immigration, available estimates (see Table 5) suggest that the number of illegal foreign workers has risen considerably since the mid 1990s and the Asian crisis⁴⁴, despite a relatively strict policy against illegal immigration since the late 1980s.⁴⁵

⁴² Another measure implemented in 1998 was the introduction of new work permit identification cards with enhanced security features (including fingerprints and photograph) for foreign work permit holders (“3-in-1”card: work permit, visit pass, and disembarkation/embarkation card). Public law enforcement vehicles are equipped with online computers that may be used to check the identity and legal status of any foreign worker with a Work Permit Identification Card.

⁴³ From 1 August 2000, homeowners have been able to check the legal (immigration) status of their foreign tenants online at

http://www.gov.sg/mha/sir/check_immi/check_immi_sts.html

⁴⁴ Most illegal foreign workers are apprehended in the construction industry. Interestingly, an investigation carried out by the Ministry of Labour in 1995 revealed that most of the convicted employers of illegal immigrants in the construction industry had not reached their dependency ceilings yet and were thus actually allowed to hire more legal workers. However, these employers deliberately chose to hire illegal foreign workers, thereby avoiding the foreign worker levy (Wong 1997).

⁴⁵ Due to a lack of data for 1999 and 2000, it is too early to assess the effectiveness of the described measures introduced in 1998.

Table 5: Arrested Illegal Foreign Workers in Singapore, 1983-1998

	1983	1985	1991	1992	1993	1995	1997	1998
Arrested illegal foreign workers	3,700 ¹	9,500 ¹	2,090 ¹	1,797 ¹	1,538 ¹	10,000 ²	14,000 ²	23,000 ²

Sources: ¹ Ministry of Labour, ² Singapore Immigration and Registration (SIR)

Similarly, while it managed to avoid the problem for a relatively long time, Kuwait has recently also been confronted with what appears to have become a significant number of illegal foreign workers. Under the *kafala* recruitment system, foreigners are permitted to enter and take up employment in Kuwait only if they are under the sponsorship of a Kuwaiti *kafeel* (=sponsor). Importantly, Kuwaiti law stipulates that the *kafeel* and employer of a foreign worker must be one and the same person. However, there is now an increasingly common practice of “selling visas”, i.e. the *kafeel* no longer fulfils the role as the employer of the foreigner under his or her sponsorship. Instead, some *kafeels* sell visas to the foreign worker (either directly or indirectly by selling it to a recruitment agency in the potential immigrant’s country of origin) with the unwritten understanding that the foreigner can work for an employer other than the sponsor. Such a visa has become known as an “Azad (free) Visa”. In her study, Shah (2000) reports that about 15% of the 800 foreign workers interviewed said that they had come on such an “Azad Visa”. An amnesty in 1997, allowing all foreign workers in illegal status to leave the country without being fined or jailed, encouraged 11,000 persons to come forth and leave the country (Shah and Menon 1999).

Finally, it is probably safe to generalise that TFWPs that target highly skilled workers have been less affected by circumvention than programmes that target largely unskilled workers. However, while evidence of significant circumvention is more difficult to come by, one may expect TFWPs that target highly skilled workers to also be accompanied by at least some illegal employment of foreign workers.

Importantly, while being a serious problem in itself, circumvention also exacerbates some of the other adverse consequences of TFWPs. For example, illegal foreign workers are even more vulnerable to exploitation and abuse by both employers and recruiters (“traffickers”) than legal migrants. Furthermore, illegal immigration also distorts the intended mechanisms of a TFWP. For example, where cheap illegal migrant labour can be hired without much risk of detection and fired whenever convenient, native employers may actually prefer to hire illegal migrant workers rather than workers that have been admitted through the TFWP.

4 Implications

Despite some common elements of policy design (such as the restriction of employment to the sponsor)⁴⁶ and some differences in outcomes (such as illegal immigration, which was a serious problem for the *Bracero* programme but a somewhat smaller problem under the *Gastarbeiter* programme), the discussion thus far suggests that TFWPs have been quite different in design but more similar in their

adverse consequences. Importantly, it appears as if policy-makers face a trade-off in adverse consequences, with different combinations of policy parameters generating the same set of adverse consequences but to different degrees. For example, in Kuwait and Singapore, native worker opposition to TFWP has been reduced at the cost of almost complete segmentation of the labour market.

What are the policy implications of this empirical evidence? There are basically two ways of interpreting the evidence. On one hand, the empirical evidence may be used to argue that TFWPs simply do not work and should therefore be abandoned altogether (the negative argument). On the other hand, it could be argued that the empirical evidence simply suggests that TFWPs – as we know them – do not work, but that there is a possibility, and a need, to learn from past policy failures and design new types of TFWPs that avoid these mistakes (the positive argument). Section 4.1 briefly discusses and evaluates each of these views. Section 4.2 then identifies the basic policy principles for making TFWPs work.

4.1 The Need to Make TFWPs Work

Given that “guest worker programmes have failed wherever and whenever they have been tried” (Martin 2000), there appears to be a consensus among academic scholars of TFWPs that such programmes are a *mirage* (Martin and Teitelbaum 2001), such that “Gastarbeiter policy initially seems like a simple

⁴⁶ Naturally, commonalities in policy design have been strongest between programmes that target similar skill groups of workers and that have been designed

solution to a complex problem but any solace taken in it is illusory over the long run.” (Papademetriou, Martin et al. 1982). In other words, the evidence presented in sections 2 and 3 is interpreted as a clear indication that the concept of a TFWP is inherently flawed and that such programmes can never work, no matter what the policy design. The policy implication of this “negative argument” thus is that the idea of temporary employment of foreign workers should be abandoned altogether.

