



GUEST-WORKER PROGRAMS

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Introduction²

The pattern of international migration has changed very drastically over the course of the 20th century. Although the changes have been in a number of dimensions, one striking feature, historically unprecedented, is the sharp drop in the interest of host countries in admitting low-skilled workers on a permanent basis. This is largely due to the emergence of a highly developed welfare state in the advanced countries, as well as the simultaneous strengthening of the political influence and economic rights of workers over the post-WWII period. In this new political, social, and economic climate, foreign low-skilled workers are less attractive as permanent immigrants. They are nevertheless still needed to meet shortages in various segments of the labor market, given the demographic trends in the advanced and rapidly growing emerging economies. An appealing modern solution to this problem is the formation of guest-worker programs.

On the basis of such programs, millions of guest-workers have been recruited for temporary employment in the advanced countries. The Bracero program (1942 to 1964), established to facilitate the temporary employment of Mexican workers in the US, is one of the early examples. In the mid-1950s, rapid growth of the continental European economies created labor shortages. Germany, Austria, Switzerland, France, Belgium, the Netherlands, Denmark and Sweden responded by establishing various forms of guest-worker schemes. In the initial stages, guest-workers were recruited from southern Europe. Recruitment subsequently expanded to Turkey and North Africa. The West German government, for example, negotiated guest-worker arrangements

with Italy (1955), Greece and Spain (1960), Turkey (1961), Morocco (1963), Portugal (1964), Tunisia (1965), and Yugoslavia (1968).

With the oil-price shock and the slowdown in economic activity that followed, recruitment of guest-workers in Western Europe came to an abrupt halt. At the same time the oil-producing countries in the Middle East, especially those with small indigenous populations and low labor-participation rates, expanded their temporary migration programs to the point where foreign workers now account for most and, in some exceptional cases, practically all of the private-sector work force. Rapid growth in the East Asian economies also generated labor shortages in the late 1980s and 1990s. In the case of South Korea, Taiwan, Hong Kong, Singapore, Brunei, Japan, Thailand and Malaysia, the shortages have been addressed by recruiting temporary foreign workers or trainees from other Asian economies to work in small scale manufacturing, construction, agriculture, food processing, and various other labor-intensive activities.

Temporary migration is a particularly attractive mode of international labor mobility for the advanced host countries. In comparison with permanent migration programs, it offers them much greater flexibility in managing the stock of foreign workers and maintaining a balance between the economy's supply and demand for labor.³ With limitations on the maximum duration of stay and discretionary work-permit renewals, along with controls on new inflows, the stock of foreign labor can be managed quite effectively, provided there are sufficient incentives for guest-workers to abide by the rules of the program.

More importantly, guest-worker programs enable the host countries to meet labor shortages while avoiding long-term commitments to foreign workers in relation to permanent settlement, political rights, and access to social programs. For the authorities in the Middle East and East Asia, the possibility that temporary migrants may stay permanently is a major concern. They worry that this can have an irreversible impact on the ethnic composition of the population and threaten the political and economic status of native inhabitants, as well as the country's cultural homogeneity. By imposing strict limitations on the duration of the stay of guest-workers

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² This paper draws on my earlier studies of guest-worker programs including some in collaboration with co-authors, but primarily on Djajić (2013), Djajić and Mesnard (2013), and Djajić and Vinogradova (2013).

³ Ethier (1985) provides a pioneering analysis of the welfare implications of guest-worker migration in a model of international trade. See also Schiff (2011), Winters et al. (2003), Djajić (2013), and Djajić, and Michael (2013) for theoretical treatment and Martin (2003), Abella (2006), and Ruhs (2005) for more descriptive analysis. An extensive discussion of the successes and failures of temporary migration programs in the past is provided by Ruhs (2002).

and applying rigorous enforcement measures, including deportations, the host countries try to minimize the prospect of a guest-worker staying permanently. For Western advanced countries, the concern over whether foreign low-skilled workers stay temporarily or permanently is more related to issues such as access to social programs, the fiscal impact of immigration, and the implications of different modes of migration for the demographic structure of the population. Cultural homogeneity and the ethnic composition of the population are not as much of a concern as they are in East Asia and the Middle East. Yet even in these relatively more permissive immigration regimes, the authorities are becoming increasingly vigilant when it comes to enforcing legislation pertaining to illegal immigration. This suggests that the guest-worker programs of the future will need to be designed with greater emphasis on ensuring that the temporary foreign workers return to their countries of origin when they are no longer needed.

