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Israeli statistics on foreign workers: achievements and challenges of the cooperation between the Israeli Central Bureau of Statistics (CBS) and involved ministries

Submitted by Central Bureau of Statistics, Israel¹

Introduction

The problem or, rather, the issue of cooperation between national statistical offices and other governmental agencies is one of the most conspicuous common denominators of these offices. This common factor exists against a background of differences stemming from the varying structure of governmental and statistical institutions, preferences and goals of national statistics and, of course, from the very different nature of the social processes in question- such as migration processes.

It is possible to specify several problematic junctures of the cooperation issue: producing statistics is not one of the priorities of most ministries. The processes of maintaining registers and managing data are negatively influenced by this situation, as is the goal of improving data quality and scope. This frequently results in gradual deterioration of data quality. Additionally, even when registers are maintained and data is managed meticulously, lack of cooperation may result in the creation of data with a very low level of harmonization with other data types-a situation which makes it impossible to produce high-quality statistical information for decision-makers, planning bodies and the public usage. Each statistical office has developed techniques for dealing with this situation in the sphere of migration statistics as in other areas.

In my view, cooperation between statistical offices and ministries in the area of migration statistics is of special significance. In many domains of national statistics, a government statistician may rely on private bodies and/or individuals in the process of collecting basic data. Household surveys and the Census (in its classic "door-to-door" version) are two main examples of techniques which presuppose cooperation between statistical offices and individuals. Needless to say, these methods are highly useful for in-depth studies of migration. However, they cannot serve the needs of national statistics as an exclusive or even primary tool. The reason for this state of affairs is revealed when we examine the very nature of migration processes and the extent of governmental involvement (desired as well as actual) in its control.

International migration implies crossing borders. This activity is inherently connected to a nation-state's status as an exclusive supervisor of border checkpoints. In this capacity, a state's strength as well as weakness is exposed. Registration activity, as managed at border checkpoints, will necessarily be restricted to "allowed" or "permitted" types of migration. In a way, a state creates different types of migration. In this connection, one of the statistician's tasks will be to create a mechanism for estimation of illegal or undocumented types of migration.

The Israeli case is an example of a nation-state with well-developed capacities for supervising its territorial boundaries. Its ability, shaped by the Israeli special geographic location and her relationship with her neighbors, has not been shaken by the increased interconnectedness implied by globalization. Studies of globalization, whatever their interpretation of the meaning of a nation-state's role and power, have argued that the nation-states' capacity to carry on supervisory and registration activities has deteriorated. Usually, these studies haven't focused directly on the statistical consequences of the situation but it is not very difficult to imagine what they would conclude on this matter: that the capacities of national statistical institutions and the quality of statistical information will deteriorate as well. *As the experience of the Israeli statistical office in the area of statistics on foreign workers may teach us, cooperation between different governmental*

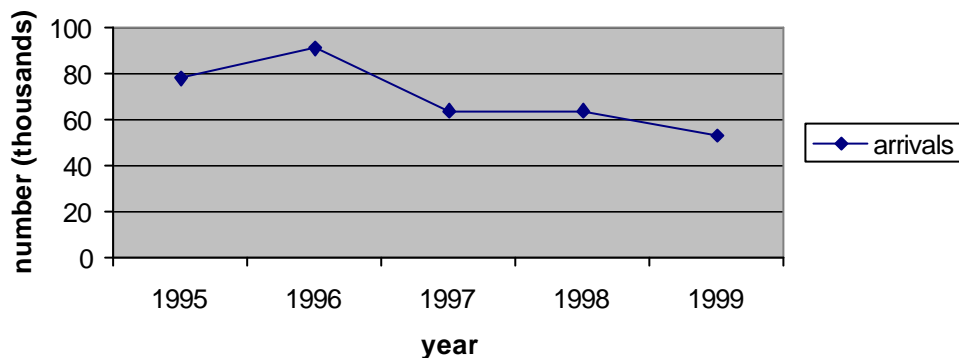
¹ Prepared by Laura Staetsky

branches and statistical offices can be as significant in its ability to determine the quality of statistical information as the combined factors that are grouped under the “globalization” umbrella. Globalization in itself influenced neither registration capacities nor the reliability of the registered information, although its validity was questionable in certain cases. The potential and actual quality of statistical information on foreign workers in the Israeli context, as well as its scope, seems to depend on the measure of influence that the Israeli statistical office can exert in its relations with the relevant ministries and on the extent of internalization of the statistical priorities by these ministries.