In contrast, one could also make a positive argument based on the notion that even if all the different TFWPs have “failed” in the past⁴⁷, it does not necessarily follow that a TFWP can never be made to work. To put it in the most simplistic terms, could it not be that past and existing programmes have failed because they have all made the same, or at least similar, mistakes in their policy designs? If that is indeed acknowledged as a possibility, could we not identify these common policy flaws and think about a completely new type of TFWP that avoids and learns from these mistakes?

To be sure, while perfectly logical and legitimate, the case for this positive argument for the quest for a new type of TFWP appears to be somewhat weaker than

under similar political systems.

⁴⁷ Importantly, although sections 2 and 3 have shown that all reviewed TFWPs have been afflicted with significant adverse consequences (despite their differences in policy design), it is at least debatable whether one can therefore conclude that all these programmes have “failed”. What exactly constitutes failure of a programme very much depends on how failure is defined. For example, current discussions about new TFWPs for Mexican farm labour in the United States clearly suggest that the primary objective of such a programme would be to reduce illegal immigration from Mexico. Policy success and failure are thus defined in terms of the programme's

the negative argument, given that the empirical evidence does suggest that different policy designs have been tried out, and all of them led to significant adverse consequences. However, the positive argument gains in importance when considering the unsatisfactory alternatives to a TFWP.

At the risk of simplification, one may broadly identify four policy alternatives to a TFWP: (i) grant permanent residence to, or permit free in- and outflows of, the needed foreign workers; (ii) rely on foreigners admitted on humanitarian grounds to fill labour shortages; (iii) tolerate illegal immigration as a way of providing labour to the host economy; and (iv) decide to not employ foreign workers and close the border with strict enforcement.

In principle, the first alternative may be highly desirable and has in fact been implemented in certain parts of the world (such as the EU). The history of labour immigration programmes shows, however, that the political realities in most countries are such that immediate permanent residence is usually restricted to highly skilled workers and refugees, while free movement of labour across borders is usually agreed upon between countries that are relatively similar in terms of their economic development. In other words, for most countries, granting all foreign workers immediate permanent residence or tolerating their free flow across national borders is a nice thought but certainly not realistic alternative to a TFWP.

capacity to actually reduce illegal immigration. Clearly, other programmes may have different primary objectives.

Similarly, the second alternative of relying on foreigners admitted on humanitarian grounds to fill labour shortages is obviously equally problematic as there can never be a guarantee that admitted refugees have the right skills and incentives to actually do so (or, for that matter, that they will be numerous enough).

The third policy alternative, illegal immigration, has been widely used in many different countries, most notably the United States, Korea and Japan. In the United States, currently more than half of all farm workers are undocumented foreigners (Taylor and Martin 2000). Hanson and Spilimbergo (2001) show that internal and border enforcement efforts have been systematically relaxed during periods of high labour demand. In other words, policy makers in the United States have chosen to provide the economy with unskilled foreign labour through what is frequently called “benign indifference” to illegal immigration. Similarly, it is well known that, since the emergence of labour shortages in the late 1980s, Korea and Japan have used their “trainee programmes” as a vent for importing unskilled foreign workers that eventually stay and fill job vacancies as illegal foreign workers.

There now is a considerable literature that describes the hardship of illegal foreign workers and the highly undesirable nature of illegal immigration as a de-facto policy programme. However, as with TFWPs, the question arises whether there are any realistic and more desirable policy alternatives to such a policy. This question has in fact been at the core of debates about what to do about illegal immigration in the United States. Opponents of a new TFWP for Mexican farm workers argue that such programmes have shown to exacerbate, rather than reduce,

illegal immigration. However, one may still counter-argue that new TFWPs that learn from past policy mistakes may succeed where past or existing programmes have failed. The fact remains that illegal immigration is highly undesirable and that there is, in principle, no reason to assume that a carefully designed legal TFWP would in any way be inferior to the illegal importation and employment of foreign workers.

Finally, the fourth alternative to a TFWP would be to decide not to employ foreign workers at all. Naturally, in this case there would be no need for a TFWP. Depending on one's point of view in the never-ending debates about the nature of labour shortages in what are supposed to be competitive market economies, this may or may not be a desirable policy for certain countries. However, there are some labour-scarce countries (again Singapore and Kuwait are the best cases in point) in which it would be virtually unimaginable to do without foreign workers, at least at the present point in time. And those who believe in existing labour market segmentations and the "structural demand" for foreign workers in most industrialised countries would argue that a very similar argument can in fact be made for most industrialised countries.

It may therefore be concluded that most countries simply do not have viable alternatives to the temporary employment of foreign workers. There is thus a need to carefully study past and existing TFWPs, identify and learn from their policy mistakes, and design new types of TFWPs that work.

4.2 Basic Principles for Making TFWPs Work

This section identifies the main sources of the adverse consequences discussed in section 3 and suggests seven basic principles for making TFWPs work.

Principle 1: De-commodify foreign workers by giving them (at least some) freedom of movement within the host country's labour market

Vulnerability is often a direct consequence of the “commodification” (or “marketisation”) of migrant *workers*. To be sure, if the commodified object can be conceptually and practically separated from its owner, commodification may not be a problem but desirable, as well-functioning markets can be an economically efficient resource allocation mechanism that allow each agent to maximise the return on his or her traded resource (be it commodities or factors of production). However, the problem with migrant labour is that, in contrast to international trade and capital flows, international labour migration generally involves the cross-border movement of the factor of production (“labour”) *and* its owner (the “migrant worker”). There is thus a danger that the worker rather than the factor of production becomes the object traded on the market. Where this is the case, the worker is denied agency and cannot act as an independent decision-maker looking for the most profitable employment opportunities anymore. Instead, commodified workers are effectively sold to employers who assume almost full control over their purchased “property”.