Aims and design

The precise aims and designs of guest-worker programs vary across countries and over time. Some economies have multiple programs, each established to compensate for a shortage in a particular segment of the labor market. One objective that these temporary migration schemes have in common is to ensure that the participants choose not to remain in the economy as undocumented aliens. Among the economies that have relied extensively on guest-workers over the last few decades, some have been successful in maintaining circularity and keeping undocumented overstays at a minimum, while others have been less successful in doing so. The point that emerges from the recent theoretical research on guest-worker migration is that the degree of host-country success in meeting this objective depends both on its policies and the market opportunities facing potential migrants.

With respect to the issue of guest-workers overstaying, for analytic purposes it is useful to draw a distinction between two types of regimes. The one in which temporary foreign workers are paid the same wage as native workers (referred to below as regime S) and another that sets the compensation of guest workers substantially below that of similarly qualified natives (referred to as regime B). S-type regimes are the norm in Western countries, while examples of the B-type regime can be observed in the Middle-East as well as in East Asian economies, where employers' associations have had a strong influence over its design. A temporary migration

program then serves not only to address shortages of low and semi-skilled labor, but also to generate employers' rents. An important consequence is that B-type programs face a specific problem that S-type programs do not: namely workers running away from their contractual employers to take up higher-paying jobs in the underground economy. The fact that in a B-type regime documented foreign workers receive lower wages than those who are undocumented, also creates a strong incentive for potential migrants to enter the host country's labor market clandestinely, rather than through official labor recruitment channels (Djajić and Vinogradova 2014).

Another noteworthy feature of a B-type regime is a tendency for the authorities to rely on deportations as an important means of controlling the stock of illegal immigrants. Japan, Singapore, South Korea, Taiwan, Malaysia, Saudi Arabia, and the United Arab Emirates are well known for their strict enforcement of laws pertaining to the residency of foreign nationals. In addition to apprehension and deportation, an illegal alien sometimes faces a fine and even a jail sentence (Vinogradova 2011). By contrast, the immigration authorities in the S-type regimes are much more reluctant to resort to deportations as an instrument of immigration control. Deportations are very costly for taxpayers, with the average cost amounting to roughly USD 12,500 per person in the USA, GBP 11,000 in the UK, and NOK 50,000 in Norway (Djajić and Vinogradova 2013). In addition, deportations have a negative impact on the country's human-rights image.

Voluntary return

From the point of view of a host country, it is important to understand the conditions under which a temporary migration program is attractive to potential participants and at the same time consistent with voluntary return. Migration and return decisions of temporary foreign workers are influenced by a wide range of variables that characterize the environment they face at home and abroad. Starting with variables that reflect market conditions, the most important is the international wage differential. International differences in price levels and rates of return on accumulated savings are also important factors, as are the immigration policies of the host country. The latter include policies with respect to the visa and other fees that migrants face when they take part in the program, the maximum duration of the work permit, and internal enforcement measures designed to combat illegal immigration. In the type B regimes,

participants are sometimes also required to make a contract-completion deposit at the time of recruitment, may have a part of their wage withheld until the end of the contract period, and face a strict deportation policy if they choose to overstay. The problem for policymakers is to identify the combinations of policy instruments that result in a voluntary return to the source country at the time of contract completion, given the economic environment in the host country and in the country of origin of migrant workers (Djajić 2013).

B-type regime

While a temporary migration scheme helps to reduce shortages of labor and diminish the incentive for employers to hire undocumented foreign workers, it also contributes to an expansion in the supply of undocumented labor if workers choose to overstay after the expiration of their work permits. Djajić and Mesnard (2013) examine the links between a B-type guest-worker program and the supply of and demand for clandestine labor in the underground economy, with a focus on how the program rules and enforcement measures of the immigration authorities influence the behavior of guest-workers, illegal immigrants, and their employers. An increase in the flow of guest-workers admitted officially through the program is found to have an ambiguous effect on the stock of illegal aliens. If the degree of intersectoral mobility of native workers is sufficiently low, an increase in the inflow of documented guest-workers can generate a larger stock of undocumented labor. By contrast, allowing each of the guest-workers to remain in the host country legally for a longer period of time, decreases the stock of illegal aliens. Noting that the stock of documented guest-workers is simply the product of the allowed inflow and the duration of each worker's authorized stay, these findings suggest that countries requiring an increase in the stock of foreign labor can achieve the objective with a more favorable outcome in terms of illegal-immigration control, by increasing the duration of each guest-worker's stay, rather than by increasing the allowed inflow.

