

Labour Demand, Education, and the Dynamics of Social Exclusion

Contract No: SOE2-CT97-3052

Final Report

01/02/2001 – 31/07/2001

1. Abstract.....	2
2. Executive Summary.....	3
3. Background and Objectives of the Project.....	4
4. Scientific Description of Project Results and Methodology.....	6
By Team	6
4.1.1 Aarhus (Pedersen).....	6
4.1.2 CREST (Kramarz)	9
4.1.3 IZA (Bauer)	13
4.1.4 ESRI (Barrett).....	20
4.1.5 Bar-Ilan (Neuman).....	21
4.1.6 EUI (Ichino) and CEMFI (Bentolila).....	27
4.1.7 Lisbon (Pereira).....	28
4.1.8 Lund (Bengtsson)	29
4.1.9 Essex (Booth).....	33
4.2 Conferences and Workshops	36
5. Project Management	39
6. Conclusions and Policy Implications	40
7. Exploitation and Dissemination of Results.....	44

1. ABSTRACT

The project has explored the post 1970 effects of technological change and market integration on the demand for labour with different levels of education and skills, and on unemployment and the process of social exclusion across Europe.

The project has focused on wage and job discrimination against immigrants, The risk of marginalization of immigrants and refugees, integration, social exclusion or return migration, wages, trade and immigration, employment, skill structure and trade, institutional framework of migrants in Germany and their assimilation, the consequences of immigration for natives, transferability of human capital investments: vocational education.

2. EXECUTIVE SUMMARY

This research programme explored the post-1970 effects of technological change and market integration on the demand for labour with different levels of education and skills and on unemployment and the process of social exclusion across Europe. As the project began, poorly educated youths, women and new migrants were experiencing increasingly severe difficulties in their attempts to enter the labour market.

At the same time, individuals with low levels of education, as well as those who migrated during the 1960s were losing their jobs, suffering long-term unemployment or entering early retirement. In addition, important gender issues had arisen. The extent of the problems discussed above differs according to gender (as well as by education, skills, background and country of origin). Some groups were becoming socially excluded through these processes, while others were finding employment and integrating successfully, but we lack an understanding of why their experiences have differed so radically.

These problems are largely unrelated to short-term fluctuations in the European economy. Immigrants, for example, also experienced problems entering the labour market during the peak economic years of the 1980s. The causes of current problems are instead more likely to be found in the long-term changes in the demand for educated and skilled labour resulting from technological development.

Although a similar process is taking place all over Europe (as well as in other parts of the world), the impact in each country is heavily influenced by institutions, regulations and policies that differ widely across European countries. In order to understand this process and to see how it differs between countries, we need to study it within a broad and comprehensive European framework.

Teams from Germany, France, Spain, Portugal, Israel, Sweden, the UK, Italy and Denmark considered this issues in the national context and then brought their conclusions together in conferences throughout the period of the project and through published papers.

This report focuses on the country findings with policy conclusions for Europe as a whole. They concluded that assimilation is closely related to labour market attachment. Focusing on the immigrant-native wage gap, which may be decomposed into three components qualifications, discrimination and assimilation, we find that a huge assimilation gap at entry and a gradual closing of the gap as time passes by and experience is accumulated. The main obstacle to integration seems to be lack of employment/experience.

In France, research showed that, all other things being equal, immigrants' children are more persevering in the direction of success when they face school difficulties and that the strong educational aspirations immigrant families expressed have an effect and partly explain the more favourable school trajectories of their children. The disadvantage of children who are foreign or who have immigrant parents therefore remains essentially the result of factors that they share with other children from underprivileged backgrounds, i.e. parents without or with few qualifications,

large or very large families, membership of the poorest social classes. They also found that children with foreign nationality or immigrant parents have a poorer career in the first four years of their secondary education than their fellow students, but their careers are actually more successful than French children with the same domestic environment. In a joint project between the German and Portuguese teams, the assimilation of Portuguese guestworkers in Germany was analysed. The empirical findings indicate that Portuguese migrants have a lower educational level than the remaining population, but that they earn more than they would in their home country and the remaining workers would have earned less if they migrated to Germany. Moreover, Portuguese migrants receive higher wages than equivalent Germans, indicating the effectiveness of the German guestworker system. The German team also examined the consequences of immigration for natives and the Austrian findings suggest that immigration exhibits negative effects on native employment and wages, and has no effect on total employment.

Research has shown that returners are very well educated relative to the resident population. Furthermore, evidence from Ireland suggests that they have higher levels of education than the total group of emigrants. Hence, it appears that the return migration process is 'positively selecting' along the education dimension. In addition, immigrants into Ireland also have higher levels of education than the resident population.

The Israeli team examined the characteristics of individuals earning low wages or classified as the working poor. Their analysis indicates that the individuals belonging to the categories of *Low Wages* or *Working Poor* are often women, young individuals or elderly persons (older than sixty), with a low educational level and working part time. Gender wage differentials stem mainly from discrimination and therefore could be reduced by fighting discrimination.

Immigrants' human capital is not transferable across countries and they should be trained in the host country to adapt to the local labour market; Easterners earn less than Westerners mainly because they have lower levels of human capital and in order to close the wage gap they need to get more education and training; Women and Arabs have less access to the prestigious, high paying occupations. This selectivity problem should be reduced in order to reach more wage equality.

As skilled immigration appears to provide a double benefit in terms of increased output and reduced inequality, an immigration policy that favours the admission of skilled immigrants looks positive from the perspective of the receiving country. And if immigrants enhance their skills and return to their origins, there can also be a benefit for the sending country.

3. BACKGROUND AND OBJECTIVES OF THE PROJECT

This research programme explores the post-1970 effects of technological change and market integration on the demand for labour with different levels of education and skills, and on unemployment and the process of social exclusion across Europe.

Today, poorly educated youths, women and new migrants experience increasingly severe difficulties in their attempts to enter the labour market.

At the same time, individuals with low levels of education, as well as those who migrated during the 1960s are losing their jobs, suffering long-term unemployment or entering early retirement. In addition, important gender issues have arisen: the extent of the problems discussed above differs according to gender (as well as by education, skills, background and country of origin).

Some groups are becoming socially excluded through these processes, while others find employment and integrate successfully, but we lack an understanding of why their experiences differ so radically.

These problems are largely unrelated to short-term fluctuations in the European economy. Immigrants, for example, also experienced problems entering the labour market during the peak economic years of the 1980s. The causes of current problems are instead more likely to be found in the long-term changes in the demand for educated and skilled labour resulting from technological development. Although a similar process is taking place all over Europe (as well as in other parts of the world), the impact in each country is heavily influenced by institutions, regulations and policies that differ widely across European countries. In order to understand this process and to see how it differs between countries, we need to study it within a broad and comprehensive European framework.

New processes of management and production have led to a restructuring of firms, sectors and economies throughout Europe. One consequence has been a significant change in the type of labour demanded by employers. Innovative methods of organising work, such as work groups and job rotation, require informal skills and strong communicative abilities, as well as the more traditional skills imparted by formal schooling. This has led to a situation in which parts of the labour force are effectively barred from attractive employment (if indeed they are employed at all), while at the same time there is excess demand for labour with more appropriate qualifications. The programme also examines this issue within a broad and comprehensive European framework.

There is neither a consensus on the appropriate policy responses, nor a common set of institutions with which to manage change. As a result, labour, immigration and education policies differ greatly across EU countries. The changes described above must therefore be evaluated within a European context in order to find appropriate solutions to the problems of technological change and social exclusion. Such an evaluation has been carried out within the framework of this programme.

As the project began there was a period of changing labour market demand: women entering the labour forces of all European countries to an extent never seen before. In addition, all European countries were experiencing extremely high levels of youth unemployment. At a time when the demand for labour was shrinking throughout Europe, many countries have experienced considerable immigration.

Although many of the new immigrants are well educated, they often find themselves competing with low-skilled workers for employment in the least attractive sectors. It is not necessarily true that new immigrants accelerate labour market problems, but this process has nevertheless caused severe social tensions. This research programme is studying the process of labour market integration and assimilation, the determinants of failure and success and the interactions with the social and economic performance of the natives.

The result of the above processes is that social exclusion is increasing throughout Europe. This project examines the processes of social exclusion in detail, with a focus on the impact of changing labour market demand and education. Earlier studies have focused almost exclusively on labour market supply, that is, on the qualities and characteristics of those seeking employment.

Such an approach has the obvious result that poor labour market performance is automatically attributed to declines in the 'quality' of a particular group, when the problem could just as well stem from changes that are quite independent of labour supply. For this reason, the project examines the issue from the largely unexplored perspective of the demand-side approach, combining supply factors with other important factors, including not only labour demand, but also policies and institutional frameworks.

The programme was designed to test a specific and highly important hypothesis: that social exclusion can be regarded as a step-wise and potentially reversible process. The analysis has therefore emphasised the processes of exclusion and inclusion, not merely the characteristics of those already excluded or included. This has important policy implications, since it allows for the possibility that exclusion can be halted and even reversed. New indicators have been designed to take full account of the multidimensional nature of social exclusion. These measures will reflect not only income and labour market outcomes, but also other aspects of exclusion such as housing, access to public services, crime and health.

4. SCIENTIFIC DESCRIPTION OF PROJECT RESULTS AND METHODOLOGY

By Team

4.1.1 Aarhus (Pedersen)

Work undertaken by this team can be divided into three projects:

4.1.1.1 Wage and Job Discrimination against Immigrants

The project aimed to discover whether the trend towards lower pay and poorer working conditions for 1st and 2nd generation immigrants can primarily be attributed to differences in qualifications, or if part of the wage and job differences between immigrants and Danish natives arise from actual discrimination. It has been interesting to examine whether any potential discrimination diminishes with the length of time spent in Denmark, and if systematic differences in wage and job relations between 1st and 2nd generation immigrants existed. Differences in the available information on the educational background of 1st and 2nd generation immigrants further motivate a distinction between these two groups. A third aspect examined was the significance of cyclical fluctuations on the extent of discrimination. One hypothesis was that immigrants do relatively better when employment is high and the separation at job appointments is correspondingly low. Finally, we examined whether changes in wage formation and wage dispersion had any significant implications for the deferred pay rise of immigrants, parallel to the international studies of the wage gap between men and women. These studies showed a clear trend: the wider the wage dispersion in a given country the wider the wage gap.

4.1.1.2 The Risk of Marginalization of Immigrants and Refugees

The purpose of this project was to analyse how immigrants, refugees and their descendants move between different labour market states with a view to identifying factors associated with particularly high risk of marginalization. Marginalization is defined as a long period without employment. Moreover, the team wished to analyse how immigrants, refugees and their descendants differ from 'native Danes' in these movement patterns. Any difference may have been due to two factors: differences in behaviour and/or discrimination. By way of example it was interesting to study differences in the impact of the social security system (benefits), the impact of education and job experience obtained in Denmark, as well as the impact of time spent in Denmark by the immigrants.

4.1.1.3 Integration, social exclusion or return migration

The outcome of the process of integration is obviously of great importance, both from a macroeconomic point of view and for the individual immigrant/refugee. This is the case regarding both the duration and the final outcome of the process. We have been looking to track cohorts of immigrants from the time of arrival until their state at the end of the period of observation. The final state will be either integration, social exclusion, or return migration to the country of origin (or to a third country). The states of integration and exclusion are to be defined in specific ways relative to duration and stability of employment, including sensitivity analyses relative to variations in these definitions.

The end state of return migration has been analysed more closely by relating the probability of return migration to relevant background variables. Due consideration should be given to the fact that return migration can be either the planned outcome of a stay abroad, or the recognition by an immigrant that her or his original expectations were not fulfilled. Finally, for a refugee, return migration could be a happy outcome in the sense that it could reflect the re-establishing of peaceful conditions in the area or country of origin. Data has been register-based and contained information on time of entry and exit to the country, demographic background factors, education while in Denmark, employment, unemployment, wages, income, benefits and taxes.

The following papers have been produced:

- Pieter Bevelander and Helena S. Nielsen, 'Declining Employment Assimilation of Immigrants in Sweden: Observed or Unobserved Characteristics?' (Bevelander is connected to the Swedish team). Published as a CEPR Discussion Paper No. 2132 and in *Journal of Population Economics* 14: 455-471
- Leif Husted, Helena S. Nielsen, Michael Rosholm and Nina Smith, 'Employment and Wage Assimilation of Male First Generation Immigrants in Denmark'. Published as IZA Discussion Paper No. 101 and in *International Journal of Manpower* 22:39-68
- Michael Rosholm, Kirk Scott and Leif Husted, 'The Times they are A-Changin'. Organizational Change and Immigrant Opportunities in Scandinavia', CLS Working Paper 2000-7 and submitted to a journal. (Kirk Scott is connected to the Swedish team)
- Michael Rosholm's paper 'Labor Market Transitions and Labor Market Detachments' has been submitted to a journal

- A paper by Peter Jensen and Peder J Pedersen entitled 'To stay or not to stay? Return Migration of Immigrants to Denmark' is close to completion.
- Helena Skyt Nielsen, Michael Rosholm, Nina Smith and Leif Husted, "Qualifications Discrimination, or Assimilation? An Extended Framework for Analysing Immigrant Wage Gaps" *IZA WP No 365*. Earlier versions published as CLS WP 00-06 and CEPR DP 2502. Submitted to a journal.
- Nielsen, H.S, Rosholm, M, Smith, N, Husted, L, "Intergenerational Transmission and the School-to-work Transition for 2nd Generation Immigrants." *IZA WP No 296* and CLS WP 01-04. Submitted to the *Economic Journal* (May 2001)
- Peder J. Pedersen, 'Immigration in a High Unemployment Economy: The Recent Danish Experience'. Published as IZA Discussion Paper No. 165
- A paper by Regina Riphahn, Michael Rosholm, Nina Smith and Leif Husted entitled 'Immigrants' Time to Economic Independence: Human Capital Investments and Public Transfer Reliance'. First draft completed. (Riphahn is connected to the German team)
- Peder J Pedersen and Nina Smith, 'International Migration and Migration Policy in Denmark', *CLS WP 01-05*. Forthcoming as chapter in book on European Immigration Policy.
- Kraen Blume Jensen, Mette Ejrnaes, Helena Skyt Nielsen and Allan Wuertz, 'Self-Employment for Immigrants: A last resort?' First draft completed.
- Michael Rosholm, Leif Husted and Helena Skyt Nielsen, 'Integration over generations: Education and occupation of second-generation immigrants' (in Danish).