The first principle for reform thus is to de-couple the factor of production, “foreign *labour*”, from its owner, the foreign *worker*, and grant the worker agency

over his or her labour services. This can only be achieved if foreign workers are given at least some freedom of movement (and thus the freedom to choose and change employers) within the host country's labour market. The operationalisation of this principle in practice necessitates the elimination of the sponsorship requirement that currently exists in most countries (see the discussion in section 2), which is no longer viable as native employers can no longer be sure that they will be able to employ a certain foreign worker until recruitment costs have been recovered.

Importantly, in addition to reducing foreign workers' vulnerability, granting foreign workers freedom of movement also benefits the host country. Specifically, it increases the efficiency of the host country's labour market by enabling foreign workers to respond to wage differentials and thereby help equalise the value of the marginal product of all workers across labour markets. This point has recently been made by Borjas (2001) who argues that "immigration greases the wheels of the labour market by injecting into the economy a group of persons who are very responsive to regional differences in economic opportunities" (p.70).⁴⁸ Such efficiency gains may be particularly pronounced where the mobility of native workers is relatively low (such as in the EU⁴⁹).

⁴⁸ In fact, Borjas (2001) finds that, in the United States, foreign workers are more responsive to wage differentials than native workers and make up a disproportionately large fraction of the 'marginal' workers who chase better economic opportunities and help equalise opportunities across areas" (p.70).

⁴⁹ In 2000, only 225,000 people (0.1 percent of the total EU population) changed their official residence between two countries. Those numbers are a fraction of the mobility observed in the United States, where about 2.5 percent of the population changes states every year (European Commission 2002).

Principle 2: Determine the number of foreign workers to be admitted by letting the price mechanism respond to native employers' demand for foreign workers

In contrast to programmes of immigration that grant foreigners permanent residence upon entry (such as humanitarian programmes, diversity programmes, etc.), the rationale and nature of a TFWP are predominantly *economic*. As such, their efficiency, i.e. the extent to which TFWPs generate economic benefits for all sides involved, largely depends upon the degree to which its policy parameters are derived from fundamental principles of economics. One of the most important principles in this context is that employer demand for foreign workers is largely a function of the *price* of labour.

In an open-economy setting, profit-maximising employers may have a number of options in responding to upward pressure on the real wage of native labour. They may: (i) increase the capital- or technology-intensity of the production process; (ii) re-locate the production process to foreign countries where (pressures on) real wages are lower and increase the intensity of work; (iii) increase working hours of employed native workers or try to increase native labour supply by encouraging previously inactive natives to join the work-force; (iv) close down production of that commodity and start producing a different commodity whose production process is less labour intensive; or (v) employ foreign workers.

The important point here is that the price mechanism plays a critical role in determining the employer's optimal choice between employing foreign workers and the other four options. This means that TFWPs that do not "get the price right" (such

as programmes that charge an economically-oriented work permit fee that is too low) or that do not allow the price mechanism to respond to the employer's demand for foreign workers at all (such as programmes that impose only administrative fees for the recruitment of foreign workers) can be expected to generate economic inefficiencies and bloating (as employers may not be considering alternatives to employing foreign workers).

A key policy principle for making TFWPs work is thus to "put price back into the labour market" (Bach 2001, p. 115) by charging employers a fee for foreign workers that is high enough as to not only adequately reflect foreign workers' real supply price (including all recruitment costs) but also to take account of any industrial policy objectives that the government may wish to pursue (such as restructuring the economy toward more capital- or technology-intensive industries). Imposing such a price on employers would thus achieve the twin goals of increasing efficiency and reducing bloating. It is also likely to reduce tendencies of labour market segmentation as wages are not allowed to drop to levels that are too low to reflect the real supply price of foreign labour any longer.⁵⁰

⁵⁰ This argument depends on the idea that native workers' unwillingness to work in 3-D (dirty, dangerous, difficult) sectors may simply be a function of wage (see, for example, Lucas, 1981). The argument goes that if there were no immigrants, it may be conceivable that such jobs would offer distinctly higher wages, determined by an appropriate 'compensating wage differential' that takes account of the non-monetary disadvantages associated with working in that sector. However, Piore (1979) suggests that wage increases at the bottom of the hierarchy would upset socially defined relationships between status and remuneration. 'Thus the cost to employers of raising wages to attract low-level workers is typically more than the cost of these workers' wages alone; wages must be increased proportionally throughout the job

Principle 3: Acknowledge potential policy-irreversibilities and establish clear procedures for the orderly exit of foreign workers into programmes that grant them permanent residence and the right to family reunion or for their return home

In addition to the absence of economic incentives that encourage employers to keep the number of foreign workers employed in line with economic fundamentals of the labour market, the problem of bloating arises because of policy makers' reluctance to acknowledge potential policy irreversibilities in the design of TFWPs. In particular, the empirical evidence clearly suggests that the number of temporary foreign workers resident in the host country can not always be increased and decreased as a simple function of economic conditions or other policy preferences, as suggested by an econometric framework of manpower planning.⁵¹ Instead, changing expectations on part of the foreign worker and pressures on the host country (especially on a liberal democracy) to grant workers who have been employed for a certain number of years the right to family reunion create path dependencies that limit the host country's ability to reduce the number of admitted foreign workers at will.

hierarchy in order to keep them in line with social expectations; a phenomenon known as structural inflation' (Massey 1993, p. 441). Piore (1979, p.34) further points out that 'the dilemma is that if the jobs at the bottom of the hierarchy are somehow eliminated, e.g. through mechanization, the jobs directly above them would then be at the bottom and eventually be shun by native workers.

⁵¹ For a critical discussion of manpower planning exercises, see Richards and Amjad (1994).

