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Methods for Performance Based Management of Active Labor Programs in Hungary: An Adjustment Methodology for Performance Indicators and a Proposal for Budget Allocation

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Methods for Performance Based Management of Active Labor Programs in Hungary: An Adjustment Methodology for Performance Indicators and a Proposal for Budget Allocation

A report on activity B.1 in the project to provide technical assistance to improve labor market analyses in Hungary, under the agreement between the United States Department of Labor and the Hungarian Ministry of Labor.

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Here at the W. E. Upjohn Institute for Employment Research, I thank Ken Kline and Rich Deibel and all others who contributed to the success of the project.

Finally, as author of this report, I accept responsibility for any shortcomings of my attempt to suggest methods for the management of active labor programs operated from the Decentralized Employment Fund in Hungary.

Christopher J. O'Leary
Kalamazoo, Michigan
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TABLE OF CONTENTS

LIST OF TABLES

1. INTRODUCTION

Unemployment in Hungary has risen dramatically since late 1989 when the process of privatization and economic reform began to accelerate. To ease the hardship associated with worker dislocation and to maintain social stability, the national government has provided unemployment compensation and a variety of active labor programs. The active labour programs adopted in recent years include nearly the full menu existing in nations with developed market economies.

This paper begins by describing active labor programs (ALPs) in Hungary and summarizing the performance indicators (PI) developed for monitoring the effectiveness of these programs. The PI systems for ALPs in Hungary were developed and implemented with the technical assistance of the W.E. Upjohn Institute for Employment Research. This paper extends that earlier work by presenting two further techniques to help in applying performance management techniques for ALPs in Hungary.

The PI system for ALPs in Hungary is an example of results oriented public management. It has been functioning in Hungary since the beginning of 1994. The PI system was designed to support decentralized decision making while allowing program managers at the national level to unobtrusively observe program effectiveness. The system allows a standardized assessment of program performance across both administrative districts and programs. Measures of performance were carefully selected so as to minimize adverse incentives. The systems are intended to promote superior performance through positive incentives, and to help identify and address poor performance through technical assistance or sanctions.

The first innovation offered in this report is a methodology for using indicators of conditions in local labour markets to adjust standards for program performance. Since regions within a country vary in their economic and labor market strength, before using data on program performance for management decisions, it is important to account for variations

in the difficulty unemployed people have in finding reemployment. The models presented here were developed using 1995 county level data on program performance and county labor market conditions. The models can be applied to assess 1996 performance on a more equitable basis than simply applying the standard of national average performance.

The second proposal suggested in this report is a new algorithm for allocating money for active labor programs from the Ministry of Labor to the county labor centers. The main aim in this proposal is to link county funding to the cost effectiveness of county operation of active labor programs. By basing even a small share of county funding on program performance, a strong incentive for cost effectiveness will be introduced. Ideally, the budget allocation model recommended would incorporate information on program performance from the PI system. At this preliminary stage an alternative is suggested.

A danger in operating a system which encourages and rewards high levels of program performance is that local and county active labor program managers will seek to enroll mostly persons who will be successful in gaining reemployment upon program completion. This practice is often referred to as "creaming" with the analogy is to milk, where the richest part, the cream, floats to the top and can be skimmed off. Creaming is a problem in performance management of labor market programs because if only the most able people get reemployment assistance, then the benefit to society of the expenditure on such programs is not as great as it might be otherwise. Highly qualified program entrants have a good chance of becoming reemployed even without the services offered in the program, while for less employment ready applicants the program services might be the only realistic path to employment.

In addition to accounting for regional differences in reemployment prospects, the adjustment methodology may also provide an easy way to discourage "creaming" and ensure appropriate targeting of reemployment services. Adjustment factors based on characteristics of the program participants can be used to encourage targeting of services to those who have particular difficulty in gaining reemployment, such as: the long term unemployed, those with

low levels of formal education, and persons with physical handicaps. Unfortunately, developing such adjustment factors requires person level data on program participants. Such data is not now available, but should be available in the near future. This potential pitfall of performance management and the possible solution offered by the adjustment methodology is mentioned as a caveat on current applications, and as a suggestion for further development of the system.