Djajić (2013) shows that in such regimes, deportation measures and salary-withholding schemes encourage voluntary return. The effectiveness of a stricter deportation policy relative to that of an increase in the salary-withholding rate in promoting voluntary return (VR) over the overstaying (OS) option is found to be greater, the shorter the duration of a documented stay allowed by the host country and the larger the wage premium in

the underground economy. In addition, a higher rate of compensation for guest-workers reduces the attractiveness of OS relative to VR. The same is true with respect to an increase in the size of the contract-completion deposit, the duration of the guest-worker contract, and the wage of the source country. Stricter controls that increase the probability of detecting and apprehending undocumented aliens work in the same direction. A larger wage premium in the underground economy obviously has the opposite effect.

S-type regime

In the case of permissive temporary migration regimes, it is clear that if the international wage differential is very large and the duration of a guest-worker permit is relatively short, migrants have a strong incentive to remain in the host country illegally. This can be offset by stricter internal enforcement measures, which make it unattractive to become undocumented. The tendency for workers to remain in the host country after their work permit expires can also be reduced if the authorities choose migrants from source countries where the cost of living is relatively low and the expected rate of return on repatriated savings is relatively high. A low price level and a high return on accumulated assets are important pull factors that attract migrants back to their country of origin (Djajić 2010, 2013). A judicious choice of partner countries in a guest-worker program can therefore substitute, to some extent, for strict internal enforcement measures in dealing with illegal immigration. Recruiting migrants with a certain minimum initial stock of wealth also works in the same direction, especially if the rate of return on investments is higher at home than it is abroad. A migrant with larger asset holdings has a stronger incentive to go back home.

Djajić and Vinogradova (2013) more closely examine the question of the optimal timing of return of utility-maximizing guest-workers. They study the role of immigration policies and of the economic environment facing foreign workers in determining how long to overstay, should it not be optimal to return voluntarily to the country of origin at the end of the contract period. For parameter values that reflect typical economic and policy environments that guest-workers face in the host countries, an environment in which they would prefer to stay longer than allowed by the rules of the program, an adequate incentive structure is required in order to achieve strict compliance. The incentive structure may have components such as a salary-withholding scheme,

a fine for overstaying, and employer sanctions that reduce the market wage of undocumented labor.

Tougher employer sanctions can be shown to lower the incentive to remain in the host country beyond the expiration of the work permit and to encourage those who overstay to return relatively sooner to their country of origin. A higher salary-withholding rate and a larger fine for overstaying, both serve to discourage workers from overstaying. Should they nonetheless choose to stay in the host country beyond the expiration of the work permit, these policies induce overstayers to remain in the host country for a longer period of time (Djajić and Vinogradova 2013). This implies that increases in the salary-withholding rate, or in other forms of pecuniary penalties that fall short of being sufficient to guarantee strict compliance with the program rules, are counterproductive with respect to the goal of reducing the stock of undocumented aliens in the economy. They fail to reduce the flow of guest-workers transiting to undocumented status, yet they increase the duration of the undocumented stay of those who do become illegal aliens. This effectively creates a larger equilibrium stock of undocumented workers. Thus the salary-withholding rate and overstay penalty must be carefully designed in relation to the environment that guest-workers face at home and abroad to be effective in reducing the stock of undocumented workers.

Lowering the cost of migration by reducing visa fees and guest-worker levies that get passed on to the workers in the form of higher recruitment fees can be shown to make overstaying less attractive. Should some workers still choose to overstay, they will do so for a shorter period of time. Retirement benefits at home also reduce the incentive to overstay, as does a lower price level and a higher expected rate of return on investments at home. Thus recruitment of guest-workers from countries that offer their citizens more generous retirement benefits, that have a relatively low price level, and where returnees can enjoy high yields on repatriated savings, can help host countries lower the number of guest-workers who overstay and reduce the optimal duration of the overstay phase for those who fail to comply with the program rules.

A much simpler way of assuring that guest-workers return home at the end of their contract is by guaranteeing the possibility of repeat migration for program participants (Gibson and McKenzie 2014). There is very little incentive to overstay when such an offer is on the table. This, however, strips the program of the capacity to

reduce the stock of temporary migrants and gives it the features of a permanent migration scheme.

Concluding remarks

Strict compliance with the rules of a temporary migration program can be effectively achieved with an appropriate combination of policy measures and a judicious choice of countries and workers invited to participate in the program. Policies, however, have their associated costs and external effects. An important item on the agenda for future research is to examine the cost effectiveness of each measure, using economic, humanitarian, and political criteria, making it possible to determine the optimal level of each policy instrument required to achieve the host country's objectives.

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