Therefore, it should be recognised at the stage of policy design that some admitted foreign workers may seek permission to remain in the host country on a permanent basis and to bring their families into their country of employment. This means that the implementation of any TFWPs must also include mechanisms for exit into different and “better” programmes that grant foreign workers permanent residence status and the right to family reunion. On the other hand, there also need to be clear procedures for the return of migrant workers who exit TFWPs without upgrading into permanent programmes.

All this implies a re-conceptualisation of TFWPs as programmes that may be joined on a temporary basis (with possibilities of exit into other “better” programmes or return home) rather than programmes that imply that the foreign worker’s stay in the host country is strictly temporary with no possibility of upgrading to legal permanent residence status, or that show “benign indifference” to foreign workers’ permanent stay as illegal foreign workers.

Principle 4: Recognise native workers’ entitlement to share in the economic benefits obtained from TFWPs and, if necessary, compensate native workers for real reductions in economic opportunity as a result of the implementation of such programmes

Native workers’ opposition to a TFWP ultimately derives from their perception of such programmes as policies that reduce their economic opportunities for the benefits of employers and the economy at large. Of course, whether these

perceptions are justified, in the sense that labour immigration adversely impacts on native workers' wages and employment in practice, needs to be empirically assessed and verified for any given labour market. To be sure, given the disagreement within both the theoretical and applied literature on this issue⁵², this is likely to be a formidable and highly controversial exercise.

Where a TFWP is found to have negative consequences for native workers, the key to reducing native workers' opposition to such programmes is to compensate them for their reductions in economic security. More specifically, in terms of the simple labour market model depicted in Figure 2, what is required to make a TFWP truly mutually beneficial for both employers and native workers is a mechanism that, first, redistributes the immigration-induced income loss to native workers (area ABCD in Figure 2) back to native workers (from native employers), and, second, splits the "immigration surplus" (area BDE in Figure 2) among native employers and native workers.⁵³

⁵² The general picture that emerges from empirical *labour market studies* is that the impact of immigration on the labour market outcomes for citizens is only minor (see, for example Bean et al. 1988, Card 1990, Hunt 1992, Roy 1997). It has been recently pointed out, however, that there is a general tendency in these empirical studies to treat particular labour markets as closed and to ignore the potential immigration-induced out-migration of citizens, which would increase labour supply (and thus affect the labour market outcomes for non-migrants) in other regions. The immigration-migration nexus may therefore *transmit* the effects of immigration away from the immigrant destination to the final destinations of citizen out-migrants (Walker, Ellis et al. 1992). Existing empirical studies of this nexus have been relatively recent, confined to the United States, and show conflicting results (e.g. Filer 1992; Walker et al. 1992; Card 2001).

⁵³ Of course, a similar argument can be made for other policies, such as trade liberalization, which generates similar adverse distributional consequences native

One can imagine a variety of mechanisms that compensate native workers for their reduced income and employment opportunities. For example, the government could charge native employers a fee for each foreign worker employed (as it is currently done in Singapore) and then distribute the revenue (e.g. as simple periodic hand-outs) among native workers who work in sectors that foreign workers have been admitted to. Under such a system, the government would need to assess and decide on the appropriate fee that would compensate native workers and still leave native employers better off.

Alternatively, in countries with high levels of unionisation, one could imagine a more market-based system under which native workers collectively decide on the compensation in exchange for which they would agree to the employment of a certain number of foreign workers. Such a system would essentially be based on a bargaining process, where native employers, native workers, and the government come together and bargain over the number of foreign workers to be admitted and employed, and over the price (work permit fee) that native employers need to pay as compensation to native workers.⁵⁴

workers in import-competing industries. However, based on Rodrik (2001), it may be argued that the beneficiaries of immigration find it more difficult to organize than the beneficiaries of trade liberalization. In the case of immigration, there is thus a *special need* of a compensating mechanism that reduces the opposition to the employment of foreign workers by assuring that the (more organized) potential opponents of immigration (native workers who compete with immigrants) are compensated for their reductions in economic security.

⁵⁴ For a detailed analysis of this mechanism, see Weinstein (2001).

To be sure, the nature and type of mechanism is likely to be specific to the given economic environment and the existing institutional capabilities of the host country. A detailed analysis of the circumstances and institutional settings under which a particular mechanism is most applicable is outside the scope of this paper. However, whatever the specific nature and type of compensation mechanism chosen in practice, the underlying idea is to align the economic interests of native workers and employers by explicitly recognising native workers' entitlement to share in the economic benefits to be obtained from TFWPs.

As an aside, one may speculate about the effects of the elimination of the economic grounds for native workers' opposition to TFWPs on other (non-economic) reasons for resisting the inflow and employment of foreign workers. While there is relatively little evidence, one may conjecture (and hope) that many non-economic motivations for resisting immigration, such as xenophobic sentiments, are closely bound with issues related to economic security.⁵⁵ In other words, by making TFWPs economically beneficial to native workers, one may hope that this will also reduce anti-immigration sentiments.

⁵⁵ Part of the problem is to determine what exactly constitutes xenophobia and how to measure it. Empirical studies are scarce and generate mixed results regarding the impact of economic factors. In fact, a relatively recent study of the determinants of the perception of foreigners and Jews in Germany suggests that the major significant explanatory variable is education rather than the situation of the respondent in the labour market (Fertig and Schmidt 2002).

Principle 5: Institutionalise native workers' interest in legalising the status of all foreign workers who have been illegally employed in the host country for a certain number of years without being apprehended and deported by the existing measures of law enforcement

In order to discourage circumvention, a TFWP must create an incentive structure that makes it advantageous for both employers and foreign workers to arrange employment through the legal TFWP rather than through illegal channels.⁵⁶

One obvious policy is to impose and strictly enforce fines and other penalties on employers who knowingly recruit, hire or retain illegal foreign workers. However, the experience with employer sanctions suggests that they have only been of limited effectiveness. Some of the reasons for this include the spread of false documents, the rise of subcontractors and other middlemen who often help evade enforcement, insufficient enforcement budgets and insufficient co-operation between agencies. Most importantly, there is a lack of natural incentives for self-enforcement or, in some cases, increasing incentives to defy enforcement as employers and foreign workers become dependent on each other (Martin and Miller 2000).