Foreign workers: the background

Israel did not attract international labor migrants up until the nineties. When they were first permitted to arrive in significant numbers –in the mid- nineties-they were meant to replace Palestinians from the territories of the West Bank and Gaza Strip whose presence was perceived as a security threat. The number of foreign residents entering Israel with work permits increased to 78,000 in 1995 and by 14% between 1995 and 1996 (to 91,000 entries per year). Since then, as a result of the compromise that was reached between the Israeli government and representatives of employers’ bodies, the number decreased by 30% -40%, fluctuating between 53,000 and 64,000 entries per year.

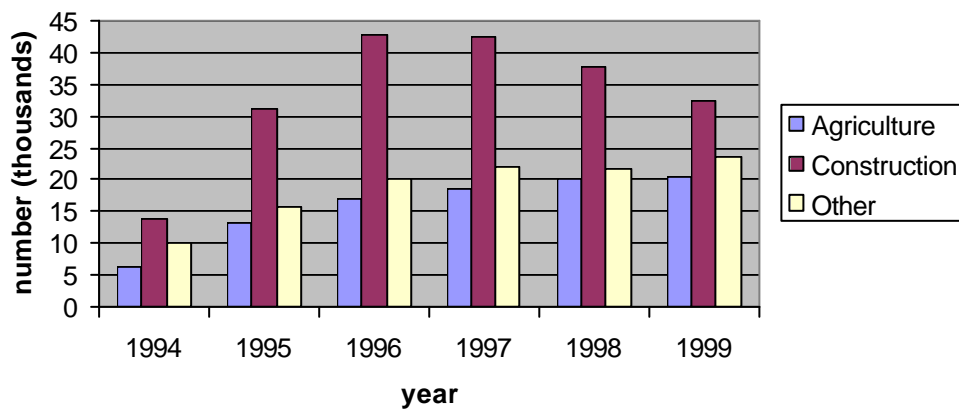
Figure 1. Arrivals of work permit holders to Israel in 1995-1999



Source: Central Bureau of Statistics.

There are three main areas of employment for foreign workers in Israel: construction, agriculture and domestic service.

Figure 2. Employee posts of foreign workers by economic activities in 1994-1999



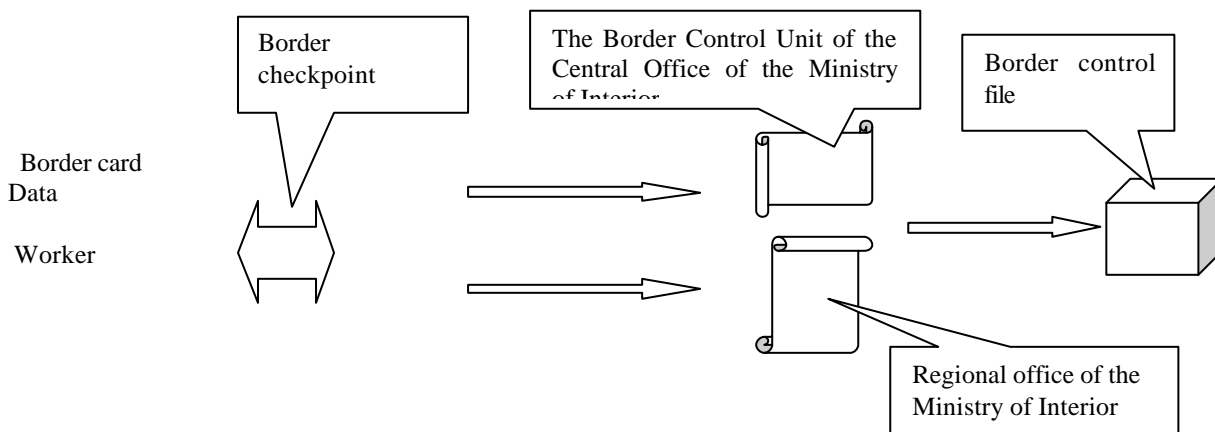
Source: Data reported to CBS by the National Insurance Institute. Excl. housekeepers and paid-attendants insured by the employers.