1.1 Background

In 1990, the W. E. Upjohn Institute for Employment Research submitted to the Hungarian Ministry of Labor a comprehensive plan entitled *Evaluation Criteria and Planning Guidelines for Employment Fund Programs in the Republic of Hungary* (O'Leary, 1990). This plan, based on two months of study in Hungary, proposed a practical system for the coordinated assessment and planning of Employment Fund programs. In March of 1991 a new Employment Law was enacted in Hungary. The new law changed the collection of programs for labor market support in Hungary and the relationship between the local employment centers, the county employment centers, and the Ministry of Labor.

In the Spring of 1992, the United States Department of Labor entered into an agreement with the Hungarian Ministry of Labor to provide technical assistance to improve labor market analyses in Hungary. The United States Department of Labor sub-contracted with the W. E. Upjohn Institute for Employment Research to provide services under activities B.1 and B.2 of the project. The project is being paid for with money from a World Bank loan to the Hungarian Ministry of Labor, and by supplementary funding from the United States Department of Labor. Services provided under this contract were coordinated by the Bureau of International Labor Affairs in the United States Department of Labor.

Starting in May of 1992, work to revise and implement a system for monitoring the cost effectiveness of Employment Fund programs began. Under the supervision of the Ministry of Labor and the National Labor Office in Hungary, the W.E. Upjohn Institute for

Employment Research worked with representatives from Borsod-Abauj-Zemplen, Hajdú-Bihar, and Somogy counties to develop and pilot test a practical system of performance indicators for active labor programs. In October of 1993 nation-wide training in how to conduct surveys, record data, and compute performance indicators was carried out. Nation-wide implementation of the performance indicators system began in January, 1994. In that same month the W. E. Upjohn Institute for Employment Research submitted to the Hungarian Ministry of Labor a report entitled *A System for Evaluating Employment Programs in Hungary* summarizing all aspects of the performance indicators system (O'Leary, 1994).

From 1994 the W. E. Upjohn Institute for Employment Research worked with the Borsod-Abauj-Zemplen county labor center and the Financial Planning Department of the Ministry of Labor in Hungary to develop a management system for active labor programs based on the performance indicators recently implemented. That report was submitted in 1996 (O'Leary, 1996).

Also beginning in 1994 the W. E. Upjohn Institute for Employment Research worked with the National Labor Center in Budapest on an agenda of four activities under the heading of "Labor Market Modelling." The activities under this project included two efforts to support management and planning of active labor programs: the development of an adjustment methodology for performance indicators and a proposal for a budget allocation model which incorporates program performance as a factor. Results of these two efforts are summarized in this report. The other two activities were undertaken by the Hungarian consulting firm Multi-Racio and involved: development of a seasonal adjustment methodology for labor market time series data, and the development of methods for estimation of local area unemployment statistics.

1.2 Active Labor Programs in Hungary

In 1996 the four most widely used active labor programs in Hungary are: retraining, self employment assistance, wage subsidies for hiring long term unemployed, and public service employment. A brief description of each follows.

Retraining - Occupational skill retraining may be provided to persons who are either unemployed, expected to become unemployed, or currently involved in public works. Unemployed recent school leavers may also qualify. Training support may include a supplement to earnings or a benefit in lieu of earnings equal to 110 percent of the unemployment compensation otherwise payable, plus reimbursement of direct costs.

Self-employment Assistance - Self employment assistance is possible for persons who are eligible for unemployment compensation. The support may include up to 6 monthly payments of unemployment compensation beyond the basic one year eligibility as soon as the unemployed person starts his business. Support may also include reimbursement of up to half the cost of professional entrepreneurial counseling services, and half the cost of training courses required for engaging in the entrepreneurial activity. Up to half the premium on loan insurance for funds borrowed to start the enterprise may be paid for one year.

Wage Subsidy for Hiring Long Term Unemployed - A wage subsidy of up to 50 percent is possible for up to one year. The payment is made directly to the employer and applies to total labor costs for hiring persons unemployed for more than 6 months (3 months for school leavers), provided the employer has not laid off anyone involved in the same line of work in the previous 6 months and after the assistance has ended, he further employs the unemployed persons at least as long as he received assistance.

Public Service Employment - Workers hired for public maintenance and infrastructure projects or public social services may have direct costs of employment (wages, overhead,

tools, clothes, and transportation) subsidized by up to 70 percent from the Employment Fund provided that the employer does not receive any net income as a result of the activity.