Two of the papers above are joint with members of the Swedish team and one with the German team. The Swedish and the Danish teams met in Copenhagen in May 1999 – a workshop which was also attended by other network members.

Our conclusions were as follows:

- Using two panel data sets covering the population of immigrants and 10% of the Danish population during 1984-1997, we estimated panel data sample selection models. We studied assimilation of first generation non-refugee immigrants in Denmark, and found a clear employment assimilation pattern and wage assimilation pattern mainly through the first ten years in the country. We consistently find that assimilation is closely related to labour market attachment. Focusing on the immigrant-native wage gap, which may be decomposed into three components (qualifications, discrimination and assimilation), we find a huge assimilation gap at entry and a gradual closing of the gap as time passes by and experience is accumulated. The main obstacle to integration seems to be lack of employment/experience. We do not find strong evidence of severe wage discrimination against immigrants, but the miserable employment experience of Danish immigrants may be an indication of discriminatory forces in the employment process.
- When it comes to second generation immigrants, we analysed the extent of intergenerational transmission through parental capital, ethnic capital and neighbourhood effects on several aspects of the school-to-work transition of 2nd generation immigrants and young ethnic Danes. The main findings are that parental capital has strong positive effects on the probability of

completing a qualifying education and on the entry into the labour market, but it has a much smaller impact on the duration of the first employment spell and on the wage level. Growing up in neighbourhoods with a high concentration of immigrants is associated with negative labour market prospects both for young natives and 2nd generation immigrants.

- Using comparative panel data for Sweden and Denmark, we find that the increasingly difficult assimilation process for immigrants has been surprisingly parallel in the two countries who experienced very different macroeconomic profiles during the period of study. We point to changes in the organizational structure of work as the most probable common cause.

In a study of return migration we find very high level differences depending on country of origin and very strong effects from individual labour market experience with indicators of labour market integration implying a significant reduction in the return migration propensity.

4.1.2 CREST (Kramarz)

The team has concentrated on the areas of immigration and trade.

4.1.2.1 Immigration

The French team has finalized the papers written on this subject, with a thorough check of the findings taking place. The team is concentrating its effort on the academic success of the sons and daughters of immigrants, a central issue in the French policy of integration of immigrants. Two papers were written by Louis-André Vallet and Jean-Paul Caille. Both are based on the 1989 French National Education Longitudinal Study (Panel national 1989 d'élèves du second degré), a panel data set comprising more than 22,000 pupils who entered lower secondary school in 1989.

Previous research has shown that immigrants' children performed less well than their schoolmates in standardized tests administered in 1989 and that, in 1991, immigrant families expressed stronger educational aspirations for their child than native families with similar socio-demographic characteristics. Using as a criterion the success in the baccalauréat examination after seven years in secondary school, this shows that immigrants' children are more successful in the French secondary school than native children with same social background and family environment. They also show that, all other things being equal, immigrants' children display greater perseverance towards success when they face school difficulties and that the strong educational aspirations immigrant families expressed have an effect upon, and partly explain, the more favorable school trajectories of their children.

The institutional arrangements with a Collège Unique (a unique track within secondary school) may well explain the relative success of these sons and daughters of immigrants. Furthermore, when they make the transition from primary to secondary school, foreign children and the children of immigrants do not attain the same level in French and Mathematics as other children. Generally speaking, the measured differences are not very large, and the educational level of the children's parents, their social class and the size of their family often seem more influential than being foreign or having immigrant parents. Furthermore, while late

arrival in France is specifically associated with substantial disadvantages in these two disciplines, these differences are greatly reduced later, at least as far as one can determine from other groups of children. In this we can see proof of the capacity of these children to adapt and a sign that French schools have already performed, as far as they are concerned, their task of assimilation. The disadvantage faced by children who are foreign or who have immigrant parents therefore remains essentially the result of factors that they share with other children from underprivileged backgrounds, (i.e. parents without or with few qualifications, large or very large families, membership of the poorest social classes).

Far from invalidating these findings, a wider analysis of the academic careers of the same children provides further confirmation of them. For example, children with foreign nationality or whose parents regularly use a language other than French have frequently repeated a primary school year in France, but not, however, more frequently than other children with the same domestic and social background. Only those who were born abroad or who have spent their first years at school abroad have a less smooth career at primary school. Similarly, children with foreign nationality or immigrant parents have a poorer record in the first four years of their secondary education than their fellow students, but their careers are actually more successful than French children with the same domestic environment. In order to understand this finding, we need to refer both to the expectations of immigrant families as regards the educational system and the manner in which the school takes these into account. French schools seem to be performing their task of assimilation well in the case of foreign children and the children of immigrants. They also remain sensitive to the unequal levels of wealth and resources that schoolchildren of all backgrounds have in their domestic environment.

Roxane Silberman and Irène Fournier, in a major revision of a paper presented in Lisbon in October 1998 at the network workshop, use data from the Census, and more importantly the Enquête EVA (Observatoire des Entrées dans la Vie Active, Entry into the Job Market). The paper focuses on the mechanisms that generate selective discrimination of immigrants' children on the labour market. In particular, they are able to contrast the job search strategies of children of EC workers, mostly of Portuguese origin, with those of Maghrebians workers. In particular, they show how educational choices interact with the job search strategy. For instance, the former receive mostly apprenticeship training in various construction occupations. From this training, they come to know people within firms whom they will then use in their search for employment. The latter, who receive mostly general education, are not able to use personal knowledge of employees in possible employing firms.

These facts explain the difficulties of children of Maghrebians origin in their first years on the labour market. They also show that children of North African origin almost never turn down job offers and that the reasons for termination of contracts also vary between children of EC origin and children of North African origin, conflict in work being more often cited. This also explains why this group expresses high dissatisfaction of their employment situations.

Two of the above mentioned papers have been submitted to the CEPR Discussion Paper series.

4.1.2.2 Wages, Trade and Immigration

The paper written by Francis Kramarz on wage determination of immigrants in the longitudinal dimension was first presented at the Florence conference of the network. The match of the DADS (Déclarations annuelles de données sociales), an administrative data source, with the EDP (Echantillon démographique permanent) that contains information from various Censuses as well as data from the civil status registers was completed at the beginning of 2001 (it has been totally checked with the help of a demographer from INED). In this article, he examines the relationship between the import behaviour of French manufacturing firms and individual wages of their employees. First, he proposes a model that explicits the exact micro-economic interactions between person- and firm-characteristics, in particular the effect of the import behaviour of firms on individual wages. Then, the resulting set of equations is implemented using matched employer-employee data sets. More precisely, the empirical analysis is based on firm-level sources matched with worker-level sources that also contain a firm identifier.

On the firm-side, the Customs administrative data set constitutes the basic component of the analysis file. All importing firms have to complete this administrative form. Access to these files is possible for the period 1986-1992. They provide data on levels of imports by countries of origin. The firms can be followed through time. This first firm-level data set can be matched with the so-called BAL-SUSE data set, a dynamic, (i.e. unbalanced) file of approximately 1 million French firms in each year of the period 1984-1992. For all such firms, most of the balance-sheet information is available. On the individual-side, I used the DADS-EDP (Echantillon Démographique Permanent) which gives detailed individual information on a sample of workers (1/200) as well as the employing firm.

This common identifier allows us to match the two sides of the market. We restrict attention to the period 1986-1992 for workers employed in a manufacturing firm (approximately 150,000 observations). To compute some of our model parameters, we use the full DADS dataset for the period 1976-1996. This data source contains 1/25th of the population employed in French private or semi-public firms (approximately 16 millions observations). Because of the presence of the two sides of the market, the econometric analysis uses newly developed techniques that allows to control two types of unobserved heterogeneity, on the firm-side as well as on the worker-side. In addition, firm-level decisions being, by definition, endogenous since they derive from an optimization process, Kramarz used a set of instruments inspired from Abowd and Lemieux (1993) and, more closely, Abowd and Allain (1996). More precisely, export prices of US manufacturing firms to various destinations are used to instrument employment, capital, and import decisions of French manufacturing firms.

The results are as follows: The import behaviour of firms has a strong impact on workers wages. This impact depends on the nature of those goods that are imported as well as on their origin. It also depends on the education-level of the workers. When finished goods are imported, more particularly from low-wage countries, wages are adversely affected. These effects are important for low-education workers. However, when intermediary consumptions are imported, the effects are reversed. Some features of the purely competitive model as it is estimated here appear to be rejected by statistical tests. A bargaining model shows that the average bargaining power is around 0.25. This bargaining power is negatively affected by imports of goods and positively affected by imports of intermediary consumption

goods. Furthermore, the high-education workers have a larger power than the low-education workers.

On the immigration side, the paper provides interesting results. First, the paper presents the first estimates available of the returns to experience of the French Labour market for persons born outside France. When estimated in this longitudinal dimension (i.e. conditional on the person effect), these returns are quite small: less than 0.1% per year of presence. Results with all firm-level variables interacted with education show that most parameters affecting the productivity in the employing firm depend on these person characteristics. First, almost all coefficients for high-education workers are not significantly different from zero. Hence, their productivity and by implication their wage depends less on specific features of the production function than their less educated counterparts. This should not be a surprise. Most of the coefficients are ordered from low-education to high-education. For instance, imports of goods which have a negative impact on wages (on the population as a whole) have a more negative impact for the low-education than for the high-education.

Focusing on the low-education workers, those born out of France receive a markedly different compensation than the group as a whole. In particular, their wage is negatively affected by purchases of intermediary products, bought locally or on the world market. In addition, the size of their employing firm has two opposite effects: negative if measured by employment and positive when measured by local sales. Once again, all these coefficients must be added to those of the low-education group to assess the compensation of low-education immigrants.

4.1.2.3 Employment, Skill Structure and Trade

The team has been working on a group of papers which focus on the impact of international trade on the demand for various groups, in particular unskilled workers. These studies are conducted using longitudinal firm-level data sets. The first set of papers (written by Biscourp and Kramarz) focuses on imports and uses the BAL-SUSE matched with the Customs data set and the ESE (employment structure survey). We use new evaluation techniques (matching) to assess the impact of starting to import on employment and skill-composition of the firm. Results show no obvious bias towards more skilled workers. Even better in some sense, firms that start to import appear to have better survival probabilities than equivalent ones that stay local. Results differ when one focuses on firms that are always present on international markets. In particular, such firms which import at all dates seem to be losing employment. Such firms are large, some are even very large, but the effect of trade is independent of the effect of size (large firms tend in general to lose employment). Hence, trade – as measured by imports – appears to have no direct effect on labour demand by skills.

The second set of papers (written by Maurin, Thesmar and Thoenig) focuses on exports. Results are vastly different and show that, indeed, changes in export activity is associated with changes in the skill-structure. But the changes do not operate as simply as previously thought. What matters is the fact that production activities become less important in such firms and that marketing, research and other non-production components become more central to those exporting firms. This substitution generates movements in the skill-structure solely because the latter activities are much more skill-intensive.

4.1.3 IZA (Bauer)

The research of the German team focuses on the following five sub-projects:

4.1.3.1 Institutional framework of migrants in Germany

Concerning the institutional background of foreign labour exclusion, an overview of the most important elements of current anti-immigration policy in Germany is given by Rotte (1998). This paper summarises measures taken to exclude new migrants in the framework of a groupwise nationally oriented, but internationally co-operative, political approach. The paper demonstrates that German migration policy constitutes a complex system in which one has to take account of administrative and legal measures, in addition to applied instruments of foreign policy and development assistance.

Bauer et al. (1998) have written a survey of the German immigration experience. This survey describes German immigration policy and analyses the in- and outflow of individuals since World War II. The paper gives a detailed and comprehensive review of the existing theoretical and empirical studies on the assimilation of migrants in Germany as well as the labour market effects of immigration to Germany on the natives.

The work of Rotte and Vogler (1998) focuses on the potential determinants of international migration from developing to developed countries, taking into consideration the relationship between trade, development and migration. For this analysis a new dataset has been constructed from information provided by the Federal Ministry of the Interior and the Federal Statistical Office. It covers migration from 86 African and Asian countries to Germany. Information is available on overall moves (1981-1995) and asylum migration (1984-1995). The estimation results confirm the importance of the economic differential between countries for migration and the existence of an inverse relationship between development and migration. The importance of the political situation in sending countries and of network effects could also be corroborated.

Furthermore, the estimation results reveal that the change in the German law in 1993, which further restricted the possibilities of applying for asylum, had a significant negative effect on the inflow of migrants from Africa, without significantly affecting the inflow of migrants from Asia. Restricting the sample to asylum seekers, the change in the asylum law shows a negative effect on both immigrants from Africa and Asia. The quantitative effect, however, is significantly higher for African migrants.

Extending their work, Rotte and Vogler (2000) investigate the effect of development aid on migration to Germany using the data set described above. Empirical research on the determinants of emigration from less developed countries so far gives little emphasis to the complex relationship of development and migration. Since the beginning of the 1990s several arguments have been put forward. They hint at the possibility that in the early stages of development economic progress might lead to more migration, even if income differentials to the potential destination regions decrease. Their empirical results confirm the importance of financial restrictions on migration, migration networks, and changes in the social structure of the sending regions as well as the existence of a home preference.