Construction and agriculture had been heavily dependent on the Palestinian labor force up until the mid-nineties, whereas in domestic service the dependence on foreign labor of non-Palestinian origin was already well-established by the beginning of nineties.

The registration process, its agents and instruments from the point of view of the Israeli CBS: description and discussion.

The Israeli registration system for foreign workers has been going through a process of specialization and sophistication which can be divided into two major stages. In the first stage (ending in November 1998), *registration of foreign workers was not separate from registration of other foreigners* coming to Israel for other purposes- tourism, studies, diplomatic service, volunteer work, transit, etc. An additional important feature of this stage was *the worker was not present when the content of the registration form was entered in the database*. The consequences of these characteristics of the registration system (and the transition to a different type of registration), in terms of its potential for statistical purposes, will be presented , following a detailed description of its stages, the actors involved, their roles, their strengths and weaknesses .

Figure 3. The first stage of the registration system for foreign workers.



The registration process was operated by two agents- the **Border Police** and the **Ministry of Interior**. The Border Police was directly responsible for the actual operation of border checkpoints, checking validity of passports and other relevant documentation and entering the type of visa on the border card. Foreigners departing from Israel went through a similar process on exit. The most basic data on foreigners (*name, passport number, citizenship, date of birth, sex, date and hour of entry/exit and the name of the border checkpoint*) were accumulated in a special database. Until very recently, the Israeli Central Bureau of Statistics made no use of this database and it was solely used by the Ministry of Police for its own purposes.

In parallel, the Border Police, acting on behalf of the Ministry of Interior, distributed to foreigners border cards which constituted a major registration instrument of the Ministry of Interior. These cards contained basic data on foreigners, such as *passport number, first name, family name, father's first name, sex, citizenship, country of birth, date of birth, country of residence, name of the border checkpoint, number of flight and transportation company as well as a serial number*. At the moment of entry/exit, *data on date of entry/exit and type of visa assigned were added to the form*. The **border control file** was created by key punching the contents of the cards in the **Border Control Unit of the Central Office of the Ministry of Interior**. Updating information in the border control file regarding a foreigner's presence in or absence from Israel was enabled by the duplicate structure of the border card: one part was filled in on entry. The other copy was left with the foreigner and he was required to present it at the border checkpoint at the moment of exit. The date of exit and the type of visa on exit were added to the form and, again, transferred to the Ministry of Interior for further treatment. The data on the departure of a foreigner was matched with the data on arrival using the serial number and the passport number. Apart from data on arrivals and departures, information on foreigners, including foreign workers, was updated continuously in the **regional offices** of the Ministry of Interior in those cases where there was a change in the type of visa assigned to a foreigner or an extension of visa validity.

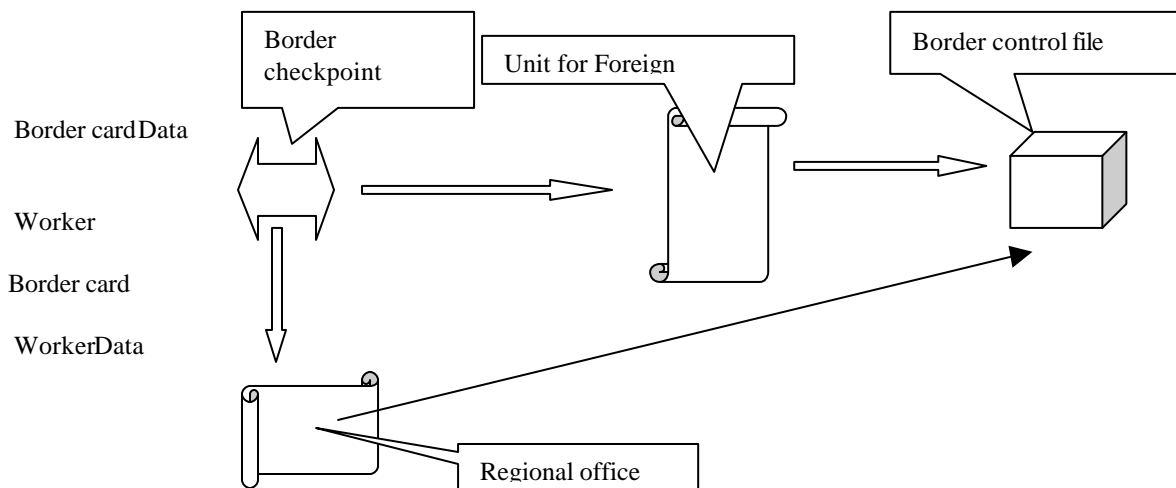
Considerable delay in the processing of the border cards by the Ministry of Interior became a distinct feature of the process. The consequences of delay were further aggravated by inaccurate registration at the moment of the workers'