In order to change current incentive structures, another policy principle for making TFWPs work is to more actively support and institutionalise the natural

⁵⁶ Note that under many existing TFWPs the incentive structure is exactly the opposite, i.e. native employer and foreign workers often have a mutual interest in circumventing the existing programme.

interest⁵⁷ of all legal workers (both native and foreign) in legalising the status of all resident illegal foreign workers who have shown to successfully evade detection and deportation. While the practical operationalisation of this principle depends on the existing institutional capabilities for representing the collective interest of legal workers, where existent, trade unions could be encouraged to play a greater role in representing the interest, and especially pushing for the legalisation, of illegal migrant workers who have been employed in the host country for a certain number of years without being detected and deported.⁵⁸

Principle 6: Implement a uniform TFWP that can accommodate foreign workers of all skill-levels

Many countries operate two separate TFWPs, that is, a relatively liberal programme for the employment of skilled foreign workers, and a more restrictive programme for the employment of unskilled foreign workers. Given the economic nature of the TFWP, this dichotomy is unjustified. The decisive factor of whether to admit and employ a foreign worker or not should be whether his or her skill level is in demand in the host economy. There is no *a priori* reason why highly skilled foreign workers are inherently more desirable than the low-skilled ones. An efficient

⁵⁷ This natural interest arises from the labour market competition from illegal workers who are in a position to undercut legal workers (both natives and foreigners) in terms of wages and working conditions.

⁵⁸ This is already happening in some countries, including Italy and Spain (see footnote 35).

TFWP should be able to facilitate the inflow and employment of all foreign workers of all skill-levels

In fact, the restrictive nature of TFWPs for unskilled workers in many countries has frequently resulted in the inflow of unskilled workers who enter the country as ‘bogus asylum seekers’ and take up employment illegally, thereby congesting the host country’s asylum system (at the expense of genuine refugees).⁵⁹

Another policy principle thus is to take an “integrative approach” in the design of a TFWP, in the sense that the programme should be designed to facilitate the employment of foreign workers of any skill level.

Principle 7: Discuss and design TFWPs through social dialogue with all parties concerned, giving voice to all sides involved and affected

International labour migration generates a complex set of consequences for citizens of the host country, non-emigrant citizens of the sending country, and for migrants themselves (for a review, see Ruhs and Chang 2002). As such, in liberal democracies, the design of a TFWP may be expected to be subject to pressures from different interest groups representing the various stakeholders affected.⁶⁰

⁵⁹ Alas, it may still be argued that, however generous the programme becomes towards unskilled workers, people who want to move to rich countries are too many for this problem of “bogus asylum seekers” to become any visibly better.

⁶⁰ In a seminal study of the politics of immigration in liberal democratic states, Freeman (1995, p.886) argues that “the typical mode of immigration politics, therefore, is client politics, a form of bilateral influence in which small and well-organised groups intensely interested in a policy develop close working relationships with those officials responsible for it”.

To assure that all interest groups are represented according to their relative stakes in the programme, a final policy principle for making TFWPs work is to include all stakeholders (including native workers and the sending country) affected by a TFWP in the discussion and, at least to some extent, also in the determination of policy parameters. In particular, the inclusion of native workers is likely to reduce their opposition to such programmes, while the inclusion of sending countries may encourage them to cooperate in addressing some of the adverse consequences, especially the circumvention of the programme.⁶¹

5 Conclusion

Temporary foreign worker programmes (TFWPs) have been repeatedly criticised for their significant adverse consequences. Some of the fiercest critics of TFWPs argue that these adverse consequences are in fact inherent to the concept of a TFWP. The policy implication thus is to simply abandon TFWPs rather than continue to debate how to fix existing programmes or experiment with new ones.

Based on a comparative analysis of six TFWPs in five different countries, I suggest that this negative interpretation of the empirical evidence is unwarranted. To be sure, my empirical analysis does suggest that, despite significant differences in their design, all of the reviewed TFWPs have indeed been afflicted with a quite similar set of significant adverse consequences. They include: (i) the emergence of

⁶¹ For a recent discussion of the increasing role of Mexico in bilateral immigration negotiations with the United States, see Rosenblum (2002).

“immigrant sectors” in the host country’s labour market; (ii) the vulnerability of migrant workers to various forms of exploitation in recruitment and employment; (iii) the tendency of TFWPs to become longer in duration and bigger in size than initially envisaged; (iv) native workers’ opposition against the introduction or expansion of a TFWP; and (v) the emergence of illegal foreign workers who, together with local employers, circumvent the programme.

Scrutiny shows, however, that these adverse consequences may be attributed to a number of fundamental policy flaws underlying the design of the reviewed TFWPs. Given that most countries lack viable alternative to TFWPs, I suggest seven policy principles for making TFWPs work. These principles require policy-makers to: (i) de-couple the factor of production “foreign labour” from its owner, the foreign worker; (ii) use the price mechanism to determine the number of foreign workers to be admitted (and “get the price for foreign workers right”); (iii) acknowledge the potential policy-irreversibilities and establish clear procedures for the exit of foreign workers into programmes that grant them permanent residence and the right to family re-union or for their return home; (iv) recognise native workers’ entitlement to share in the economic benefits generated by a TFWP and, if necessary, compensate them for reduction in economic security as a result of the implementation of such programmes; (v) institutionalise all legal workers’ interest in legalising the status of all foreign workers who have been illegally employed in the host country for a certain number of years without being apprehended and deported; (vi) design a uniform TFWP that can accommodate foreign workers of all skill-

levels; and, finally, (vii) include all stakeholders (including native workers and the sending country) affected by a TFWP in the discussion and determination of policy parameters.