1.3 Performance Indicators of Program Effectiveness

The approach adopted in Hungary to monitor the effectiveness of Employment Fund programs focuses on timely measures which can be readily implemented and are a natural part of the management system. The monitoring process centers on what are called performance indicators. Performance indicators (PI) allow standardized assessment of performance across programs and counties not provided by other methods of evaluation. Furthermore, the information from the PI system is timely so that results may be used in the annual planning and budget allocation process. Table 1-1 lists the performance indicators for active labor programs used in Hungary during 1995.[1]

Among the evaluation methods available, which also include experimental, quasi-experimental, and econometric approaches, the monitoring approach using PI was chosen as being particularly practical at the early stage of program development.[2] The monitoring approach to evaluation which uses PI has been endorsed by senior officials in the Hungarian Ministry of Labor, the National Labor Center in Hungary, and the Labor Research Institute of the Hungarian Ministry of Labor.

Values of the performance indicators computed with county data for a calendar year may be used to establish targets called performance standards for the following year. Table 1-2 presents data on performance indicators for the 20 counties in Hungary for 1995 based

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[1]O'Leary (1995) provides an overview of performance indicators systems for active labor programs in both Hungary and Poland.

[2]Frey (1992) surveyed evaluation methods used around the world and concluded that the monitoring approach is best for labor market programs in Hungary at this stage of development.

on follow-up surveys conducted by the counties. The following section combines this data on county performance with information on exogenous measures of the county labor market situation to estimate adjustment models for fairly assessing program performance. The performance standards can be updated periodically to reflect national trends.

2. AN ADJUSTMENT METHODOLOGY FOR PERFORMANCE INDICATORS

The adjustment methodology proposed here is offered to be part of the system of performance indicators to assess the effectiveness of programs in each county considering the specific reemployment difficulties faced by job seekers in the county.

2.1 A Simple Example

Table 2-1 is an example of a work sheet which may be used by a county to set its own performance standard for a particular program relative to the national departure point for performance, given reemployment prospects in the county. The example given in Table 2-1 is for Borsod county and for the PI: "average cost per trainee employed at follow-up."

The national departure point for performance on a particular indicator is set so that the adjusted standards allow seventy-five percent of the counties to meet or exceed the performance standard.[3] In Table 2-1 the national departure point for the performance indicator "average cost per trainee employed at follow-up" (A11) is listed as HUF 355,070 (monetary units--Hungarian Forints). In Table 2-1 the values under the heading "weights" are the amounts by which deviations in county values of adjustment factors from national average values change the county performance standard from the national departure point. The weights in Table 2-1 are based on data for all counties in Hungary for 1995. The example given shows a case where it is typical in the nation for an increase of one person per square kilometer in the county population density (POPDENSE) to reduce the average

[3]The technical details of setting the departure point are discussed below.

cost per employed trainee at follow-up by HUF 31.1. Increases in the other factors--the county unemployment rate (UNRATE), the index of average monthly earnings (WAGECOST), and the percent of registered unemployed who receive unemployment compensation (PCTONUC)--tend to increase the average cost per employed trainee at follow-up. Each of these factors affects the cost of reemployment through group retraining in the expected way, and this is an important requirement for adjustment factors.

In this example, since the PI concerns average cost, a lowering of the performance standard is a tightening of the criterion, and a raising of the performance standard means the criterion is relaxed. In the example, since the unemployment rate (UNRATE) in Borsod county was 5.9 percentage points more than the national average, and since that factor tends to increase costs, the performance standard for Borsod county is significantly relaxed by HUF 161,677. Borsod was slightly below the national average for the average monthly earnings (WAGECOST) factor, and since decreases in that factor tend to decrease costs the cost standard in terms of Hungarian Forints was lower making it harder to reach. The same qualitative effect occurred for the percent of registered unemployed receiving unemployment compensation (PCTONUC), since Borsod was below the national average the cost standard was tightened for this factor. For the fourth factor (POPDENSE), since the population density is relatively low in Borsod county, it is below the national average, and since a decrease in population density tends to increase the cost of reemployment through group retraining the performance standard relaxed for Borsod County by this factor.[4]