arrival. Frequently, a tourist visa was mistakenly assigned to the workers. For example, in January-September of 1998 at least 14% of foreign workers received a tourist visa at the moment of entry (*Source: CBS*). This data was amended during the visit to the regional office of the Ministry of Interior that was paid by the employer shortly after the workers' arrival. The employer's visit constituted the final stage of the registration process. During this visit additional data was entered in the border control file: date of visa expiry and a new type of visa, in case there was a change. In certain cases, data on the employer was registered as well. Because of the delay in dealing with registration forms in the central office, regional offices sometimes found themselves responsible for the whole registration process in order to be able to add new data or change a type of visa. In certain cases, this resulted in double registration of the same worker- by the regional office first and by the central office in the process of dealing with the registration form-later. There was another problem of the registration process, unrelated to the delay in treatment, and reflecting, more than anything else, the level of development of the registration system for foreign workers at this early stage: registration of visa changes and visa validity. The border control file did not contain separate fields for registration of these kinds of changes; instead, the original visa and validity fields were simply replaced. Clearly, the situation resulted in a very limited ability to follow visa changes and validity updates.

Despite the existence of various problematic aspects in the registration system of foreign workers as it operated up until November 1998 (their consequences will be highlighted in the following parts of the paper), its advantages from the point of view of the Israeli statistical office shouldn't be overlooked. As I have shown, its central problems were limited validity of certain types of data and the lack of reliability of other types, both of which might have been overcome relatively easily if the whole process of registration was completely transparent for the statistician. One clear advantage of the registration system in its first stage was its *universal* nature. There was no way for a foreigner (worker or tourist) to escape registration and categorization under one type of visa or another. Another advantage of the system was in the types of data that were registered; this data created a *firm basis for demographic analysis*.

In November 1998, the Ministry of Interior *separated the registration processes of foreign workers from that of other foreigners*, creating a special Unit for Foreign Workers. *At the same time, it put an end to the separation between the registration form and the person, in the case of foreign workers*. Nevertheless, the essence of the registration process for foreign workers did not change. Data on foreign workers was still accumulated in the **border control file**. Registration of incoming workers became a direct task of the Unit located in the international airport or the regional offices of the Ministry of Interior, depending on the border checkpoint and, especially, on the economic branch the worker belonged to.

Figure 4. The second stage of the Israeli registration system for foreign workers.



At the very beginning, the Unit's activity was limited to the registration of construction workers, but gradually it expanded to other sectors as well, in this order: agriculture, industry, domestic service. Until now, only registration of domestic workers has been left to the regional offices. The change resulted in greater efficiency (delay in treatment of forms and problems related to it were overcome) and in greater precision of the registration process for foreign workers, promoting reliability and validity of data. At the same time large-scale changes regarding registration of other types of foreigners were initiated by the Ministry of Interior in order to promote efficiency, but these haven't achieved a desirable effect so far. Moreover, as a result of budget-related difficulties, these changes engendered a severe crisis in the work of the Israeli CBS. The nature of changes and their consequences will be presented in the context of describing a method for evaluation the numbers of illegal workers in Israel.

Mistaken registration of foreign workers as tourists on arrival continued. However, the presence of the new Unit's workers at the airport (the principal border checkpoint) created greater awareness by the Border Police of differences between types of visa assigned to the foreigners. Additionally, since there was no more separation between the registration form and the person (in case of the foreign workers), splitting the registration process into two halves, most of the amendments of the type of visa and visa validity took place immediately at the Unit or, after a short period of time, at the regional offices during the employer's visit. Employers were no longer required to visit the regional offices except in cases where an error had been made in visa assignment. Progress was made on the technical side of registration of visa changes and date of expiry: two separate fields were created in the border control file for original visa type and the current visa type, as well as for original expiry date and current expiry date.