4.1.3.2 Assimilation of migrants in Germany

In a joint project with the Portuguese team, the assimilation of Portuguese guestworkers in Germany has been analysed (Bauer et al,1998). A new dataset covering the period 1975-1990 has been provided by the German Labour Office and is used for empirical investigation. Matching the German data with equivalent Portuguese cross-section data for 1982 and 1986 allows a comparison of migrants with the population of the sending country. The empirical findings indicate that Portuguese migrants have a lower educational level than the remaining population, but that they earn more than they would in their home country and the remaining workers would have earned less if they migrated to Germany. Moreover, Portuguese migrants receive higher wages than equivalent Germans, indicating the effectiveness of the German guestworker system.

Riphahn (1998) analyses the labour market exclusion of foreigners from social assistance programmes. Since the share of foreigners in the German social assistance programmes exceed their population share, this study tests whether higher welfare dependence is due to foreign-native differences in behaviour or exogenous characteristics. The determinants of welfare dependence are analysed using data from the German Socioeconomic Panel (1994-1996), panel attrition and welfare dependence processes being modelled jointly. The results suggest that the difference in aggregate welfare dependence appears to be due to observable characteristics, with labour market status of the head of a household and single parent status being of central importance. Significant differences in the response rates of German and foreign households to given characteristics are uncovered. The controls for attrition are found to have strong effects on the estimation and simulation results.

Jörgen Hansen and Magnus Lofström (1999) analyse differences in welfare utilisation between immigrants and natives in Sweden using LINDA, a large panel data set covering the period from 1990 to 1996. Both welfare expenditures and immigration increased substantially in Sweden in the 1990s. Immigrants are found to use welfare to a greater extent than natives and non-refugee immigrants utilise social assistance less than refugee immigrants. Differences in welfare participation and number of months on welfare between immigrants and natives cannot be explained by observable socio-economic characteristics. Using a random effects probit model, analysis reveals that immigrants lower their participation rates in welfare with time spent in Sweden. Refugees display substantially higher public assistance participation rates upon arrival in Sweden compared to non-refugee immigrants, but they assimilate out of welfare at a faster rate than non-refugee immigrants. Neither immigrant group is predicted to reach the participation rates of native households within a 20-year period in Sweden. A fixed effects logit model supports these findings. The predicted differences in the length of social assistance spells follow a very similar pattern. Simulations of the move to a national uniform benefits structure in 1998 show a decrease in the participation rate and in expenditures.

Occupational mobility of ethnic migrants who have immigrated to Germany since 1984 was analysed by Bauer and Zimmermann (1998). This empirical analysis suggests significant differences in the probability of downward occupational mobility, (i.e by gender, immigration status, and schooling levels). In general, migrants with higher skill levels face a sharper deterioration in their relative labour market position at the time of immigration. Nevertheless, they are also able to reach their original occupational status much faster than low-skilled immigrants.

The paper by Eric Zwiintz (1998) gives an overview of the quantitative development of migration to Germany from Eastern Europe and focuses on special characteristics such as language skills. Empirical results from the analysis of the GSOEP indicate that there are differences in the labour market performance of ethnic German migrants from different countries of origin. Migrants from the former USSR show insufficient language skills and experience a higher risk of being unemployed. Furthermore, the estimations show that German language skills have a large impact on earnings as well as on the probability of being unemployed.

Ongoing research has concentrated on a comparison of the assimilation and labour market performance of ethnic German immigrants with those of Jewish immigrants to Israel. The results to date indicate that labour market integration of both groups of immigrants in their respective countries of destination are driven by variables similar in significance and magnitude, especially as far as educational attainment in the countries of origin is concerned. Lilo Locher (a graduate student of IZA and Bonn University) visited Israel for one year. During her visit she has developed a simple two-period model of migration with uncertainty about future conditions in both, the sending and the receiving country. In this framework, the return to arriving early is higher, the higher the education of a potential migrant. However, education also increases the option value of staying.

Estimation of a Cox proportionate hazard model and a discrete time hazard model using Israeli data suggest that human capital investment considerations indeed influence the timing of migration. Other variables that make people migrate earlier are being Jewish, being married, and having no children. Economic conditions in the source countries and the destination country, which are also included in the regressions, seem to be irrelevant in this context and cover mainly time effects (see Locher, 2000).

In a second paper (Locher 2001), Locher presents a model for the migration process that takes place when a population with dual ethnicity, constrained to live in one country, suddenly has the possibility to live in both national states that are part of their own mixed nationality. There are several examples for these kinds of migration waves: Jews from the Diaspora who came to Israel after the foundation of the State of Israel, migration within the former Soviet Union countries, return migration of guest workers or second generation immigrants and also ethnic German migration in the 1990s.

The model is able to explain two common phenomena about migration, which cannot be covered by simple wage comparisons. First, migration does not always take place if there is a positive wage difference. It can also take place in spite of a negative wage difference. Although wage differences are one parameter of the model, ethnicity and community ties also play a role. If the effect of the latter two is stronger, migration does not take place in the direction of the positive wage difference. Second, the transition process described in the model is able to explain the procrastination we observe in migration behavior. She applies the model for the case of ethnic German migration in the 1990s looking at five countries of origin, taking immigration restrictions into account. The basic results are that Romanian and Polish immigrants were not affected by the immigration restrictions, whereas the Russian, Kazakh and Kyrgyz immigrants were. Without immigration restrictions, the number of ethnic German immigrants to Germany would have peaked in 1992 at about 500,000 immigrants, and would have shrunk to more or less zero in the end of the 1990s. Immigration restrictions did not prevent, but postpone migration.

4.1.3.3 The consequences of immigration for natives

Zimmermann (1998) gives an overview of the central economic consequences of immigration for a host country's labour market. The most important theoretical arguments are presented and evaluated against available empirical evidence. The paper concludes that the impact of immigration on employment, wages and wealth is crucially dependent on the design of immigration policy. Immigration of selected workers may create gains in efficiency that also results in positive distributive effects, not only for capital but also for native labour.

Winter-Ebmer and Zimmermann (1998) investigate the effects of the transition in Central and Eastern Europe for the German and Austrian labour markets. Using econometric sectoral panel studies for both countries, the Austrian findings suggest that immigration exhibits negative effects on native employment and wages, and has no effect on total employment. Imports affect employment negatively while exports have a positive effect on wages. The German findings indicate that immigration and trade do not harm employment and wages. Trade does not affect wages at all, and hardly effects employment. Thus one can expect that, while the eastern enlargement of the EU might have a somewhat negative effect on the Austrian labour market, the German labour market will not.

Bauer et al. (1998) analyse the effects of immigration on natives within the framework of workplace safety in industrial organisation. Given the tight system of German workplace safety regulation, the focus is on the impact of work organisation and interdependence of native and foreign workers. Empirical results from the analysis of a firm-based data set collected in the German manufacturing sector in 1975 show that there are no significant differences between natives and foreigners regarding technological determinants of workplace accidents. Employment of guestworkers, however, has a strong positive effect on the job safety of natives. The estimates imply that a 1 percent increase in foreign blue-collar employment is associated with a 1.7 percent decrease in less severe accidents of natives, and a 1.3 percent decrease in severe accidents. From a technical point of view, this paper is particularly interesting since it applies univariate as well as bivariate count data models.

4.1.3.4 Educational attainment of second-generation immigrants

Gang and Zimmermann (2000) compare the educational attainment of second-generation immigrants to those of natives in the same age cohort. The empirical findings suggest that ethnicity does play an important role: the size of the ethnic network has a positive effect on educational attainment and a clear pattern is exhibited between countries-of-origin and educational attainment even in the second generation. For the children of the foreign-born, parental schooling plays no role in making educational choices.

Bauer and Gang (1999, 2001) examine the appearance of sibling sex composition and sibling size effects on educational attainment for West German, East German and foreign families. Concerning the sibling sex composition, they find a positive effect of the presence of a sister on educational attainment for East German males, and a positive effect of the presence of a sister and the percentage of female siblings in the family on educational attainment for foreign females. For males they

find a strong negative effect of family size on educational attainment only for West Germans. Additional siblings, however, more negatively affect all groups of females, with the effect being strongest for foreign females.

During a research visit at the Lund University in July 2000, Jörgen Hansen and Magnus Lofstrom started a project with Kirk Scott from the Swedish team on post-migration education and labour market outcomes. This project analyses investment in human capital among immigrants using a unique Swedish panel data set managed by the Swedish team.

4.1.3.5 Labour dynamics, trade and technical progress

Bauer and Zimmermann (2000) consider theoretical and empirical investigations of the link between the growth of the global economy and the mobility of labour. They further provide a theoretical and empirical comparison of the labour market effects of globalisation and the immigration of labour. Finally, they analyse attitudes of the German population towards immigrants and discuss the German immigration policy in light of these attitudes. The discussion shows that the globalisation process will most likely result in increased immigration flows to the developed countries, at least in the short and medium run, and that trade and immigration could lead to increased income inequality or a rise in the unemployment of unskilled workers, even though the empirical evidence regarding the latter is mixed. The development of tensions against additional immigrants is different between West and East Germany. Whereas the share of West Germans opting for a total stop of immigration is constant or decreasing between 1990 and 1996, the share of East Germans opting for a total stop is sharply increasing for all groups of immigrants.

Migration policies are mainly based on political objectives. In their paper, Bauer, Lofstrom and Zimmermann (2000) argue that this approach has detrimental effects on assimilation and the sentiments of natives. The paper first reviews the assimilation literature in economics and the policy approaches taken in Europe and among the traditional immigration countries. Second, a new analysis of individual data from 12 OECD countries studies sentiments concerning immigration and the determinants of these sentiments. It concludes with a consistent picture: If European governments select migrants more according to the needs of their labour markets, social tensions about migration would be moderate and the economic performance of the respective country would be improved, as both political and economic objectives of policy-makers would be met.

In addition to the above mentioned research projects, Melanie Ward from IZA has done empirical work on gender discrimination using data for the UK. In particular, she examines the possibility that the gender salary gap observed in the academic labour market is predominantly explained by differing average characteristics of male and female academics and barriers to female promotion. Using data from Scottish universities, analysis reveals that the crowding of women into the lower rungs of academia is a strong determinant of their lower average salary. This effect should be transitory as young women, now entering the profession move up its ranks. A rank attainment model is constructed to investigate the distribution of females that would hold in the absence of barriers to promotion. Significant evidence of barriers to female promotion is revealed.

Some of the above mentioned research results have been gained in part through co-operation with other TSER participants. Between September 1998 and July 2000, several members of the other research teams visited IZA (for example: Alan Barrett, Alison Booth, Francis Kramarz, Shoshana Neumann, Peder Pedersen, Nina Smith).

In February 2000, Thomas Bauer visited CEMFI in Madrid. Magnus Lofstrom and Jörgen Hansen from IZA visited the Swedish group at Lund University in July 2000 and started a joint project with Kirk Scott (member of the Swedish team). Kirk Scott visited IZA several times.

4.1.3.6 Policy Implications

The research results of the German team have several implications, which are important for migration policy, particular, in view of the upcoming EU enlargement to Central and Eastern Europe. The results suggest that a migration policy that selects migrants according to their skills is beneficial for the receiving country because of the following reasons:

- Skilled migrants assimilate very quickly to the society and economy of the receiving country. A fast assimilation in turn reduces the probability that migrants become dependent on social benefits.
- Immigration of selected workers reduces the possibility of negative effects of immigration on native employment as well as wages and may even create gains in efficiency that also result in positive distributive effects, not only for capital but also for native labour.
- A selective migration policy meets both political and economic objectives, since it reduces social tensions towards migration among the native population and enhances the economic performance.

The results of the research project further suggest that assimilation policies seem to be necessary to achieve a fast economic assimilation of the migrants and to reduce the potential costs of immigration for the receiving country. The studies on the assimilation of first- and second-generation immigrants as well as the determinants of welfare dependence of migrants indicate that language skills are of particular importance.