Taking all the adjustment factors together, the worksheet presented in Table 2-1 indicates that Borsod county was less than its own adjusted standard for this performance indicator by about nineteen percent. Since having cost below the standard is desirable, this

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[4]It should be emphasized that the computations done involve national averages of county values not actual means. For example, the population density in Hungary is 110 while the average of the 20 county population densities is 276. This is done to conform with properties of weights estimated by ordinary least squares multivariate regression on county data.

indicates superior performance on this important measure of success for Borsod county. In this example of the adjustment methodology, Borsod county received the greatest relaxation in the performance standard because the unemployment rate in the county exceeded the national average by a significant amount and the adjustment "weight" for this factor is relatively large. The measurement given under item "P" for the performance indicators worksheet in Table 2-1 is a more equitable measure by which to compare performance across counties than the simple unadjusted value of the performance indicator.

2.2 Development of the Adjustment Weights

The weights used in the performance indicators adjustment method work sheet in Table 2-1 are simply coefficients from estimation by ordinary least squares (OLS) of a multivariate regression model of the following type:

$$(1) \qquad y_i = b_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{3i} + b_4x_{4i} + u_i,$$

where, x_1 to x_4 represent the four adjustment factors used to compute the weights which appear in Table 2-1. The four factors in the model where the dependent variable y is "average cost per trainee employed at follow-up" (A11) are: county unemployment rate (UNRATE = x_1), the index of average monthly earnings (WAGECOST = x_2), the percent of registered unemployed who are unemployment compensation recipients (PCTONUC = x_3), and the county population density (POPDENSE = x_4). Data on these and four other exogenous variables is given in Table 2-2 for the 20 counties of Hungary.

The following eight exogenous factors were selected from as the best candidates from variables available to adjust standards for performance by counties in managing active labor programs.

UNRATE - Average monthly registered unemployment rate in 1995 as a fraction of the previous year's labor force.

WAGECOST Based on a May 1995 survey by the National Labor Center.

PCTLONG - Persons registered as unemployed for 12 months or more as a percentage of all registered unemployed on June 20, 1995.

PCTONUC - Persons collecting unemployment compensation as a percentage of registered unemployed on June 20, 1995.

PCTONUA - Persons collecting unemployment assistance--the social type benefit for those who have exhausted unemployment compensation--as a percentage of registered unemployed on June 20, 1995.

VACRATE - Job vacancies per 100 registered unemployed on June 20, 1995.

POPDENSE Population density as of the 1994 census of the population.

PCTURBAN Percent of the population living in urban areas as of the 1994 census of the population.

The adjustment models were each specified to include the county unemployment rate (UNRATE) and three other exogenous variables. The index of average monthly earnings (WAGECOST) was included in the model for each performance indicator which measured a cost. Other variables were selected for inclusion so as to improve the overall explanatory power of the model.

Following is the result of estimating equation (1) on 1995 data for the 20 Hungarian counties as listed in Table 1-2 and Table 2-2:

$$(2) \qquad A11 = \underset{(1.42)}{-1106886} + \underset{(1.53)}{27428}*UNRATE + \underset{(1.80)}{7752.12}*WAGECOST +$$

$$\underset{(0.82)}{94446.08}*PCTONUC - \underset{(0.60)}{31.11}*POPDENSE.$$

Figures in parentheses are the absolute value of t-statistics for the test of significance, the coefficient of determination was 0.29. Unfortunately the index of average monthly earnings (WAGECOST) is the only significant variable in the equation for the average cost per trainee employed at follow-up (A11). Furthermore, the F-statistic of 1.52 to test for the joint significance of all parameters estimated indicates that taken together the five parameters in the equation are not different from zero in a test at the 95 percent confidence level (the critical F-value is 2.90).

2.3 Setting the National Departure Point

The aim of the adjustment methodology presented in this report is to set a different performance standard for each county for each performance indicator which adjusts for county labor market conditions which are likely to affect program performance. The previous subsection explains that the adjustment weights for these models are estimated are estimated by ordinary least squares regression (OLS).

Estimation of weights by the OLS method means that the response surface, represented for example by equation (2), passes through the point of means of the data. In the present application this implies that about have the counties will lie above the response surface and about half will lie below the surface. In terms of the work sheet given as Table 2-1 it means that if the National Departure Point were set at the average of the 20 counties, then about half the counties would exceed their standard and about half the counties would be below their standard.