About the time that the registration processes of foreign workers and other foreigners were separated, the Ministry of Interior initiated another improvement which clearly indicated the growing interest in labor migration and willingness to invest in efforts to understand it better, with the purpose of tightening control over it. Since early 1999 the Ministry of Interior systematically embarked on collecting new types of information about foreign workers: registration of economic branches and other employers' characteristics (*name of the employer/employing company, personal ID number or a similar number for a company, address, number of employees and the economic branch- construction, agriculture, industry, domestic service etc.*). In the field of the domestic services, an automatic connection was created to the employers' record in the Population Register, potentially enriching our knowledge of this distinct (in its patterns of demand) sector of the Israeli foreign labor market. Data on economic branches is of particular value since the basic data on foreign workers that had been collected hitherto was based entirely on demographic characteristics and ignored completely the economic aspect of the phenomenon of foreign labor.

The changes presented here as well as additional developments expressed the maturation of the registration process and the border control file in response to the growth and expansion of a new phenomenon-foreign labor force in Israel. The upgrading endeavor of the Ministry of Interior (with a certain degree of involvement of the Border Police) has proceeded according to its own timetable and working agenda, as an adaptive response to a new situation.

The Israeli CBS as a consumer of other ministries' data: challenges and recommendations.

It was demonstrated that the border control file functions as a major working tool of the Ministry of Interior with respect both to foreign workers and to other types of foreigners. Since its inception, it was a major statistical resource for the Israeli Central Bureau of Statistics. Until the end of 1999, CBS received monthly extracts of flows (entries and exits) for all types of foreigners. Additionally, at the end of each year, extracts containing data on foreigners staying in Israel at the end of the year (stocks) were received. However, since the beginning of 2000, faced with an increasing back log, the Ministry of Interior has halted the key punching of all border cards, intending to replace the system with one of optical data entry. To date the border control file has not been updated. As a result, the CBS has received files of flows and stocks exclusively for foreign workers who were updated in the new system.

In recent years cooperation between the Israeli Central Bureau of Statistics and the Ministry of Interior has not been close. The Ministry of Interior has its own priorities and it perceives its efficiency by their standard. At times this perception and changes induced by it might meet statistical needs and requirements; however, frequently- it doesn't. Reflection on potential difficulties of statistical offices must go further. Even when, as a result of close cooperation between the ministry and the statistical office at a certain point of time, there is perfect correspondence between statistical needs and the routine operation of the ministry, the situation might suddenly deteriorate. This may occur if structural changes take place in the work of the ministries, especially in the absence of an established forum, responsible for continuous "mutual adjustment" between the ministries and the statistical offices. Such a forum would need to represent a wide range of interests of all involved authorities (including of course the statistical office itself) and provide a mechanism for discussion of mutual needs. There is no doubt that the operation of such a body would necessitate a certain measure of expertise of its members in each other's subject matter.

The Israeli experience of cooperation is instructive since it demonstrates that in the absence of a body with the clearly defined task of coordinating the fulfillment of mutual requirements, the production of high-quality statistical information might be hindered. A few examples of such difficulties in producing statistics on foreign workers will illustrate this point.

The first example is the lack of consistency between data on flows and stocks of foreign workers. This *might* be related (although, not exclusively) to faulty recording of visa changes and the delay in data entry of the registration forms by the Ministry of Interior on arrival and departure. It is often observed in countries with a computerized system of registration for flows that there is a systematic error in the registration of matching exits. Since the registration process on departure is based on matching data on the exit of a foreigner with his/her data on entry, any failure to match these data (due to error in

recording the identity or serial number of a foreigner either at entry or on departure) results in creation of an exit unrelated to a previous entry, while the original entry remains “open”. Repeated mistakes inflate the stock of foreigners, reflecting not the true number but system-error.

Given the attention devoted to the number of foreign workers, there is reason to believe that the registration process –both on entry and on exit- is more precise for workers than for other types of foreigners. Since matching procedures were not considered reliable, the Israeli CBS preferred to present data on flows. When data on flows were compared to data on stocks, a growing gap between the two emerged. In the years 1995-1999 the data on stock at the end of a certain year could not be reconciled with the data on flows from the year in question.