List of papers by the German team:

- Bauer, T., B. Dietz, K. F. Zimmermann, and E. Zwintz (1998), 'Migration: The German Case', Mimeo, IZA, Bonn
- Bauer, T. and I. N. Gang (1999), 'Siblings, Their Sex Composition and Educational Attainment in Germany', *Vierteljahreshefte zur Wirtschaftsforschung*, 68(2), 215-221
- Bauer, T. and I. N. Gang (1999), 'Sibling Rivalry in Educational Attainment: The German Case', *Labour*, 15(2), 237-255.
- Bauer, T., M. Lofstrom and K. F. Zimmermann (2000), 'Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries', *Swedish Economic Policy Review*, 7(2=), 11-53.
- Bauer, T., A. Million, R. Rotte and K. F. Zimmermann (1998), 'Immigrant labor and workplace safety', IZA Discussion Paper No. 16, Bonn, and CEPR Discussion Paper No. 1876

- Bauer, T., P. T. Pereira, M. Vogler and K. F. Zimmermann (1998), 'Portuguese migrants in the German labor market: Performance and self-selection', IZA Discussion Paper No. 20, Bonn, CEPR Discussion Paper No. 2047 and forthcoming in *International Migration Review*
- Bauer, T. and K. F. Zimmermann (1999), 'Occupational Mobility of Ethnic Migrants', IZA Discussion Paper No. 58, Bonn
- Bauer, T. and K. F. Zimmermann (2000), 'Immigration Policy in Integrated National Economies', IZA Discussion Paper No. 170, Bonn
- Gang, I. N. and K. F. Zimmermann (2000), 'Is Child like Parent? Educational Attainment and Ethnic Origin', *Journal of Human Resources*, 25, 550-569
- Hansen, J. and M. Lofström (1999), 'Immigrant Assimilation and Welfare Participation: Do Immigrants Assimilate Into or Out-of Welfare?', IZA Discussion Paper No. 100, Bonn
- Hansen, J., M. Lofström and K. Scott (2000), 'A Longitudinal Analysis of Post-Migration Education and Labor Market Outcomes', mimeo, IZA, Bonn and Lund University
- Locher, L. (2000), 'Immigration from the Eastern Block and the former Soviet Union to Israel: Who is coming when?', IZA Discussion Paper No. 227, Bonn
- Locher, L. (2001), 'The Determination of a Migration Wave Using Ethnicity and Community Ties', IZA Discussion Paper No. 346, Bonn
- Riphahn, R. T. (1998), 'Immigrant Participation in the German Welfare Program', *Finanzarchiv*, 55(2), 163-185
- Rotte, R. (1998), 'Sorties from the fortress: The current system of anti-immigration policy in Germany', IZA Discussion Paper No. 13, Bonn
- Rotte, R. and M. Vogler (1998), 'Determinants of International Migration: Empirical Evidence for Migration from Developing Countries to Germany', IZA Discussion Paper No. 12, Bonn
- Rotte, R. and M. Vogler (2000), 'The Effects of Development on Migration: Theoretical Issues and New Empirical Evidence', *Journal of Population Economics*, 13(3), 485-508
- Ward, M. (2000), 'Gender, Salary and Promotion in the Academic Profession', IZA Discussion Paper No. 151, Bonn, forthcoming in *Scottish Journal of Political Economy*
- Winter-Ebmer R. and K. F. Zimmermann (1999), 'East-West trade and migration: the Austro-German case', in: Faini, Riccardo/ Jaime de Melo/ Klaus F. Zimmermann (eds.), *Migration. The Controversies and the Evidence*, Cambridge University Press, Cambridge, 296-327
- Zimmermann, K. F. (1998), 'Immigration und Arbeitsmarkt: Eine ökonomische Perspektive', in: Boesler, Klaus-Achim/ Günter Heinritz/ Reinhard Wiessner (eds.), *Europa zwischen Integration und Regionalismus*, Franz Steiner Verlag, Stuttgart, 1998, 56-66
- Zwintz, E. (1998), 'Panel Analysis of Wages and Unemployment of Ethnic Germans', mimeo, University of Munich

4.1.4 ESRI (Barrett)

Initial work by the Irish team was concerned with establishing the characteristics of former emigrants returning to Ireland. Given the recent exceptional economic growth, this phenomenon is currently perceived as being an important feature of the Irish labour market. Using the Labour Force Surveys of 1994 to 1996, they have shown that the returners are very well educated relative to the resident population. Furthermore, there is evidence to suggest that they have higher levels of education than the total group of emigrants. Hence, it appears that the return migration process is 'positively selecting' along the education dimension. In addition, immigrants into Ireland also have higher levels of education than the resident population. This work was presented at the European Research Conference in Espinho, Portugal and was published in the summer issue of the *Irish Banking Review*.

The team then moved on to begin their analysis of the dataset which contains information on people who graduated from third level colleges in Ireland in 1992 and who were surveyed in 1998. A proportion of those surveyed had left Ireland to work for a period and have now returned. It is possible to compare return migrants and stayers and to assess their relative degrees of success in the labour market. Given the importance of return migration to the continued success of the Irish economy, this area of research is considered to be of great importance from an academic and policy standpoint. The first results from the analysis were presented at the TSER group meeting in Lisbon in October of 1998. It was shown that returners earn about 10 percent more than those who stayed. As the wage advantage is related to length of time away and men stay away longer than women, the advantage is more substantial for men.

They have continued to work on the issue of the wage premium for returning migrants. The paper 'Is There a Wage Premium for Returning Irish Migrants?', by Alan Barrett and Philip O'Connell, has been published as CEPR Discussion Paper No 2408 and has also been submitted to a journal.

In July 2000, the ESRI produced a paper titled 'Earnings Inequality, Returns to Education and Immigration into Ireland'. It appeared as CEPR Discussion Paper No. 2493. As the ESRI's earlier work under this project had shown that immigrants and returning migrants entering Ireland in recent years were relatively more skilled than the resident population, this gave rise to the question of whether the inflow had the effect of reducing earnings inequality and the returns to education.

Looking at data from 1987, 1994 and 1997, it is shown that while Irish earnings inequality did increase substantially between 1987 and 1994, there was no increase between 1994 and 1997. A similar pattern is seen in the returns to education. As the inflow occurred after 1994, this is suggestive of a link. In order to test this, they estimate a model of the Irish labour market and use it to simulate the impact of alternative migration scenarios. The model supports the hypothesis that immigration did reduce earnings inequality.

In addition to distributing the paper via the CEPR Discussion Paper Series, Alan Barrett also presented the paper to the Northern Ireland Economic Research Centre at the Queen's University in Belfast.

This paper was submitted to the journal, *Labor Economics*, in Autumn 2000 and referee reports were received in March 2001. On the basis of the comments contained, the Irish team invested additional time in the paper, refining the analysis and the arguments. The paper is being re-submitted to the journal in the expectation

of publication. In addition, the paper mentioned above on the wage premium for returning migrants was published in the January 2001 issue of the *Economic and Social Review*.

The research conducted by the Irish team found the following.

- Return migration into Ireland in the mid-1990s was largely made up of skilled people. This was an important finding because it implied that the investment in education made in the state in earlier years was not lost through the brain-drain of the 1980s.
- In addition to the returning migrants being more skilled than the domestic population, they also seemed to have additional human capital that allowed them to earn a wage premium relative to comparable non-migrants.
- The effect of the skilled inflow into Ireland during the 1990s was to reduce earnings inequality.

4.1.5 Bar-Ilan (Neuman)

The Israeli team has been working on a number of topics:

4.1.5.1 Low Wages and Working Poor in Switzerland

(Joseph Deutsch and Jacques Silber of the team, together with Yves Flückiger of Département d'Economie Politique, Université de Genève, Switzerland).

Many studies have attempted to explain the rise in wage inequality and the increase in the number of *working poor* that have been observed during the past twenty years in Western countries. Among the reasons given for these changes, globalization, technological change and international migrations are the factors that are the most often mentioned, though institutional changes (a decrease in the rate of unionization or the existence of legal minimum wages) are also cited.

Less attention seems to have been given to the characteristics of the individuals earning low wages or classified as working poor. In this study the team have tried to determine the main features of this sub-population of *Low Wages* and *Working Poor* in Switzerland, the latter including only individuals whose (low) earnings are the main source of income of the household to which they belong. To identify these populations they have borrowed techniques from the poverty literature in so far as they have defined a threshold corresponding to half the median wage and called *low wages* and *working poor* any individual with a wage lower than this critical level. The data used were those of the Labour Force Surveys, that have been conducted annually since 1991.

This work includes three sections. Firstly, the team estimate 'poverty indices' of the type commonly used in the literature on poverty (headcount ratio, income gap ratio, Foster-Greer and Thorbecke index) to determine how important the sub-population of *Low Wages* or of *Working Poor* is. They also estimate these indices for different categories (defined by linguistic area, age group, size of the household, gender, nationality, status at work, educational level and hours of work per week).

Secondly, they try to better identify the main characteristics of the individuals who are classified as *Low Wages* or *Working Poor* and apply the technique known as

cluster analysis that enables one to make a distinction between three or four main types of individuals (classified as *Low Wages* or *Working Poor*).

Thirdly, they use a logit model where the dependent variable indicates whether the individual belongs to the population of *Low Wages* (or of *Working Poor*) while the exogenous variables are those mentioned earlier (linguistic area, age, education, nationality, etc...).

The results of these various types of analysis indicate that the individuals belonging to the categories of *Low Wages* or *Working Poor* are often women, young individuals or elderly persons (older than sixty), with a low educational level and working part time.

In future work, we intend to refine the analysis by studying separately individuals working full time and part time and looking at the impact of the profession and of the economic branch in which the individuals work.

Adrian Ziderman and Shoshana Neuman have produced the paper, 'Can Vocational Education Improve the Wages of Minorities and Disadvantaged Groups? The Case of Israel'.

There is a considerable empirical literature which compares wage levels of workers who have studied at secondary vocational schools with wages of workers who took academic schooling. In general, vocational education does not lead to higher wages. However, in some countries where labour markets are characterized by employment growth, skill shortages and a good match between vocational skills and available jobs, the record of vocational schooling has been more positive. Israel constitutes a case in point. However, little attention has been given to examining the success of vocational education in raising the wages of various sub-sections of the labour force, in particular of minorities and disadvantaged groups. In this paper, we examine the efficacy of vocational education in raising the wage levels of four such groups: recent immigrants, Jews of Eastern origin, Israeli Arabs and females. The results are mixed, differing from group to group, thus justifying our approach of examining the impact of vocational schooling on finer breakdowns of the population of secondary school completers.

4.1.5.2 Transferability of Human Capital Investments: the Case of Recent Immigration to Israel

(Shoshana Neuman and Adrian Ziderman)

Jews living in the Diaspora (particularly in Europe) have historically invested considerably in the acquisition of human capital. One explanation offered for these relatively high levels of educational investment (Chiswick) lies in the greater portability of human as opposed to physical, capital investments, representing a hedge against future hostile policies that might be forged against them.

But in practice, migrants may find their accumulated human capital investments less than fully portable if their acquired skills are not well matched with the needs of the labour market in the country of in-migration. More general human capital investments may be readily transferred across national labour markets. Other, more specific skills are less readily transferable, mitigating against the absorption of immigrants into good quality jobs.

There is now a considerable comparative literature arguing against the wide scale provision of vocational schooling, because the returns to investments in vocational schooling are shown to fall short of those from general academic schooling. Studies

from Israel (Neuman and Ziderman) show a different picture. Workers who completed their vocational schooling in Israel and are employed in jobs that match their field of vocational study, earn considerably more than graduates of academic schools and of vocational schooling graduates not employed in matched jobs.

The current research examines whether these findings apply equally to recent immigrants to Israel who completed their secondary schooling prior to migration. Vocational education supplies fewer general labour market skills and more limited future education possibilities than does academic education. It is also likely to be less transferable across national labour markets than is academic education, thus extending the process of absorption and the period of social exclusion of immigrants with vocational schooling.

Some early results are now available from the study, based on data from the 1984 Census. These confirm that new immigrants (those who arrived during the last decade) with vocational schooling qualifications fare far less well than their counterparts in the working population ('old-timers' – population aged 25-49 who had not immigrated during the last decade). Vocational school old-timers working in a matched occupation received hourly wages of some 8% above those academic school graduates and non-matched vocational school graduates. For new immigrants, no differential was found for matched vocational school graduates over academic school and non-matched vocational school graduates and comers. However, the number of years since arrival does raise the hourly earnings of immigrant (by approximately 1.5% annually).

4.1.5.3 Can Vocational Education Improve the Wages of Minorities and Disadvantaged Groups? The Case of Israel

There is a considerable empirical literature which compares wage levels of workers who have studied at secondary vocational schools with wages of workers who took academic schooling. In general, vocational education does not lead to higher wages. However, in some countries where labour markets are characterized by employment growth, skill shortages and a good match between vocational skills and available jobs, the record of vocational schooling has been more positive. Israel constitutes a case in point. However, little attention has been given to examining the success of vocational education in raising the wages of various sub-sections of the labour force, in particular of minorities and disadvantaged groups. The team is examining the efficacy of vocational education in raising the wage levels of four such groups: recent immigrants, Jews of Eastern origin, Israeli Arabs and females. The results are mixed, differing from group to group, thus justifying their approach of examining the impact of vocational schooling on finer breakdowns of the population of secondary school finishers.

The Israeli team worked mainly on issues of social exclusion and wages of minority groups. The various papers (reported in the previous research reports) analysed Labour market behaviour of the following: minority:immigrants (compared to native Israelis), women (compared to men), Easterners (compared to Westerners) and Israeli Arabs (compared to Israeli Jews). Two of the 3 papers described in this last report deal with immigrants. The first presents a multi-generation model of immigrants' earnings and applies the model to Israeli data. The second analyses earning functions and wage dispersion of immigrants compared to natives, using 3 sets of data-from 1982,1990 and 1998. The third paper presents a new methodology for the decomposition of wage differentials into 3 components, namely the human capital component, the discrimination component and selection into the profession

under discussion. The proposed methodology is then applied to data from the last 1995 Israeli census and used to look into both gender and ethnic wage differentials. A more detailed description of the 3 papers follows:

Gil S. Epstein and Tikva Lecker, 'Multi-Generation Model of Immigrant Earnings: Theory and Application'.

Most studies to date comparing the economic performance of immigrants, among other aspects, with that of the native-born population mainly focused on the first rather than the second generation of immigrants. This motivated researchers to carry out more extensive research on the diverse aspects of absorption in various host countries among the second generation of immigrants, as compared to their parents and the native population.

Several studies on changes in the relative earnings and employment patterns of the second generation have been carried out in various countries. Chiswick (1977, 1978), for example, in his early work, examined the effect of foreign parentage in the United States in 1969 on earnings of native-born white male workers in the 25-to-64 age range. He showed that earnings among second-generation immigrants were similar or slightly higher than among native white-born male Americans. Earnings were higher among immigrants with foreign- rather than native-born parents. Thus, according to Chiswick, any discrimination against second-generation Americans is apparently overcome by other factors.