Identifying half the counties in the nation as failing to meet their standard for performance would be rather imprecise information for management purposes. Instead the approach used for managing the Job Training Partnership Act programs in the United States is proposed. That is to set a National Departure Point for each performance indicator so that seventy-five percent of the counties will meet or exceed their standard. This means that in Hungary, five of the twenty counties will be identified as candidates for management assistance or sanctions from the Ministry of Labor.

Having described the National Departure Point it is easy to state the method for computation. The difference between the actual value of a performance indicator for a given county and the predicted value for that county suggested by a result like equation (2) estimated by OLS is called a residual:

$$(3) \quad e_i = y_i - Y_i$$
$$= y_i - XB$$

where Y_i is the predicted value of the dependent variable, X is a matrix of exogenous variables, and B is a vector of OLS regression coefficients. We then simply add the 75th percentile residual to the national average of y to arrive at the national departure point.

Care must be taken in this last step since counties seek to be above reemployment rate performance indicators and below reemployment cost performance indicators. When ranking residuals, e_i, for the 20 counties to determine the 75th percentile value, for cost criteria like A11, the residuals should be ranked in ascending order from lowest (most negative) to highest (most positive), while for reemployment rate criteria like A12, the residuals should be ranked in descending order.

As indicated above, the National Departure Point for the performance indicator "average cost per trainee employed at follow-up" (A11) is HUF 355,070. This is arrived at by adding to the national average of HUF 298,751 the 75th percentile residual, which was

HUF 56,319 for Hajdu-Bihar county. The adjusted standards for the performance indicator A11 and the percentage deviation of the county actual from the adjusted standard is given in Table 2-3 for each of the twenty counties together with all the data needed to produce these results.

2.4 Adjustment Models Based on 1995 Performance

In addition to the adjustment model for A11, Table 2-4 lists an adjustment model for each and every performance indicator listed in Table 1-1. These models were developed as described above and estimated on the 1995 data listed in Table 1-2 for the performance indicators and Table 2-2 for the exogenous variables.

Table 2-5 lists the national average value of each performance indicator together with its national departure point to be used in setting performance standards for each county. Finally, to provide further examples of applying the adjustment models, Table 2-6 lists the percent deviations from adjusted standards on the main indicator of reemployment cost effectiveness for each active labor program, and Table 2-7 lists the percent deviations from adjusted standards on the main indicator of rate of reemployment effectiveness for each active labor program.

2.5 Refinement of the Adjustment Methodology

There are obvious problems with the adjustment models presented in the previous subsection. First, a sample size of 20 is too small on which to base such an important management method. Second, a National Departure Point has been recommended to avoid the consequence of the OLS regression method which will tend to place half of the counties above the national average performance level and the other half below. However, it should be noted that the models developed on 1995 data will actually in fact be applied to performance indicators data for future years so this "OLS property of means" problem will take care of itself somewhat.

It is recommended that in the first year, the adjustment models presented in this report only be used for internal purposes, and that further efforts to refine the adjustment models continue. Two next steps are possible. First, since management of ALPs is devolving to the local areas, it may be practical to estimate adjustment models on data for the more than 180 local offices. Second, it may possible to estimate adjustment models using person level data from the follow-up surveys of ALPs. Large random samples could be drawn across counties and the models estimated with proper care in the treatment of county level factors in these models.[5]

In years to come, as the performance indicators system matures, the adjustment factors used should be changed depending on changes in labor market conditions and policy targets, and the methodology used for computing adjustment weights should also be refined.[6]

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[5]A good discussion of methods for refining performance indicators is given in Richard W. West (1992), *Development of Adjustment Models for PY 92 JTPA Performance Standards for Titles II-A and III*, Menlo Park, CA: Social Policy Research Associates (June).

[6]A good guide on setting performance indicators was produced by the Office of Strategic Planning and Policy Development (1989) in the U.S. Department of Labor. It is called a *Guide for Setting JTPA Title II-A and Title III (EDWAA) Performance Standards for PY 89.*

3. BUDGET ALLOCATION OF THE DECENTRALIZED EMPLOYMENT FUND

The Employment Fund has two principal parts: the decentralized part--which is about 60% of the total--and the centralized part. The centralized part is reserved for special projects funded at the discretion of the Ministry of Labor, these include: an industrial adjustment service for coping with mass layoffs, job clubs, and special measures for high unemployment regions like employment companies. A new department for Public Works in the Ministry of Labor will also receive significant funding from the Decentralized Employment Fund.