Table 1. Comparison between data on flows and data on stocks of foreign workers in 1995-1999

Type of data	1995	1996	1997	1998	1999
arrivals	78,000	91,000	64,000	64,000	53,000
departures	51,000	68,000	65,000	57,000	54,000
stock	58,000	90,000	71,000	75,000	87,000
stock calculation on the basis of flows		81,000	89,000	78,000	74,000
difference (absolute number)		9,000	18,000	3,000	13,000

Source: Central Bureau of Statistics

The changing differences between the “expected” data on stocks based on calculation of flows and the data that was received directly from the border control file (in terms of their size and direction) made it clear that there was more than one factor (system-error) involved. The existence of differences has not been sufficiently accounted for so far, but the partial explanation for the phenomenon can be found in the mixed effect of the visa changes in 1995-1997 and the “working routine” of the Israeli CBS at the same period. As mentioned earlier, monthly extracts of flows were received by the CBS. In fact, in 1995-1997 CBS received data on new entries and exits with a delay of 2 weeks from their first registration in the border control file and didn’t receive any later updates. The scope of visa changes in itself was quite new for the registration system. Although changes took place between the different types of visa before 1995 as well (mostly transitions from tourist visa to other types-immigrant, volunteer, student, clergy, diplomat etc.); however, they had never posed a difficulty to the system. Either they were recorded separately (tourist to immigrant) or they were numerically insignificant (other changes). Most visa status changes were not received by the Israeli CBS in the monthly *entry files*, when they occurred before the production of the monthly file. Moreover, the number of such changes cannot be discovered a posteriori, since the border control file did not contain separate fields for the registration of visa changes. To receive updated visa status, it would be necessary to obtain a new file of entries in 1995-1997 from the border control file. The data on *exits* is presumed to be more up to date when the exit files are created, since the registration of exits, by definition, occurs later, with enough time for the updates of entries to take place. Clearly, the data on stock in the end of each year must contain the later updates; nevertheless, the fact that data on stocks might be inflated can’t be dismissed.

Another consequence of the lack of formal cooperation between the Ministry of Interior and the CBS was that the new data on employers and economic branches collected by the Ministry of Interior has been unavailable to the CBS so far. Since the beginning of the routine registration of these types of data and until recently, CBS was not made aware of the data. Two alternative sources for this type of data were available. The first was the data on work permits produced by the Employment Authority, the body responsible for regulating and balancing the supply and demand in the market of foreign labor in accordance to the plan outlined by the Israeli government. The information of the Employment Authority was not completely satisfying for two reasons:

- 1) since the permits were issued to employers by the Authority before any workers were recruited, data on the demographic characteristics of actual workers couldn’t be obtained from this source;
- 2) since the number of permits issued during the year doesn’t necessarily reflect the number of actual entries during the same year; utilization of permits by employers is not necessarily immediate and the number of actual entries might be higher or lower than the number of issued permits;

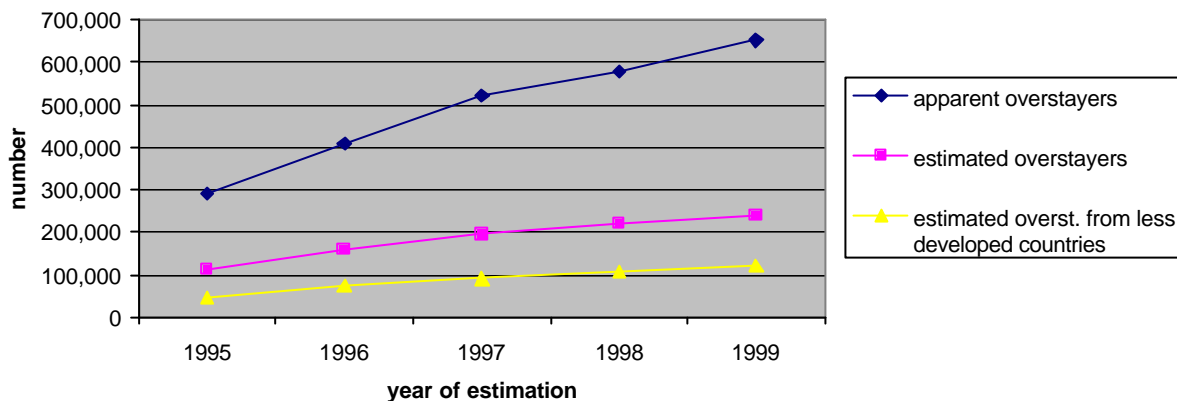
The second source was data reported by employers to the National Insurance Institute. This too was deficient for similar reasons:

- 1) the data is based on reports by employers, not the employees; once again, there was no possibility to cross economic data with demographic data on employees;
- 2) the reports refer to the *posts* or *positions* of the foreign workers and their number doesn’t reflect the actual number of workers; a single worker might be employed by more than one employer;

In this connection, it’s hard to underestimate the value of the new data for future research and decision-making.