More recently, Gang and Zimmermann (2000) and Gang (1999) showed that ethnicity did not affect the educational achievements of second-generation immigrants, compared to those of natives in the same age cohort, in a large German data set. While parental schooling did not play a role in the educational choices of children of foreign-born parents, contrary to the general findings in the literature, there is a statistically significant difference in favour of the father's over the mother's education in children of native-born German parents. Similar studies among Jewish immigrants of various ethnic origins in Israel have been carried out by Amir (1988), Benski, *et al* (1990), Lecker (1993) and Mark (1994), among others. The intergenerational mobility in earnings and immigrant workers assimilation in the labour market was studied by Kossoudji (1989), Berman *et al* (1990), Borjas (1992) and Solon (1992), among others, in the United States; by Lillard (2000) in Germany and the United States; and by Corak *et al* (1997) in Canada. Schultz (1984) in the United States and Binder (1998) in Mexico, among others, conducted research on schooling and educational achievements of such populations.

However, since relations between immigrants and native populations in the host countries are extremely complex, it is difficult to project the well-characterized economic behaviour of the first generation of immigrants and the relatively less well-deciphered behaviour of the second generation into the third generation. Therefore, a multi-generation model comparing performance of immigrants and the native population in the host countries, particularly with respect to the labour market, is highly pertinent.

In this paper, we develop a multi-generation model comparing labour market performance of immigrants and the native population, assuming that the latter is the appropriate reference group and not the home-country population. The model is based on the concept of bilateral altruism among immigrant generations, (i.e. positive linkage of the father's and son's utilities via their earnings). Thus, if the father earns less than the native population, the son, would maximize his own utility by investing time and effort in increasing his earnings to compensate also for his

father's relatively low income. Thus, the second generation of immigrants would be expected to be in an advantaged position (at least with respect to the first generation). However, the third generation would revert to a disadvantaged status relative to the second generation, and possibly also to the native population.

We examined intergenerational mobility of relative earnings among immigrants to Israel, based on the 1995 Israeli Census of Population data. A two-fold comparative analysis over three generations was carried out on two levels: (1) among three generations of immigrants from Asian-African source countries; and (2) between immigrant and native Israeli populations.

In the 1995 Israeli Census of Population data, first-generation immigrants showed relatively lower earnings than the second generation, but this fell again in the third generation. This supports the hypothesis behind our multi-generation immigrant performance model. In addition, separating the wage differential into human capital and market evaluation components throws new light on the effects of the relative investment in education in these three generations.

By following immigrant economic behaviour over three generations, both in theoretical and empirical terms, our model enhances understanding of economic behaviour among immigrants in Israel, and may be projected to other countries. Assimilation does not necessarily occur in the third generation, indicating that the two migrant-generation case cannot be generalized to all further generations.

The various papers lead to numerous policy implications (discussed in the papers), such as: gender wage differentials stem mainly from discrimination and therefore could be reduced by fighting discrimination; immigrants' human capital is not transferable across countries and they should be trained in the host country to adapt to the local labour market; Easterners earn less than Westerners mainly because they have lower levels of human capital and in order to close the wage gap they need to get more education and training; Women and Arabs have less access to the prestigious, high paying occupations. This selectivity problem should be reduced in order to reach greater wage equality.

Our studies contribute to the literature on social exclusion, discrimination and Labour market behaviour offering new models, new methodologies and mainly many case studies and empirical results that lead to important policy implications.

Joseph Deutsch, Jacques Silber, 'Earnings Functions and the Measurement of the Determinants of Wage Dispersion: The Case of Immigrants and Natives in Israel in 1982, 1990 and 1998.'

"When addressing the impact of immigration on wage inequality, researchers have generally focused on whether the immigration-induced shift in labour supply has reduced the wages of selected groups. In a comprehensive analysis of the issue, Borjas et al. (1997) conclude that immigration accounts for 30-55% of the relative wage decline experienced by high-school dropouts and other low-wage workers. Yet they conclude that immigration accounts for at most a small share of the increase in overall wage inequality..." (Lerman, 1999). In the study, cited above, Lerman (1999) stresses the difficulties faced by any researcher attempting to estimate the impact of immigration on inequality as the population analyzed at two different periods is not the same, new immigrants appearing during the second period. Lerman (1999) suggested indeed a method that might allow overcoming these problems related to the compositional change affecting the labour force over time.

The present study represents another attempt to deal with such an issue. The approach proposed here combines two techniques. The first one is popular in the field of income inequality measurement and concerns the decomposition of inequality by population subgroups. The second one, very common in the labour economics literature, uses the Mincerian earnings function to derive a breakdown of wage differences into components measuring respectively the impact of human capital, discrimination (differences in rates of return on human capital) and eventually unobservable characteristics. This methodological novelty allows one first to determine the exact impact of each of these three elements on the overall wage dispersion, on the dispersion within and between groups (e.g. natives versus immigrants) and on the degree of overlap between the wage distribution of the various groups. But the decomposition technique suggested here gives also the precise contribution of each population subgroup (e.g. natives versus immigrants) to the overall wage dispersion. This methodology is then applied to data obtained from income surveys conducted in Israel in 1982, 1990 and 1998. The main results of the empirical analysis can be summarized as follows:

First during the two sub-periods that have been analyzed, the between-groups dispersion first decreased, then increased. Since the same pattern has been observed, in percentage terms, for the rates of return component of this between-dispersion, which contributes most to this dispersion, we may fairly assume that rates of return on human capital characteristics played a central role here.

Second, the within-groups dispersion increased in both periods, a pattern that is observed also, in percentage terms, for the human capital component of this type of dispersion. Although this component never represents more than a third of the within-groups dispersion, it is likely that its variation over time explains the increasing importance of the within-groups dispersion.

Third the overlapping component first increased, then decreased. This is also the pattern observed for the rates of return and unobservable characteristics components of the overlap. We may therefore conjecture that the story of the overlap is that of the rates of return and unobservable characteristic components of this type of dispersion. The latter component seems to play the main role as it has the highest share but the negative contribution of the rates of return cannot be ignored either.

Fourth, the contribution of the various population subgroups to the overall wage dispersion seems to be very close to that expected on the basis of their share in the total number of binary comparisons made. On the contrary it appears that in 1982, 1990 and 1998 the contribution of the between groups dispersion to the overall wage dispersion was higher and that of the within groups dispersion lower than expected. The same observation may be made for the overlapping component, at least in 1990 and 1998.

Fifth, differences between actual and expected values are also observed when looking at the impact of the various population sub-groups on the different types of dispersion. Thus it appears that in 1982, 1990 and 1998, in absolute terms at least, the IL, AA and EA groups played a greater role than expected in determining the between groups dispersion, this being also true of the NIM group in 1998. The three groups IL, AA and EA seem on the contrary to have a smaller impact than expected on the overlap, the same being true for the NIM group in 1998. For the within groups dispersion a smaller role than expected may be observed for the AA group in 1982 and the NIM group in 1998.

In summary, this paper proposes a new methodology for analyzing the respective impact of human capital characteristics, rates of return on these characteristics and unobservable characteristics on the overall wage dispersion. It also shows how to determine the role played by between and within groups dispersion as well as by the degree of overlap between the groups' wage distribution, when the individuals are also characterized by the groups to which they belong. In such a case it also suggested a way to estimate the contribution of the various population subgroups to these three elements of the wage dispersion. An illustration based on income surveys conducted in Israel in 1982, 1990 and 1998 indicated that the approach proposed here sheds some interesting light on the evolution of the wage dispersion over time. In particular it allowed us to check that most of the predictions made on the basis of either economic theory or institutional- historical knowledge were confirmed. We thus found that the overall wage dispersion as well as the between- and within-groups dispersion increased over time, that the between-groups dispersion was mostly related to between groups differences in rates of return while the within-groups dispersion reflected more changes in the human capital characteristics.

4.1.6 EUI (Ichino) and CEMFI (Bentolila)

The preceding reports described the research process and the final results obtained in the first main project undertaken within the network, which led to the paper entitled 'Unemployment and Consumption: Are job losses less painful near the Mediterranean?' After many public presentations and revisions, accounted for in the preceding reports, the current version of the paper has been resubmitted and it is currently being considered for publication at the *Economic Journal*.

During the final six months, the teams from the European University Institute and CEMFI have been working jointly on the second research project undertaken within the network. The project addresses one particular dimension of the broad theme which inspired the first project, namely that of North-South differences within the EU in the unemployment experience, and its relationship with cross-country diversity in family structure and links. The project is aimed at understanding how family income and wealth affect young workers' labour market participation and emancipation decisions in Italy. This project explores one of the most striking puzzles of the Italian society today, namely that grown-up children are very reluctant to leave the parental home and to begin to work. This feature is also shared by Spain and other southern European countries.

The teams have devoted several months to preparing the data for this project. Data from the Italian Survey of Household Income and Wealth and from the Bank of Italy have been used. Expertise with this database, acquired from work on the first project, was essential at that stage. The team members also met at the European University Institute over 19-21 March 2001 to undertake work on the project

A first draft of a paper presenting the results from this project, entitled 'Parental Job Insecurity and Children's Emancipation: The Italian Puzzle', was presented at the workshop of the TSER network, hosted by EUI, that took place in Florence on 10-12 June 2001. This paper is co-authored by the two team leaders and Sascha O. Becker (CES).

In the paper the researchers analyze empirically one potential explanation for the late labour market entry and emancipation of Italian youth: the limited job insecurity

experienced or expected by their fathers. Using panel data for Italian households for 1995 and 1998 they find that both having an unemployed father in 1995 and having one with a high perceived probability of becoming unemployed are situations which increase the child's likelihood of living independently in 1998. There is however no clear-cut evidence of an effect of those two variables on the chances of the child being employed in 1998. The researchers assess the robustness of these results with the help of recently developed matching and propensity score methods and propose, informally, a theoretical framework capable of interpreting them.

In view of comments received on the first version of the paper, the authors will be meeting in Munich during the second week of December 2001 (already outside the network's period) to further work on the theoretical model and the empirical evidence.

As to the third project undertaken within the network, the EUI team made considerable progress on their study on higher-education dropouts in Italy. Team member Sascha Becker has recently completed a new version of the paper 'Why Italians Do Not Finish University?'. Italy's university dropout rate of more than 60% is the highest of all OECD countries and thus contrasts sharply with Germany's dropout rate of 25%. In the theoretical part, a model of university enrolment and job search is developed that helps in understanding the differences between the two countries. In the absence of job opportunities when leaving high school, enrolling in university is an attractive choice. But then, many students drop out of university as soon as they receive a job offer. Thus, university serves as a parking lot for high school graduates waiting for a job.

In the empirical part, two main groups of dropouts are identified in the Italian case. Those labelled 'misguided students' are ill prepared to obtain an academic degree. On the other hand, so-called 'parking-lot' students drop out as soon as they get the first suitable job offer, but they obtain a degree in case they never receive a job offer during their studies. In Germany, only misguided dropouts exist, and there are fewer of them than in Italy.

Various versions of the papers have been presented in conferences and seminars at UC Berkeley, the 4th Annual German Socioeconomic Panel User Conference, the Annual Conference of the Italian Association of Labour Economists, the Institute for the Study of Labour (IZA), the ZEW Young Scholars Conference, and at the EUI. After a final revision, the paper is going to be submitted to a journal soon.

4.1.7 Lisbon (Pereira)

Since the last report the Portuguese team have continued their work with data from the Enquete de L'Emploi 1994 and 1995.

A characterization of the samples appears in 'Portuguese Population in France: A snapshot 25 years after their arrival', (Pedro Telhado Pereira and Lara Patricio Tavares, Faculdade de Economia, Universidade Nova de Lisboa, Working paper 375). This paper has been submitted for publication.

In this paper decisions concerning naturalization, place of residence, education and family decisions are studied. The main conclusion is that there seems to be an assimilation process going on among the Portuguese community towards the French standards.

The same results appear in the paper 'Is Schooling of Migrants' Children more like that of their Parents, their Cousins, or their Neighbours?', Pedro Telhado Pereira and Lara Patrício Tavares, (submitted for publication) where the educational decision is studied more carefully. The authors show that the educational attainment of the second generation in France is much closer to the French than to those who stayed in Portugal (cousins). In this sense, we can speak of assimilation.

Wages functions for the Portuguese in France and for the French were estimated. At this moment the Portuguese team is going through the results, trying to analyse the possibility of discrimination in the French labour market against the Portuguese. Preliminary results seem to point to no discrimination.

The same conclusion was found in the study 'Portuguese Migration to Germany: An Analysis of Labour Market Performance and Self -Selection', Thomas Bauer, Pedro Telhado Pereira, Michael Vogler and Klaus Zimmermann, accepted for publication, International Migration Review.

4.1.8 Lund (Bengtsson)

Since the start of the project the Swedish team has been working on the collection of data for the programme, as well as the first stages of analysis. The Swedish Longitudinal Immigrant Database now includes information through to 1996, and the addition of detailed information on the financial status of the individuals is included. This new financial information was merged into the existing database during spring 1999, and began being used in April. The database contains a number of socio-economic variables, as well as previously unavailable information from immigrant files kept at the national immigration bureau. The database in its final form is unusual both because of its large size and the long time period covered and because it contains data about the immigrants from their home country prior to emigration. Given these characteristics, it serves as an excellent platform for analyses of social exclusion and economic integration of both immigrants and natives.

Since the Swedish and Danish data contain a number of similarities, a meeting took place in June 1998 in Aarhus, Denmark, to set up future co-operation between the Danish and Swedish teams. It was agreed that similar techniques and topics would be used in order to allow for easy comparison between the two nations. A follow-up meeting took place in December 1998 in Copenhagen, which proved to be very productive, with more ideas being discussed for co-operation between the two teams. These efforts are now underway, with Pieter Bevelander and Helena Skytt-Nielsen having published a CEPR Discussion Paper on the determinants of immigrant employment assimilation in Sweden. Michael Rosholm from Denmark and Kirk Scott from Sweden have submitted a paper for publication comparing the development of employment prospects for immigrants in Denmark and Sweden during the 1980s and 1990s. This paper investigates the factors behind the weakened immigrant position in Sweden through a comparative approach. Here it is possible to examine Swedish experiences during a time which saw a shift from extremely low unemployment to unemployment of European levels in the light of Danish experiences during a period which was characterized by European levels of unemployment. Another paper with a similar framework is being written by Martin Klinthäll from Lund and Peder Pedersen from Aarhus in a study of return migration from Denmark and Sweden.