The proposed principles are meant to constitute a basis for discussing and thinking about new TFWPs that avoid (at least some of) the adverse consequences generated by existing programmes. Importantly, the principles are *general* in the sense that they are meant to apply across various economic environments and institutional settings. The challenge of making TFWPs work then is to operationalise these policy principles in one uniform programme, taking into account the specific socio-economic environment and especially the existing institutional capabilities of the host country in question.

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Table A1 Programme and Country Indicators

Country	United States		Germany		United States		Switzerland		Kuwait		Singapore	
Name of Programme/Visa/Work Permit	Bracero Programme		Gastarbeiter Programme		H-1B Programme		Auslaenderausweis B		Kafala -V. 18 Programme		Employment Pass R	
Years of Operation	1942-1964		1955-1973		1952-				1973-		1987-	
Stock of Migrant Workers Legally Present Under this Programme: (% share in total NC temporary workers) [% share in Total Labour Force]	1951 (Oct.) 121.6 (n.a.) [0.2%]	1959 (Oct.): 291.5 (n.a.) [0.4%]	1961: 549.0 (~100%) []	1973: 2,450.0 (~100%) [11%]	1991: 204 (n.a.) [0.2%]	2000: 425 (n.a.) [0.3%]		2000: 181.6 (51.2%) [4.6%]	1988: 444.8 (72%) [52%]	1997: 691.2 (70%) [56%]	1990: 218.4 (88%) [14%]	2000: 489.8 (80%) [23%]
Annual Number of Admissions Peak (year) Last/Latest (year)	445.2 (1956) 177.7 (1964)		948.7 (1970) 40.4 (1973)		302.326 (1999) 302.326 (1999)		22 (2001) 22 (2001)		n.a. n.a.		n.a. n.a.	
Population and Immigration	1950	1964	1961	1973	1990	2000	1993	2000	1990	1999	1990	2000
Total Population	152,271.4	191,888.8	56,174.8	62,090.1	248,709	274,087	6,969	7,170	2,141.5	2,107.2	3,047.1	4,017.7
Total NC Residents (% share in total population)	2,052.6 (1.3%)	n.a.	686.2 (1.2%)	3,966.2 (6.4%)	11,770 (4.7%)	17,758 (6.5%)	1,260.3 (18.1%)	1,384.4 (19.3%)	1,560.8 (73%)	1,303.3 (62%)	423.3 (13.9%)	1,044.6 (26.0%)
Total Labour Force (LF)	62,208	73,091		22,272.7	125,840	140,315.8	3,890.7	3,990.1	854,716	1,226	1,537	2,094
Total NC Workers (% share in total LF)	n.a.	n.a.	549.0 (1.3%)	2,450.0 (11.0%)	n.a.	10,664 (7.6%)	899 (24%)	885.8 (22.2%)	735.9 (86%)	1,004.7 (82%)	n.a.	n.a.
Total NC Workers with a Temporary Visa (% share in total LF)	n.a.	n.a.	549.0 (1.3%)	2,450.0 (11.0%)	n.a.	n.a.		350.1 (8.8%)	735.9 (86%)	1,004.7 (82%)	248.2 (16.15%)	612.2 (29.24%)

Unless indicated otherwise, all figures are in thousands

Sources:

US (*Bracero* Programme): Calavita (1992), Griego 1983, Galarza (1964), US Census Bureau, US Immigration and Naturalisation Service (INS)

Germany (*Gastarbeiter* Programme): all figures based on *Statistisches Bundesamt*; for computations see Ruhs 2001a

US (H-1B Programme): Lowell 2000, Usdansky and Espenshade 2000, Martin, Chen, and Madamba 2000, US Census Bureau, US Immigration and Naturalisation Service (INS)

Switzerland (*Auslaenderausweis B* Programme): *Bundesamt fuer Auslaenderfragen* (www.auslaender.ch), Pigué and Mahning 2000, Golder and Straubhaar 1997

Kuwait (*Kafala – Visa 18*): all figures based on Kuwaiti Ministry of Planning, *Annual Statistical Abstract*, for computations see Godfrey and Ruhs 2002

Singapore (Employment Pass R): all figures based on Singapore Department of Statistics, *SINGSTAT*, www.singstat.gov.sg; for computations see see Ruhs 2001b

Table A2 Policy Parameter I: Number

	<i>Bracero Programme</i>	<i>Gastarbeiter Programme</i>	<i>H-1B Programme</i>	<i>Auslaenderausweis B</i>	<i>Kafala-V.18 Programme</i>	<i>Employment Pass R</i>
	United States	Germany	United States	Switzerland	Kuwait	Singapore
Quotas	no, but Mexican authorities imposed quotas on Mexican states	no	yes, annual (country-wide) quotas set by Congress; as of 2001, 195,000 per year (excluding dependents)	yes, annual quota for first issuance (no quotas for renewals); as of 2001, total quota is 22,000 per year, including quotas of 12,000 for distribution by the cantons and 10,000 for distribution by the <i>Bund</i>	no	yes, sector-specific "dependency ceilings" that specify the maximum share of foreign workers in the total company workforce (e.g. 83% in construction, in 1999)
Permit Fees (administrative or economically oriented)	no	yes (administrative), 350 DM per recruited worker	yes (administrative), \$1,110 per worker ("slow track") or \$2,110 per worker ("fast track")	yes (administrative)	yes (administrative), 10 KD per work permit (new arrival and transfer), plus 2 KD per year of employment (first time employment and renewal)	yes (economically oriented), flexible, sector-specific "foreign worker levies" (e.g. 470 S\$ per month per unskilled foreign worker in construction-1999)
Labour Market Test	yes, primarily based on employer attestation	yes, primarily based on certification by Municipal Labour Offices	yes, primarily based on employer attestation, with special attestation requirements for "H-1B dependent" firms	yes, primarily based on certification by cantonal labour market office	yes, primarily based on certification by the Ministry of Labour	no