Money for the Employment Fund is provided by the Hungarian Parliament from general revenues as part of national unified budget. Unemployment compensation and the national system of labor centers are financed out of a separate pool called the Solidarity Fund. Employers currently contribute 3.9% and workers 1.5% of gross payrolls to the Solidarity Fund. This is down from 5 and 2 percent respectively levied until 1994. In recent years, even this lower level of taxation has overfunded unemployment benefits and the system of labor centers, consequently part of the Solidarity Fund surplus has been transferred to the decentralized Employment Fund to finance active labor programs.

Funding for the decentralized part of the Employment Fund is allocated to the counties by a formula approved by the tri-partite National Labor Market Committee (NLMC). The allocation is based on observable factors summarizing recent labor market activity and use of active labor programs. The counties themselves then determine the

allocation of money across programs. It is expected that in the near future the NLMC will approve incorporation of information about performance in operating programs into the algorithm for allocation of the decentralized Employment Fund.

3.1 Budget Allocation in Recent Years

1991 was the first year that the process of allocating the decentralized employment fund was done. In that year the formula for allocating the decentralized Employment Fund had the following six factors (the weight for each factor is in parentheses): the county share of total registered unemployed in Hungary (45%), the county share of total population in Hungary (10%), the county share of school leavers in Hungary (10%), the county share of registered unemployed who are unskilled in Hungary (5%), the county share of registered unemployed who had worked in declining industries in Hungary (15%), and the previous distribution of Employment Fund money (15%). In subsequent years, the allocation model has involved fewer factors.

In 1992 the budget allocation formula was simplified to have only three factors. The factors (with weights in parentheses) were: the county share of total registered unemployed in Hungary (60%), the county share of long term unemployed in Hungary--long term unemployed means registered 6 months or more as unemployed (20%), and the county share of school leavers in Hungary (20%).

For 1993 the only change in the algorithm for allocation of the decentralized employment fund which was made from 1992 was to change the factor "county share of the nation's school leavers" to the factor "county share of the nation's unemployed school leavers."

The algorithm selected by the National Labor Market Committee for 1994 involved only three factors, each applied independent of any prime factor. The three factors were (with weights in parentheses): the county share of the sum of registered unemployed, retraining participants, and Public Service Employment (PSE) participants (70%), the county share of long term unemployed in Hungary--long term unemployed means registered 6 months or more as unemployed (15%), and the county share of school leavers in Hungary (15%).

For 1995 the factors in the budget allocation algorithm were (with weights in parentheses): the county share of the sum of registered unemployed plus participants in active labor programs (80%), the county share of long term unemployed in Hungary--long term unemployed means receiving unemployment compensation for 6 months or receiving unemployment assistance which is the welfare type income support paid to eligible exhaustees of unemployment compensation (10%), and the county share of school leavers in Hungary (10%). Relative to 1994 this algorithm involved a change in weights for factors and a change in the definition of the first two factors. The first factor, which was increased to 80% weight in the allocation, includes participants in all ALPs. The definition of long term

unemployed used as the second factor in the model was changed from the share on the register six months or more to the county's share of long term benefit recipients. This new definition which is based on administrative data is less subject to manipulation by county labor offices. Part way through 1995, the original decentralized Employment Fund was increased about twenty-five percent from the original 8 billion Hungarian Forints. This was done so that counties could pre-approve Active Labor Program activities which would carry over into the next calendar year, thereby helping counties to smoothly administer programs over the course of the year.

The 1996 model for allocation of money from the Decentralized Employment Fund to the Counties involved three factors and the same weights as used in 1995, with the only change being that the factor measuring the share of long term unemployed was broadened to include registered unemployed who have no income support. The practice, originally tried in mid-1995, of instructing counties to consider 25% of their decentralized EF allocation as money to pre-allocate to ALPs for the coming year was also retained for 1996.