Another outcome of the meeting in Denmark was the agreement to hold a workshop in Copenhagen in May 1999, organized by Professor Nina Smith from Aarhus. This workshop was attended by members of the Swedish and Danish groups, as well as Thomas Bauer from IZA and Christian Dustmann from University College London. Preliminary research was presented, and guidelines for future research and collaboration were established.

Members of the group have also actively participated at the European Science Foundation conference on migration in Espinho, Portugal (organizer, paper authors), the TSER workshop in Lisbon (session chairperson, paper authors), the TSER workshop in Tel Aviv (paper authors), and the European Science Foundation conference on migration in Maratea, Italy.

In addition to refining the data, the team has also carried out analyses of immigrant economic integration into the Swedish labour market. Several papers and academic dissertations have been completed. These are briefly mentioned below.

Göran Broström has been developing methods of event history analysis using a maximum likelihood approach to Cox proportional hazards models. This allows for the utilization of longitudinal data containing large numbers of ties, and is a step beyond the standard use of techniques such as Breslow's approximation. This approach is discussed in the article 'Cox regression: Ties without tears', which has been submitted to *Lifetime Data Analysis*. In addition, Broström has done work on the effects of economic incentives on absenteeism in the workplace, with the article 'Assessing the Effect of Economic Incentives on Incidence and Duration of Work Absence', submitted to *The Review of Economics and Statistics*.

Rolf Ohlsson and Christer Lundh have completed updating their book *Från arbetskraftsimport till flyktinginvandring* in the second edition. This update includes labour market performance of immigrants in Sweden during the mid to late 1990s, as well as the effects of immigration policy on the flows and integration of migrants.

Rolf Ohlsson is currently in the final stages of two books related to economic marginalization in Sweden. The first is a discussion of various forms of discrimination in general, and their application to present Swedish conditions. The second book, which is currently in the publication process, deals with the increasing diversity of the Swedish population regarding ethnic and national mix, and different possibilities available for dealing with this problem.

Tommy Bengtsson and Kirk Scott wrote a paper on the effects of structural change on the economic prospects of immigrants between 1970 and 1993. This paper was presented at the Population Association of America meeting in March, 1999.

Bengtsson and Scott are also in the final stages of a paper examining the consumption of sickness benefits among immigrants from various nationalities during the period 1981-1995. Preliminary results were presented at the ESF conference on migration and development in Italy in May 2000. Another area involving studies related to health is immigrant mortality, which is currently being examined by Tommy Bengtsson.

Kirk Scott published his doctoral dissertation in April 1999. This examined the changing economic environment for immigrants between 1970 and 1993, with an emphasis on increasing difficulties caused by cultural distance between immigrants and natives. Going a step further, Scott, Husted and Rosholm (Danish TSER member) have completed a comparative study of the economic integration of male immigrants in Denmark and Sweden, two countries with similar institutional environments, but differing economic experiences, especially concerning

unemployment, during the past 20 years. This study is to be followed by an examination of female employment development in the two Scandinavian countries during the same period. Two other studies under way are in collaboration with Magnus Löfström (IZA) and Jörgen Hansen (Concordia, formerly with IZA). These studies examine two aspects of immigrant assimilation and marginalisation. The first looks at investment in education after arrival in Sweden for immigrants from a selected number of nationalities. The second paper deals with the movement from non-welfare dependency to a state where the majority of one's financial income is in the form of means-tested transfers. Again we examined the same group of nationalities. Both of these papers were submitted during spring 2001.

Martin Klinthäll has been working on the question of return migration, and presented the results of his research at an ESF conference in France in September 1999. In addition, his licenciate thesis, also on return migration from Sweden, was successfully defended during the autumn term 1999. A comparative study of return migration from Sweden and Denmark, written jointly with Peder Pedersen and Peter Jensen from Aarhus, will be presented at the TSER conference in Florence in spring 2001. In connection to this, Klinthäll recently presented results at a seminar in Denmark, organized by Peter Jensen.

Dan-Olof Rooth has completed his doctoral dissertation concerning processes of integration of refugee immigrants in Sweden during the late 1980s and early 1990s. This dissertation was defended during the autumn term 1999.

Mats Hammarstedt defended his licenciate thesis in 1998. His study examined income and income security among immigrants to Sweden during the last 30 years. Since then, he has been busy completing his doctoral dissertation, which expands the licenciate thesis in a number of areas, including self-employment experiences of immigrants.

Pieter Bevelander has written several papers regarding the employment prospects of immigrants in Sweden. One paper has been published in *Journal of Ethnic and Migration Studies*, one as a CEPR Discussion Paper, and one as a chapter in the book *Crossing Borders, Regional and Urban Perspectives on International Migration*. His doctoral dissertation, *Immigrant Employment Integration and Structural Change in Sweden, 1970-1995* is now completed, and will be publicly defended in December 2000.

List of papers by the Swedish team:

- Bengtsson, T and Scott, K (1998), 'Labor Market Entrance and Income Assimilation. An analysis of longitudinal data from Sweden, 1970-1993', paper presented for the PAA annual meeting, New York City, March, 1999
- Bengtsson, T and Scott, K (1999) 'Immigrant Consumption of Sickness Benefits in Sweden, 1981-1996', paper presented at TSER workshop, Bar Ilan University, Nov. 21 - 22, 1999
- Bevelander, P (1998) 'Employment and Structural Change: Economic Integration of Immigrants in the Swedish and Malmö Labor Markets, 1970-1990', in *Crossing Borders, Regional and Urban Perspectives on International Migration* edited by Cees Gorter, Peter Nijkamp and Jacques Poot, Ashgate/Aldershot
- Bevelander, P (1999) 'The Employment Integration of Immigrants in Sweden', in *Journal of Ethnic and Migration Studies*, vol 25 no 3, July, 1999
- Bevelander, P (2000), 'Immigrant Employment Integration and Structural Change

in Sweden, 1970-1995', forthcoming

- Bevelander, P and Scott, K (1998) 'Cultural Distance in a Structural Perspective', Lund: Dept. of Economic History, Mimeo
- Bevelander, P and Scott, K (2000) 'Employment Integration of Immigrants. A longitudinal study of young arrivers', paper presented at the ESF conference 'Migration and Development', 12-17 May 2000
- Bevelander, P and Skytt-Nielsen, H (1999) 'Declining Employment Assimilation of Immigrants in Sweden: Observed or unobserved characteristics?', CEPR Discussion Paper No 2132
- Broström, G. (1998) 'Cox regression: Ties without tears', submitted to *Lifetime Data Analysis*
- Broström, G, Johansson, P, and Palme, M (1998), 'Assessing the Effect of Economic Incentives on Incidence and Duration of Work Absence', submitted to *The Review of Economics and Statistics*
- Hammarstedt, M (1998), 'Studier kring invandrades arbetsinkomster och inkomsttrygghet', Lund: Department of Economics
- Klinthäll, M (1998) 'Patterns of Return Migration from Sweden 1968-1993', paper presented at the CEPR Conference on Metropolitan Economic Performance, Lisbon, Portugal, November 1998
- Klinthäll, M. (1999) 'Greek Return Migration from Sweden 1968-1993', paper prepared for the ESF-conference 'European Society or European Societies? Migrations and Inter-Ethnic Relations in Europe', Obernai, France, 23-28 September 1999
- Klinthäll, M (1999) 'Homeward Bound. Return migration from Sweden to Germany, Greece, Italy and the United States during the period 1968-1993', licentiate thesis, Dept. of Economic History, Lund University
- Lindblad E, Lyttkens C H, Hanson B S, Östergren P-O (1998), 'Equity is out of fashion? - An essay on autonomy and health policy in the individualized society', *Social Science and Medicine* 1998; 46:1017-25
- Lundh, C, and Ohlsson, R (1999), 'Från arbetskraftsimport till lyktinginvandring', 2nd edition, SNS, Stockholm
- Rooth, D-O (1999), 'Refugee Immigrants to Sweden. Processes of Labor Market Integration and Marginalisation', Lund Economic Studies
- Scott, K (1999), 'The Immigrant Experience. Changing Employment and Income Patterns in Sweden, 1970 - 1993', Lund University Press
- Rosholm, M, Scott, K, and Husted, L (1999) 'Employment and Earnings of First Generation Immigrants in Denmark and Sweden: A Comparative Study', paper presented at TSER workshop, Bar Ilan University, Nov. 21 - 22, 1999
- Rosholm, M, Scott, K, and Husted, L (2000) 'The Times They Are A-Changin'. Organizational Change and Immigrant Employment Opportunities in Scandinavia', CLS Working Paper No. 00-07, Aarhus: Centre for Labor Market and Social Research

4.1.9 Essex (Booth)

The team from the University of Essex have continued their work on self-employment, training and worker/firm heterogeneity, and temporary employment. They have produced the following papers:

- 'Why do Firms Invest in General Training? 'Good' Firms and 'Bad' Firms as a Source of Monopsony Power' by Alison Booth and Gylfi Zoega. In this paper, Booth and Zoega develop a model showing the conditions under which firms will invest in the general training of their workers. In this model, firms have monopsony power when it comes to buying the services of Labor. This power is generated through the collaboration and productive interaction of workers within the firm. For this reason, firms are willing to expend resources to provide workers with general training. The paper was presented at the ESSLE meetings at Ammersee in September 1999. This has now been revised as 'Worker Heterogeneity and General Training', June 2001 and submitted to a journal.
- 'Residential Mobility, Housing Tenure and the Labour Market in Britain' by Mark Taylor and René Böheim investigates the reasons for moving house and the extent and determinants of house moves. Their findings suggest that the unemployed are more likely to move than employees, supporting the classical economic hypothesis that individuals move to escape unemployment, and suggests that the unemployed are not immobile. A desire to move motivated by employment reasons has the single largest positive impact on the probability of moving between regions. This paper has been presented at the Employment and Education Economics Group workshop in Swansea in July 1999, and at the European Society for Population Economics conference in Turin in June 1999. This paper has now been revised as "Tied down or room to move? Housing tenure, employment and residential mobility in Britain", and is forthcoming in the *Scottish Journal of Political Economy*.
- 'The Half-Time Score: Part-time vs Full-time Work, A Two-sector Model with Endogenous Wages, Training and Productivity' by Alison Booth (June 2000). Part-time workers represent a significant proportion of OECD work forces. The choice of part-time or full-time employment status is an important decision for women, since it will have profound effects on their subsequent wages. This is not only because working provides 'experience capital' gained through learning on-the-job, but also because it gives workers access to formal job-related training. In this paper, Booth models the behaviour of both firms and workers in a frictional labour market in which workers can choose either part-time or full-time jobs. Workers know *ex ante* that their initial choices will affect their accumulation of job-related training and their subsequent wages profiles, and this affects their initial decisions. Booth models the determination of part-time and full-time wages and the amount of general training offered by firms in an imperfectly competitive labour market, and compares this with the first-best. There is under-provision of training in both part-time and full-time sectors. In the model, *ex post* wage setting to deter quits (and allowing firms to extract monopsony rents) has the effect of flattening wage profiles as compared with the competitive case. This is a form of wage compression, but it is not due to the imposition of minimum wages or trade unions setting training wages too high. Booth also derives some empirically testable predictions about part-time/full-time wage differentials and wages profiles. The paper was presented at the ESSLE meetings at Ammersee in September 2000, and the revised version presented at the Education and Employment Economics Group Workshop at the University of Southampton (3-5

July 2000); at the European Summer Symposium in Labour Economics at Ammersee (Germany, 26-30 September 2000); and at the Royal Economics Society Annual Conference (University of Durham, April 2001).

- 'Temporary Jobs: who gets them, what are they worth, and do they lead anywhere?' (May 2000) by Alison L Booth, Marco Francesconi and Jeff Frank, *Working Papers of Institute for Social and Economic Research (incorporating the ESRC Research Centre on Micro-social Change, [Paper 2000-13](#)* [downloadable pdf - 171 Kilobytes], Colchester: University of Essex. In Britain about 7% of male employees and 10% of female employees are in temporary jobs. In contrast to much of continental Europe, this proportion has been relatively stable over the 1990s. Using data from the British Household Panel Survey, the team find in this paper that temporary workers report lower levels of job satisfaction, receive less work-related training, and are less well-paid than their counterparts in permanent employment. However, there is evidence that fixed-term contracts are a stepping stone to permanent work. Women (but not men) who start in fixed-term employment and move to permanent jobs fully catch up to those who start in permanent jobs. This paper was presented at the UK Department of Trade and Industry and at the Universities of Essex, Newcastle and York. The paper was revised in 2000 as "Temporary Work: Stepping Stones or Dead Ends?" and presented at a number of conferences including the Education and Employment Economics Group Workshop (funded by the DfEE) at the University of Southampton (3-5 July 2000); the World Congress of the Society for the Advancement of Social Economics, London School of Economics (July 2000); and the European Association of Labour Economists annual meetings, University of Jyväskylä, Finland (13-16 September 2001).
- 'My home was my castle: Evictions and repossessions in Britain' by Mark Taylor and René Böheim. This paper uses data for 1991 to 1997 from the British Household Panel Survey to investigate the incidence of housing finance problems, evictions and repossessions. Previous research on repossessions and problematical housing debt in Britain has focused on cross-sectional data. The paper contributes uniquely to the literature by examining the sequence of household and individual events associated with housing arrears and evictions. Their results show that the previous experience of financial problems has a significant and positive association with the current financial situation and the probability of eviction, and that negative financial surprises are an important route into financial difficulties controlling for other changes such as divorce or loss of employment. Families with higher income and where the head or his/her spouse is in work have a lower risk of experiencing problems meeting their housing costs. This paper has now been published in the *Journal of Housing Economics*.
- 'Unemployment duration and exit states in Britain' by Mark Taylor and René Böheim presents new evidence on the determinants of unemployment duration for men and women in Britain in the 1990s, using a nationally representative data set. It examines the impact of individual and local labour market characteristics on the probability of unemployment spells ending with moves into full and part-time employment, self-employment and economic inactivity. The data show that the median duration of unemployment spells among men, at 5 months, is almost double that for women, although much of this differential is explained by exits to part-time work and economic inactivity among women.