Sources:

Bracero Programme: Galarza 1964, Griego 1983, Massey and Liang 1989, Calavita 1992

Gastarbeiter Programme: Miller and Martin 1982, Bhagwati, Schatz et al. 1984, Martin 1994, Ruhs 2001a

H-1B Programme: Lowell 2000, Usdansky and Espenshade 2000, Martin, Chen et al. 2000, INS 2000, Auerbach 2001, www.ins.gov/graphics/index.html

Auslaenderausweis B Programme: Golder and Straubhaar 1998, Piguat and Mahnig 2000, www.admin.ch

Kafala-Visa 18 Programme: Longva 1997, Godfrey and Ruhs 2002

Employment Pass R Programme: Wong 1997, Atipas 2000, Ewing-Chow 2000, Ruppert 2000, Ruhs 2001b, www.mom.gov.sg

Table A3 Foreign Worker Levies and Dependency Ceilings in Singapore, 1980-2001

	MARINE			MANUFACTURING				CONSTRUCTION			DOMESTIC SERVICES
	skilled	unskilled	dependency	skilled	unskilled workers levy	dependency	skilled	unskilled	dependency	levy	
	workers	workers	ceiling	workers	below	above	workers	workers	ceiling	(all workers)	
	levy	levy	(% share of	levy	ceiling	ceiling	(% share of	levy	levy	(% share of	
(S\$ per month)	(S\$ per month)	foreigners)	(S\$ per month)	(S\$ per month)	(S\$ per month)	foreigners)	(S\$ per month)	(S\$ per month)	foreigners)	(S\$ per month)	
1980								230*			
1981								230*			
1982	30% of monthly wage (>\$150)		-	30% of monthly wage (>\$150)		-	-	30% of monthly wage (>\$150)		-	
1983			-			-				-	
1984	200		-	200		-		200		-	
1985			-			-				-	
1986	350		-	350		-		350		-	
1987	140		50%	140		-	50%	140		50%	
1988	170			170		-	50%	170			
1989	250		40%	250		-	40%	250		50%	
1990	300			300		-	40%	300			
1991	250	350		300		-		250	350	66%	
1992	250	350	66%	250	300	450	35%-45%	250	400	83%	
1993	200	385		200				200	440		
1994	200		75%	200	300	450	35%-45%	200			
1995	200			200				200	440	75%	
1996	200			200				200			
1997	200			200	300	450	35%-45%	200	440	83%	
1998	100	385	75%	100	330	400	40%-50%	100	470	83%	
1999	30	295	75%	30	240	310	40%-50%	30	470	83%	
2000											
2001											

Notes: * non-Malaysian foreign workers only

Sources: Tat 1992, Fong , Ofori 199?, Wong 1997, Athukorala and Manning 1999, Ruppert 2000, Asher 2000, Atipas 2000, Ewing-Chow 2000, www.gov.sg/mom

Table A4 Policy Parameter II: Selection and Recruitment Mechanism

	Bracero Programme	Gastarbeiter Programme	H-1B Programme	<i>Auslaenderausweis B</i>	<i>Kafala-V. 18 Programme</i>	<i>Employment Pass R</i>
	United States	Germany	United States	Switzerland	Kuwait	Singapore
Skill Requirements	unskilled farm workers	as specified by employer	professional workers for "specialty occupations"	mainly (but not exclusively) skilled workers	as specified by employer	semi-skilled and unskilled workers with income < S\$2,000
Restrictions on Nationalities	yes, Mexico (bilateral agreement)	yes, Italy, Greece, Spain, Turkey, Former Yugoslavia (as determined by bilateral agreements)	no	yes, first preference is given to citizens of the EU and EFTA; workers from other countries admitted in exceptional cases	yes, some nationalities prohibited; initially preference for Arabs; since Second Gulf War preference for Asians;	yes, only 14 nationalities allowed (as of March 2001)
Sponsorship Requirement	yes	yes	yes	yes	yes	yes
Employer's/Sponsor's Duties:						
Cover transport costs to job	yes	No (but see work permit fee)	no	no	no	no
cover repatriation costs	yes (security bond required)	no (but see work permit fee)	only if dismissed before end of contract		yes	yes (security bond required)
provide housing	yes (must be "adequate")		no	no	no, (but often provided)	yes, (must be "acceptable")
provide meals	yes (at "reasonable" cost)	yes (must be "adequate")	no	no	no	no
provide (private) health benefits	yes	no	yes, same as US workers	yes, same as Swiss workers	yes	yes
other	pay 3.00\$ per each day of unemployment under a period equal to 75% of the contract period					provide workmen's compensation
Recruitment:						
public	yes, jointly administered by Mexico and US	yes, administered by German Federal Labour Office	no		no	yes, but very limited
private	yes, but very limited	yes, but very limited	yes		yes	yes, 1,100 licensed private agencies in Singapore (as of March 2001)