The last example represents another challenging task for Israeli statistics on migration: statistics on illegal workers. Since 1995 the CBS has prepared special estimate of the number of illegal workers. The estimates are calculated on the assumption that most of the *tourist visa overstayers* from the less developed countries might be considered as illegal workers. However, an extract of the stock of tourist visa overstayers from the border control file couldn't be obtained directly since, as it was mentioned, mismatched records of entry and exit inflate the apparent stock of visa overstayers. The CBS has used a method that was first developed at the Immigration and Naturalization Service of the USA by Mr. Robert Warren and adjusted to the Israeli migration context by Mr. Ari Paltiel. The method estimates an overall system-error. It calculates the percent of apparent overstays for each country as the ratio of apparent overstays to tourist arrivals (subtracting those who adjusted their status). On this basis, system error is estimated as the weighted average of the rates for the countries with the lowest rates of apparent overstay; more or less same countries tend to participate in this group for each year-Japan, Denmark, Switzerland, Germany, Sweden, Finland, Hong Kong, Indonesia, Singapore. The estimates of overstays by country of residence are finally derived by subtracting the overall system error from the number of apparent overstays.

Estimation of tourist visa overstays in Israel in 1995-1999



Source: Central Bureau of Statistics

The estimation enterprise entirely depended on timely and meticulous updating of the border control file for tourists. Apart from a range of administrative changes that was launched by the Ministry of Interior during 1998-1999 regarding the foreign workers registration, the efforts were made to upgrade the registration process for tourists as well. As previously mentioned, this operation has been suspended. Although optical scanning of border cards was supposed to replace the previous system, budgetary and administrative difficulties have delayed its implementation. Facing a crisis in producing data on tourists, CBS has resorted to using data obtained from the Border Police file, which contains less detailed data, and does not record visa status. Thus there was no longer a source for estimating overstayers. Moreover, the proposals by the Ministry of Interior to improve the system, even once implemented, are not foreseen to include visa data.

Concluding remarks.

Since the mid- nineties, Israel has been exposed to a new influence originating from the global scene: flows of legal and illegal foreign workers. In creating the current picture, globalization of the labor force has been uniquely interacting with local factors, such as the structure of the labor market in Israel and the security situation.

As was demonstrated, the Israeli registration system for foreigners has been coping relatively successfully with a new challenge. Contrary to the worst expectations of many experts, global forces and developments has not weakened the capacities of the existing registration system. In reality, somewhat the opposite effect has been observed: to properly handle the new phenomenon, the Ministry of Interior upgraded its procedures for foreign workers. Further improvements have been initiated through cooperation between the Ministry of Interior, the Border Police and the Employment Authority, creating the unified registration system for the foreign workers.

The CBS' capacity to produce statistical information need not have effected by changes in the Ministry of Interior procedures. However, limitations in the validity and reliability of the data received (which are natural in the early stages of a new phenomenon) couldn't be solved in time, since the possibilities of exerting effective influence on the Ministry of Interior' priorities were restricted. Needless to say, the registration process would have benefited from the involvement of the statistical office, had it occurred. In practice, the Ministry of Interior operated in accordance to its own goals and logic,

without reference to statistical requirements (reliability and validity of data as well as its coverage) while the Israeli CBS continued to produce statistical information on the existing basis, moving back and forth between an attempt to clarify in its understanding of the registration process and an effort to exert some influence on the Ministry of Interior's approach to statistical needs.

The upgrading effort of the Ministry of Interior and the Border Police was welcomed by the Israeli CBS, but its capacity to really shape the situation in accordance with its own needs has remained limited. Therefore, future success of the CBS will largely depend on its capacity to create and support formal frameworks for cooperation.