Multivariate analysis suggests that policies to reduce unemployment duration and encourage full-time work, especially among men, should be targeted towards those aged 25 and over on entering unemployment and on increasing education levels. Mothers are found to have significantly lower exit rates into full-time work than both men and childless women. This paper was presented at the 1999 Network workshop, EEEG 2000, RES 2000, ESPE 2000. It is currently under revision to be resubmitted to the *Oxford Bulletin of Economics and Statistics*.

- 'The Search for Success: Do the Unemployed find Stable Employment?' by Mark Taylor and René Böheim. This paper uses an independent competing risks framework to model job tenure, with previous labour market status and the duration of the preceding unemployment spell as explanatory variables. The authors find that jobs that follow an unemployment spell have shorter mean duration than other jobs. Less than one half of jobs that follow unemployment last for twelve months. Multivariate results suggest that an unemployment spell has a severe penalty on subsequent job tenure. However, men and women who spend more time unemployed and searching for work are rewarded with a better worker-firm match in their subsequent job. This paper was presented at ESPE 2000, RES 2000, EEA 2000 (University of Zurich), Austrian Labour Economists Workshop (Vienna), and is being revised to be resubmitted to *Labour Economics*.
- 'Job search methods, intensity and success in Britain in the 1990s' by Mark Taylor and René Böheim. In this paper we investigate the use of various job search strategies and their impact on the probability of subsequent employment and the re-employment wage among working age men in Britain. We find that replying to advertisements and using Job Centres are the two most common methods of job search, and that job search intensity, and direct applications to employers in particular, result in a higher probability of subsequent employment. Conditional on finding work, replying to advertisements results in higher paying employment. Age, education, family circumstances and local labour demand, as well as unobserved individual specific effects, emerge as key determinants of job search strategy use. This paper was presented at ESPE 2001, BHPS 2001, and the 2001 network workshop in Florence. The paper has been submitted to the *Oxford Bulletin of Economics and Statistics*.

Conference presentations:

European Society for Population Economics, Turin, Italy, 24th-26th June, 1999
 EEEG Overnight Workshop, Swansea, Wales, 5th-7th July 1999.

Papers arising from the projects:

- 'Job search methods, intensity and success in Britain in the 1990s' *Working Papers of the ESRC Research Centre on Micro-social Change*, Paper 2000-7. Colchester: University of Essex (Rene Boheim and Mark P. Taylor)
- 2000 'The Search for Success: do the unemployed find stable employment?' *Working Papers of the ESRC Research Centre on Micro-social Change*, Paper [2000-5](#) [downloadable pdf - 155 Kilobytes]. Colchester: University of Essex (Rene Boheim and Mark P. Taylor)

- 2000 'My Home Was My Castle: evictions and repossessions in Britain' *Working Papers of the ESRC Research Centre on Micro-social Change*, Paper [2000-2](#) [downloadable pdf - 94 Kilobytes]. Colchester: University of Essex (Rene Boheim and Mark P. Taylor). Published as Boheim, R. and M.P. Taylor (2000) 'My Home Was My Castle: evictions and repossessions in Britain', *Journal of Housing Economics*, 9, pp.287-319.
- 2000 'Unemployment Duration and Exit States in Britain' *Working Papers of the ESRC Research Centre on Micro-social Change*, Paper [2000-1](#) [downloadable pdf - 136 Kilobytes]. Colchester: University of Essex (Rene Boheim and Mark P. Taylor)
- '[The Half-Time Score](#): Part-time vs Full-time Work, A Two-sectory Model with Endogenous Wages, Training and Productivity' (June 2000) [downloadable pdf - 107 Kilobytes], Alison L Booth
- 'Temporary Jobs: who gets them, what are they worth, and do they lead anywhere?' (May 2000) (Alison L Booth, Marco Francesconi and Jeff Frank) *Working Papers of Institute for Social and Economic Research (incorporating the ESRC Research Centre on Micro-social Change*, [Paper 2000-13](#) [downloadable pdf - 171 Kilobytes]. Colchester: University of Essex
- 'Job Mobility in 1990s Britain: Does Gender Matter?' (December 1999) (Alison L Booth and Marco Francesconi) *Working Papers of ESRC Research Centre on Micro-social Change*, [Paper 99-26](#) [downloadable pdf - 137 Kilobytes]. Colchester: University of Essex. Published as Booth AL and M Francesconi (2000) 'Job Mobility in 1990s Britain: Does Gender Matter?' (2000) *Research in Labor Economics*, 19, pp 173-189.
- 'Unemployment persistence', *Oxford Economic Papers* 52, January 2000 (W. Arulampalam, A.L. Booth and M.P. Taylor)
- 'Survival of the fittest? An analysis of self-employment duration in Britain', *Economic Journal*, Vol 109, no. 454, 1999 (M.P. Taylor)
- 'Residential mobility, housing tenure and the Labor market in Britain', Discussion Paper no 99/35, Institute for Labor Research, University of Essex (R. Boheim and M.P. Taylor). Forthcoming as "Tied down or room to move? Housing tenure, employment and residential mobility in Britain", in the *Scottish Journal of Political Economy*.
- 'Self-employment and windfall gains in Britain: Evidence from panel data', CEPR Discussion Paper No. 2084, February, 1999 (M.P. Taylor). Forthcoming in *Economica*.
- 'Training, Rent-Sharing and Unions', Alison L. Booth, Gylfi Zoega and Marco Francesconi, CEPR Discussion Paper No. 2200.

4.2 Conferences and Workshops

Several meetings which are described below have taken place under the auspices of this project to date.

A planning meeting for this network was held at CEPR's offices in London in February 1998, at which a representative of each team was present. The purpose of

this meeting was both to discuss the administrative details of the project (financial arrangements, reporting, etc.) and to plan the execution of the work plan.

Many members of the Network met at the European Summer Symposium on Labour Economics and Migration at Gerzensee in September 1998. This Symposium included sessions on Migration and Language; Training; Skill-Biased Technical Change; Migration Effects; Decomposition Methodology; Labour Flows and Institutions; Quits, Recruits and Retentions and Education Returns. Among others, presentations were given by members of the British, Irish, German and Israeli teams. The meeting was not funded by this Network, but is an example of the synergies that are possible with other ongoing CEPR research programmes.

The Network held its first workshop in November 1998 in Lisbon. The papers presented by Network members included: 'Is there a Wage Premium for Returning Irish Migrants?' by Alan Barrett and Philip O'Connell (both Economic and Social Research Institute, Dublin); 'On Inequality in the Quality of Life in Israel: New Immigrants Versus Old-Timers', by Jacques Silber and Nira Yacouel (both Bar-Ilan University); 'Estimating Labor Market Discrimination with Selectivity Corrected Wage Equations: Methodological Considerations and an Illustration from Israel', Shoshana Neuman (Bar-Ilan University); 'Glass Ceilings or Sticky Floors?', Alison Booth and Marco Francesconi (both University of Essex); 'Vocational Education in Israel; Wage Effects of Vocational Education, Occupation, and the Voced-Occupation Match', Shoshana Neuman and Adrian Ziderman, (both Bar-Ilan University); 'Immigrants and Refugees – Risk of Marginalization', Peter Jensen (Aarhus Universitet); and 'How Painful is Unemployment?', Samuel Bentolila (CEMFI) and Andrea Ichino (European University Institute).

In addition, in June and December 1998 and May 1999 there were bilateral meetings in Aarhus and Copenhagen respectively between the Swedish and Danish teams (see section 4.1.8 below).

The Network held its second workshop at Bar-Ilan University in November 1999. The workshop was split into five sessions:

- Unemployment and Low Wages
- Education and Training
- Return Migration
- Immigrant Assimilation
- Employment and Earnings of Immigrants

All teams were represented at the workshop, and in addition to presenting papers, the participants took the opportunity to discuss the progress of the research agenda, administrative matters and the future research programme.

Many of the Network members also met at the 1999 European Summer Symposium in Labour Economics, which was held in Ammersee in September. ESSLE is designed to bring together economists in the field from across Europe and key researchers from outside the region. It provides a unique opportunity for researchers from different universities and countries to discuss their work in a relaxed atmosphere and to develop long-term collaborative relationships. Another important aim of ESSLE is to provide young researchers with the opportunity to meet and discuss their work with senior economists. Papers presented by Network members included: 'Job Protection, Minimum Wage and Unemployment', Pierre Cahuc (Université de Paris I, CEPREMAP and CREST-INSEE) and André Zylberberg

(CNRS and Université Paris I); 'The Endogenous Determination of Minimum Wage', Gil Epstein and Shmuel Nitzan (both Bar-Ilan University); 'General Training and Human-Capital Externalities', Alison Booth (University of Essex) and Gylfi Zoega (Birkbeck College); 'Immigrant Labour and Workplace Safety', Thomas Bauer, Klaus F Zimmermann (both IZA), Andreas Million and Ralph Rotte (both SELAPO); 'Labour Market Assimilation and the Self-Employment Decision of Immigrant Entrepreneurs', Magnus Lofstrom (IZA); 'Group Interactions and Individual Background: Explaining Regional Shirking Differentials in a Large Italian Bank', Andrea Ichino (EUI) and Giovanni Maggi (Princeton University and NBER); 'Absenteesim and Employment Probation', Regina Riphahn (Universität München) and Anja Thalmaier (IZA); 'Employment and the Distributional Effects of Restricting Working Time', Ramon Marimon (EUI) and Fabrizio Zilibotti (IIES).

Many Network members also met at the 'Marginal Labour Markets in Metropolitan Areas', hosted by the Economic and Social Research Institute at Dublin in October 1999. The conference explored the labour market experiences of groups such as immigrants, ethnic minorities, young people, women, and others at risk of being located in low-paid jobs or of becoming long-term unemployed, all in an urban context. Of particular interest were papers which explored the following issues: the dynamics of social exclusion/integration; the assimilation of migrants; the success or otherwise of targeted policies and the mechanism of such targeting; the link between labour market marginalization and social deviance; and the intergenerational transmission of Labour market marginalization. Once again, Network members played an active part in the conference, both in presenting papers and in acting as discussants.

Network partner Samuel Bentolila (CEMFI and CEPR) organised a workshop on 'Inequalities, Labor Market Regulation and Redistribution' in Madrid in April 2000. The workshop looked at how different countries are coping with increasing inequalities and analysed how the operation of labour market policies and other institutions feeds back into the generation of wage and unemployment inequalities.

Some of the Network members presented papers at the European Summer Symposium in Labour Economics in September 2000 at Ammersee. These include: 'Are Judges Biased by Labor Market Conditions? The Selection of Firing Litigations for Trial in an Italian firm', Andrea Ichino (European University Institute), Michele Polo and Enrico Rettore (both Università Bocconi); 'Does Product Market Regulation Hinder Job Creation? Commercial Zoning and Retailing Employment in France', Francis Kramarz (CREST-INSEE) and Marianne Bertrand (Princeton University); 'The Half-Time Score: Part-Time Versus Full-Time Work', Alison Booth and Marco Francesconi (both University of Essex) and Jeff Frank (Royal Holloway College, University of London).

Many members of the Network met at the 2001 European Summer Symposium in Labor Economics, which took place at Ammersee from 26 - 28 April 2000.

5. PROJECT MANAGEMENT

The project was co-ordinated by the Centre for Economic Policy Research (CEPR), under the direction of Professor Klaus F. Zimmermann.

The CEPR has ensured regular meetings of partners, dissemination and reporting to the Commission. There was one team transfer during the project – German participation transferred from Munich to Bonn under the new leadership of Dr Thomas Bauer. The transfer was successful and without complications – particularly as it took place in the early months of the project.

The project has benefited from regular contact among the partners – key to a successful project. Partners met as soon as the project began in order to ensure the research programme could start as soon as possible. The impetus was upheld through the life of the project.

CEPR organised the three research workshops and original kick off meeting, ensuring communication among partners and research outcomes according to the project plans.

The project managers ensured the dissemination plan, which was built around the CEPR *Discussion Paper Series*, the quarterly CEPR *Bulletin*, CEPR's newsletter *European Economic Perspectives*, and the Centre's web site (www.cepr.org). The CEPR *Discussion Paper Series* served as the initial means of disseminating the research output of the network. 49 discussion papers were produced through this project under CEPR auspices. This is not to mention the many other publications produced by other organisations.

Papers appearing in the *Discussion Paper Series* achieve a wider readership than university working paper series, especially among economists in the policy community. This is partly a result of the summaries (800-900 words) which appear on the CEPR web site and are periodically distributed to the media, but also because the Centre conducts regular mailings (electronic and hard copy) of the papers specifically to the non-academic community, which it is able to do because of its network of supporters, members and contacts in these areas.

In addition, each of the participating institutions are running their own working paper series, have their own website, and run their own public and research-oriented meetings. These have been exploited to disseminate the work of the Network. Network researchers have also participated in international conferences such as the American Economic Association, the European Economic Association etc. and were thereby able to disseminate the Network's research even further.