Sources: see Table A2

Table A5 Policy Parameter III: Features of Migrants' Bundle of Rights

	Bracero Programme	Gastarbeiter Programme	H-1B Programme	Auslaenderausweis B	Kafala-V. 18 Programme	Employment Pass R
	United States	Germany	United States	Switzerland	Kuwait	Singapore
Duration of Visa/ Work Permit	less than one year, renewal possible	initially one year, renewal possible; after residence of three years, two-or- more-year work permit may be issued	three years, renewable for a total of up to six years	one year, renewal possible and unlimited in number	up to three years, renewal possible and unlimited in number	two years, renewable for a total of up to four years
Change of Status	no	yes, after a minimum residence of five years, worker may be granted permanent residence	yes, workers may be granted permanent residence ("green card") if sponsored by a US employer	yes, after a minimum residence of five years, worker may be granted permanent residence	no	no
Family reunion	no	yes, after three years of continuous residency if worker is able to provide housing "suitable for a family"	yes, spouses and minor children are granted H-4 visas, permitting them to attend school in US but not to accept employment	yes, spouse and minor children are granted residence permit; spouse may also be granted work permit	no	no
Employment Restricted to Specific Sector	yes, agriculture and railways (1942-46 only)	yes	yes, as indicated in H-1B petition (but "portability provisions" in some cases)	yes	yes, private business sector	Yes, manufacturing, construction, service sector, domestic services
Employment Restricted to Specific Employer	yes	yes	yes, (but "portability provisions" in some cases)	yes	yes	yes
Wage Restrictions	yes, equal to those prevailing in the area, and not less than 30 cents p. hour ("collective bargaining" between Mexico and the US)	yes, right to equal pay	yes, higher of the actual wage paid to other workers similarly employed or the local area " prevailing wage" for the occupation	yes, employer needs to pay at least the "prevailing wage" for the occupation	no	no
Forced Savings	yes (10% of wage)	no	no	no	no	no
Social Security Benefits	no, most benefits provided by employer; exemption from social security and income taxes	yes, right to equal treatment with regard to social security	yes, same as US workers	yes, same as Swiss workers	no, CHECK	no, exemption from contributions to "Central Provident Fund"
Other	discrimination against Braceros officially prohibited	right to equal working conditions	right to equal pay, fringe benefits, and working conditions			numerous restrictions, e.g.: no marriage/cohabitation with Singapore national; no pregnancy (mandatory pregnancy checks)

Sources: see Table A2

Table A6 Apprehensions and Departures of Illegal Aliens in the US, 1892-1999

Fiscal Year	Deportable aliens located ¹	Formal removals ³	Voluntary departures ⁴
1892-1999	39,918,152	2,437,135	35,975,142
1892-1900	NA	25,642	NA
1901-10	NA	119,769	NA
1911-20	NA	206,021	NA
1921-30	128,484	281,464	72,233
1931-40	147,457	185,303	93,330
1940	10,492		
1941-50	1,377,210	141,112	1,470,925
1941	11,294		
1942	11,784		
1943	11,715		
1944	31,174		
1945	69,164		
1946	99,591		
1947	193,657		
1948	192,779		
1949	288,253		
1950	468,339		
1951-60	3,598,949	150,472	3,883,660
1951	509,040		
1952	528,815		
1953	885,587		
1954	1,089,583		
1955	254,096		
1956	87,696		
1957	59,918		
1958	53,474		
1959	45,336		
1960	70,684		
1961-70	1,608,356	101,205	1,334,528
1961	88,823	8,181	52,383
1962	92,758	8,025	54,164
1963	88,712	7,763	69,392
1964	86,597	9,167	73,042
1965	110,371	10,572	95,263
1966	138,520	9,680	123,683
1967	161,608	9,728	142,343
1968	212,057	9,590	179,952
1969	283,557	11,030	240,958
1970	345,353	17,469	303,348

Table A6 Continued

Fiscal Year	Deportable aliens located ¹	Formal removals ³	Voluntary departures ⁴
1971-80	8,321,498	240,217	7,246,812
1971	420,126	18,294	370,074
1972	505,949	16,883	450,927
1973	655,968	17,346	568,005
1974	788,145	19,413	718,740
1975	766,600	24,432	655,814
1976	875,915	29,226	765,094
1976,TQ ²	221,824	9,245	190,280
1977	1,042,215	31,263	867,015
1978	1,057,977	29,277	975,515
1979	1,076,418	26,825	966,137
1980	910,361	18,013	719,211
1981-90	11,883,328	232,830	9,961,912
1981	975,780	17,379	823,875
1982	970,246	15,216	812,572
1983	1,251,357	19,211	931,600
1984	1,246,981	18,696	909,833
1985	1,348,749	23,105	1,041,296
1986	1,767,400	24,592	1,586,320
1987	1,190,488	24,336	1,091,203
1988	1,008,145	25,829	911,790
1989	954,243	34,427	830,890
1990	1,169,939	30,039	1,022,533
1991-99	12,852,870	753,100	11,911,742
1991	1,197,875	33,189	1,061,105
1992	1,258,481	43,671	1,105,829
1993	1,327,261	42,542	1,243,410
1994	1,094,719	45,674	1,029,107
1995	1,394,554	50,924	1,313,764
1996	1,649,986	69,680	1,573,428
1997	1,536,520	114,432	1,440,684
1998	1,679,439	172,887	1,570,036
1999	1,714,035	180,101	1,574,379

¹ Aliens apprehended were first recorded in 1925. Prior to 1960, data represent total aliens actually apprehended. Since 1960, figures are for total deportable aliens located, including nonwillful crewman violators.

² The three-month period—July 1 through September 30, 1976—between fiscal year 1976 and fiscal year 1977.

³ Formal removals include deportations, exclusions, and removals. See Yearbook text for further information about the different types of formal removals.

⁴ Voluntary departures includes aliens under docket control required to depart and voluntary departures not under docket control; first recorded in 1927.

Source: INS, *1999 Statistical Yearbook of the Immigration and Naturalisation Service*; and *1959 Annual Report of the Immigration and Naturalisation Service*