6. CONCLUSIONS AND POLICY IMPLICATIONS

The project "Labour Demand, Education and the Dynamics of Social Exclusion" contributed to the existing scientific literature on social exclusion, discrimination and labour market behaviour offering a variety of new theoretical and empirical models, new methodologies and many country studies. Many of the papers produced by the team members have been published in high-ranked economic journals, indicating the high quality of the research done by the project members. The project output further leads to important policy implications. Due to the variety of data sets, different institutional settings and the different methodologies used by the different teams, many of these policy implications are country-specific. However, despite the different methods and data sets used, some common patterns emerge which have also important policy implication on the European level, in particular with regard to immigration policy.

The need for a common EU migration policy is connected with the characteristics of a common European market, since the abolition of interior borders results in a dependency of each member state on the immigration policy of the other states. Once a foreigner enters EU-territory, the further migration of this person cannot longer be controlled. As a result of free labour and product markets within Europe, individual member countries are unable to follow independent migration policies without potentially harming other members. Therefore, a unified migration policy on the European level seems to be necessary. The organisation of such a policy, however, requires knowledge about

- the type of migrants (family migrants, economic migrants, asylum seekers, high or low skilled migrants) that are attracted by the different countries in the EU as well as the selection process and the determinants of return migration.
- the determinants of a fast assimilation process of both, first- and second-generation migrants into the society and the labour market of the receiving countries in order to minimize the costs of immigration.
- the effects of immigration on the labour market outcomes of natives.

The results of the project offer some important insights to these questions.

The research of the team from the University of Essex and, especially, of the German team indicates that economic factors are important determinants of the migration decision of individuals. Migration, however, does not always take place if there is a positive wage difference. In the case of strong ethnic networks it can also take place in spite of a negative wage difference. The research results also suggest that immigration restrictions can only postpone but not prevent migration. These results have strong implications for immigration policies, in particular for the upcoming enlargement of the EU towards Central and East European countries and the questions whether this enlargement should be accompanied with immediate free mobility of labor or whether labour mobility should be restricted for a transition period, as it was the case when Spain, Portugal and Greece joined the Union. The important role of ethnic networks for the location decision of migrants further indicates that East-West migration after the enlargement of the EU towards the East will be largely a problem for Germany and Austria.

Concerning return migration the results of the project are rather mixed. The experience in Denmark indicates that less successful migrants have a higher probability to return to their home country. The results for Ireland indicate, however, that return migrants have higher skills and higher wages than the immobile Irish population.

Most studies within the project were concerned with the assimilation of migrants into the society and the labor market of the receiving countries along several dimensions, i.e. wages, employment, welfare dependency, educational attainment, and health. Despite the different data sets and methodologies used by the respective teams, there appears to be a rather clear pattern in almost all countries investigated. At the time of immigration migrants show to be in a disadvantaged situation when compared to similar natives. With time of residence, however, immigrants assimilate to natives. The two most important determinants of fast assimilation identified in all countries are language skills as well as attachment to the labor market in order to accumulate labour market experience. These results indicate that effective integration policies should concentrate in particular on language courses.

Concerning the welfare dependence of migrants the results are somewhat different for the countries investigated. Whereas differences between natives and immigrants in aggregate welfare dependence appear to be due to observable characteristics in Germany, this seems not to be the case in Sweden. The results for Germany would imply that the fear of a "race-to-the-bottom" in social standards due to welfare magnet effects of generous social security systems are unfounded; this conclusion is not confirmed by the experience in Sweden. Further research in this area seems to be necessary to get a clearer picture.

Many teams in the project also investigated the integration of second-generation immigrants. In general the results of the different country studies indicate that existing problems faced by second-generation migrants are the results of factors that they share with other native children from underprivileged background, such as parents without or few qualifications, large families in living in a relatively poor neighborhood. These results suggest that effective policies towards underprivileged families should also be effective for second-generation migrants and that, with the exception of policies stressing the accumulation of language skills, special policies towards second-generation migrations seem not to be necessary. The results of the Israeli team, however, indicate that focusing only on second-generation migrants might be too narrow and that future research should include third-generation migrants.

Finally, the results of the project indicate that there are no negative labour market effects of immigration on natives and hence confirm the results obtained in other countries such as the US or Canada. A cross-country analysis of the German team indicates further that if European governments select migrants more according to the needs of their labour markets, social tensions about migration would be moderate and the economic performance of the respective country would be improved, as both political and economic objectives of policy-makers would be met.

The policy implications of the research output of the project with regard to immigration policy, which are of particular importance in view of the upcoming EU enlargement to Central and Eastern Europe are listed below. The results suggest

that a migration policy that selects migrants according to their skills is beneficial for the receiving country because of the following reasons:

- Skilled migrants assimilate very quickly to the society and economy of the receiving country. A fast assimilation in turn reduces the probability that migrants become dependent on social benefits and increases the probability of a successful integration of second-generation migrants.
- Immigration of selected workers reduces the possibility of negative effects of immigration on native employment as well as wages and may even create gains in efficiency that also result in positive distributive effects, not only for capital but also for native labour.
- A selective migration policy meets both political and economic objectives, since it reduces social tensions towards migration among the native population and enhances the economic performance.

The results of the research project further suggest that assimilation policies seem to be necessary to achieve a fast economic assimilation of the migrants and to reduce the potential costs of immigration for the receiving country. The studies on the assimilation of first- and second-generation immigrants as well as the determinants of welfare dependence of migrants indicate that language skills are of particular importance.

From the other research projects and results of the project it is more difficult to derive European-wide policy conclusions because the results are either very different across countries or focus on some special, country-specific questions. For example, the French and German team also investigated the labour market effects of increase trade. The results are rather diverse and differ across the countries investigated. In France, the import behaviour of firms has a strong effect on wages. However, the specific effects differ depending on the nature of the imported goods, the origin of these goods as well as on the skill-level of the workers. For Austria the results indicate that imports affect employment negatively while exports have a positive effect on wages. In Germany, trade does not affect wages or employment.

Several studies within the project investigated the effects of vocational training, both theoretically and empirically. The results of the different studies within this area of interest are also too diverse to derive specific policy conclusions. In Israel, for example, the impact of vocational training differs according to the specific groups investigated. Finally, the project has delivered a wide range of country-specific analysis that provides important insights into the variety of the dynamics of social exclusion. Some of these country-specific results could, however, be also used to analyse similar problems in other European countries. The Italian team, for example, investigated the role of family characteristics in explaining the late labour market entry and emancipation of Italian youths as well as the high university dropout rate in Italy, which is rather similar to the situation in Spain.

Apart from the specific investigations of the dynamics of social exclusion the project resulted in some new methodologies, techniques and econometric models to investigate issues related to the overall topic. Members of the Israeli team developed several methods to classify and characterize individuals with low earnings or the working poor. Members of the Swedish team developed new methods of event history and duration analysis, which are helpful to investigate the dynamics of social exclusion, and the German team developed new models for bivariate count-data, which are useful when modelling count data for different groups of people. Finally, the team members of the project developed new

theoretical models that explain some patterns of social exclusion or inclusion, such as for example the multi-generation model of immigrant earnings by members of the Israeli team or new explanations for why firms invest in general training by the team from the University of Essex.

7. EXPLOITATION AND DISSEMINATION OF RESULTS

The research results have been circulated initially in the CEPR Discussion Paper Series in order to receive the widest possible professional scrutiny, both in the research and the policy communities. On average 500 copies of each Discussion Paper are circulated throughout Europe and the rest of the world. CEPR Discussion Papers are also abstracted widely, and summaries of the papers are also distributed on a monthly basis by electronic mail to over 3,000 individuals. During 2000 the Centre published 307 CEPR Discussion Papers. The key results in each Discussion Paper are also reported in the quarterly CEPR Bulletin, which circulates to over 10,000 members of the academic and policy communities, and in addition appears on CEPR's webpage. Highlights of the Centre's research are featured in its newsletter European Economic Perspectives, which is distributed to over 14,000 members of the policy community and the private sector world-wide. In 1998/9 CEPR also published two conference volumes, six reports, two books, two journals and two journal special issues.

In addition, ongoing research results are being presented at public discussion meetings organised by CEPR.

The following CEPR discussion papers have been produced through the lifetime of the project:

Can Vocational Education Improve the Wages of Minorities and Disadvantaged Groups? The Case of Israel	Shoshana Neuman, Adrian Ziderman
The Union Membership Wage Premium Puzzle: Is There A Free-Rider Problem?	Alison Booth, Mark L Bryan
Is Wage Compression a Necessary Condition for Firm-Financed General Training?	Alison Booth, Gylfi Zoega
A Theory of Immigration Amnesties	Gil S Epstein, Avi Weiss
The Wage Expectations of European College Students	Giorgio Brunello, Claudio Lucifora, Rudolf Winter-Ebmer
First- and Second-Generation Migrants in Germany - What Do We Know and What Do People Think?	Michael Fertig, Christoph M Schmidt
Multi-Generation Model of Immigrant Earnings: Theory and Application	Gil S Epstein, Tikva Lecker
Learning About Migration Decisions from the Migrants: Using Complementary Datasets to Model Intra-Regional Migrations in Spain	Manuel Arellano, Olympia Bover
Settlement Policies and the Economic Success of Immigrants	Olof Åslund, Per-Anders Edin, Peter Fredriksson

Ethnic Enclaves and the Economic Success of Immigrants - Evidence from a Natural Experiment	Olof Åslund, Per-Anders Edin, Peter Fredriksson
The Wage Performance of Immigrant Women: Full-Time Jobs, Part-Time Jobs and the Role of Selection	Christian Dustmann, Christoph M Schmidt
Labour Market Interactions Between Legal and Illegal Immigrants	Gil S Epstein
Racial and Economic Factors in Attitudes to Immigration	Christian Dustmann, Ian Preston
Unemployment and Consumption: Are Job Losses Less Painful near the Mediterranean?	Samuel Bentolila, Andrea Ichino
Why Do Firms Invest in General Training? 'Good' Firms and 'Bad' Firms as a Source of Monopsony Power	Alison Booth, Gylfi Zoega
Gender, Salary and Promotion in the Academic Profession	Melanie Ward
Hit Twice? Danish Evidence on the Double-Negative Effect on the Wages of Immigrant Women	Helena S Nielsen, Michael Rosholm, Nina Smith
Unemployment Duration and Exit States in Britain	René Böheim, Mark P Taylor
Earnings Inequality, Returns to Education and Immigration into Ireland	Alan Barrett, John Fitzgerald, Brian Nolan
Language Proficiency and Labour Market Performance of Immigrants in the UK	Christian Dustmann, Francesca Fabbri
Racial Beliefs, Location And The Causes Of Crime	Thierry Verdier, Yves Zenou
Employer Learning And The Returns To Schooling	Thomas Bauer, John P Haisken-DeNew
Immigrant Assimilation And Welfare Participation: Do Immigrants Assimilate Into Or Out Of Welfare?	Jörgen Hansen, Magnus Löffström
Female Labour Supply, Flexibility Of Working Hours, And Job Mobility	Rob Euwals
Social Harmony At The Boundaries Of The Welfare State: Immigrants And Social Transfers	Gil S Epstein, Arye L Hillman
Is There A Wage Premium for Returning Irish Migrants?	Alan Barrett, Philip O'Connell
Youth Employment Policies In France	Denis Fougère, Francis Kramarz, Thierry Magnac
Work Environment And Individual Background: Explaining Regional Shirking Differentials In A Large Italian Firm	Andrea Ichino, Giovanni Maggi
Employed 40 Hours or Not Employed 39: Lessons from the 1982 Mandatory Reduction of the Workweek	Bruno Crépon, Francis Kramarz

The Endogenous Determination of Minimum Wage	Gil S Epstein, Shmuel Nitzan Regina Riphahn
Immigrant Participation in Social Assistance Programs: Evidence from German Guestworkers Are Austrian Returns to Education Falling Over Time?	Josef Fersterer, Rudolf Winter- Ebmer Yves Zenou
Urban Unemployment, Agglomeration and Transportation Policies On the Age at Marriage: Theory and Evidence from Jews and Moslems in Israel	Leif Danziger, Shoshana Neuman Alison Booth, Marco Francesconi, Gylfi Zoega
Training, Rent-Sharing and Unions	Alexia Fürnkranz- Prskawetz, Jan Michael Hoem, Gerda Neyer John M Abowd, Francis Kramarz, David N Margolis Bruno Crépon, Francis Kramarz
Third Births in Austria: the Effect of Public Policies, Educational Attainment and Labour-Force Attachment	Etienne Wasmer, Yves Zenou Pieter Bevelander
Minimum Wages and Employment in France and the United States	Fiorella Padoa Schioppa Kistoris Margaret Stevens
Working 40 Hours or Not Working 39: Lessons from the 1981 Mandatory Reduction of Weekly Working Hours Does Space Affect Search? A Theory of Local Unemployment Declining Employment Assimilation of Immigrants in Sweden: Observed or Unobserved Characteristics? Regional Aspects of Unemployment in Europe and in Italy Should Firms be Required to Pay for Vocational Training? Self-Employment and Windfall Gains in Britain: Evidence From Panel Data Changes in the Relative Structure of Wages and Employment: A Comparison of Canada, France and the United States Lower and Upper Bounds of Returns to Schooling: An Exercise in IV estimation with Different Instruments	Mark P Taylor
Glass Ceilings or Sticky Floors?	David Card, Francis Kramarz, Thomas Lemieux Andrea Ichino, Rudolf Winter- Ebmer Alison Booth, Marco Francesconi, Jeff Frank Christian Dustmann, Ian Preston Andrea Ichino, Rudolf Winter- Ebmer
Attitudes to Ethnic Minorities, Ethnic Context and Location Decisions	
The Long-Run Educational Cost of World War II: An Example of Local Average Treatment Effect Estimation	