3.2 Trends in Budget Allocation Plans

Table 3-1. summarizes the factors and weights used in the allocation of the decentralized EF in Hungary during the 1990s. Over the years the trend has been toward simpler models with the greatest weight on the county share of registered unemployed and those in Active Labor Programs. The county share of school leavers has remained an

element in the model over the years, but weight on this factor has diminished as more specific programs for this group have developed with alternative financing plans. The county share of long term unemployed has remained a factor, but with decreasing weight in the allocation. The most recent trend in the allocation model is the move to allow counties to commit spending for the coming year, this practice allows a smoothing of enrollment in Active Labor Programs over the calendar year.

The bottom two rows in Table 3-1 summarize trends in the budget of the Decentralized Employment Fund which is allocated by the model and the total amount spent from the fund each year since 1991. Total spending from the fund was HUF 3.586 billion in 1991 reached a peak of HUF 13.837 billion in 1994 and declined to HUF 11.368 billion in 1996. The share of spending allocated by the model reached a maximum of HUF 12.000 billion in 1994; the share has declined since then. In 1995 a mid-year addition to the money available for spending was made. In 1996 the preallocation and carry over of funding has made the model allocated amount an even smaller share of the final total expenditure. For 1996 HUF 8.750 b. was allocated by the model given in column 6 of Table 3-1, HUF 2.250 b. was from the county's right to precommit 25% of the prior year's funding, and HUF 0.368 b. paid for early retirement costs. There was a further modification in 1996 to constrain the total funding for Budapest to be no more than 11.5% of the total amount spent nationwide.

3.3 A New Proposal for Budget Allocation to the Counties

The proposed budget allocation model for 1997 is presented in two stages. The first stage involves only simple adjustments of the model used in 1996; the second stage presents the final recommendation which involves two further modifications.

Two alternative proposals are presented. The first involves only simple rearrangement and reweighting of factors used in the 1996 model so as to implicitly include an incentive for cost effective utilization of the Employment Fund. The second further modifies the first proposal by reallocating half of the fund based on county wage cost differences and an index of county unemployment rates. Both proposals presume that the preallocation for 1997 of 25% of 1996 funding provides a base line for funding.

Earlier in this report a system of performance indicators for Active Labor Programs in Hungary was presented. A means for comparing performance across counties based on an adjustment methodology was also presented. To provide an incentive for counties to meet or exceed performance targets, funding should in some way be based on objective measures of cost effective operation of programs. Once the performance indicators (PI) and the adjustment methodology are mature, reliable, and accepted, the NLMC may incorporate a summary measure of performance based on PI into the algorithm for allocation of the decentralized Employment Fund. The present proposals suggest an interim solution to indirectly provide a performance incentive to counties operating active labor programs. The

new proposal made here is described relative to the 1996 model which is the most mature incarnation of the budget allocation process.

The first factor listed in Table 3-1 for the 1996 allocation model combines registered unemployed and ALP participants, thereby giving each equal weight in the allocation process. The first new proposal as presented in Table 3-2 separates and reweights registered unemployed and the county share in ALPs. The factors (and weights) in this first proposed allocation model are: registered unemployed (30%), the county share in ALPs (40%), school leavers (10%), and long term unemployed (those receiving UC six months or more plus those receiving UA) (20%). Recall that additional money amounting to 25% of the 1996 allocation is also available for 1997 programs.

The effect of separating out the number of participants in ALPs and increasing the weight is to create an implicit cost effectiveness incentive for counties running ALPs. The proposals for 1997 presume a HUF 2.8 billion carry over from 1996 and HUF 10 billion allocated by the formula, with previous participants in ALPs determining 40% or HUF 4.0 billion. Having more participants for a given expenditure indicates greater cost effectiveness thereby improving a county's position for receiving money from the Decentralized Employment Fund.

The weight for school leavers remains at 10 percent, unchanged from 1996, despite the fact that there will be three new programs specifically targeted to school leavers: (1)

work experience by subsidizing further employment in their apprenticeship (2) work experience through a wage subsidy to employers of school leavers for up to 9 months (with a further obligation for up to 3 months more)--for this program the county labor center decides the jobs and occupations which qualify, if there is no further work school leavers will qualify for regular UC, and (3) there is a special retraining program for school leavers, restricted to several jobs or occupations by specified by the county labor center. The other ALPs (except self-employment) can also be used for school leavers.

The data on variables used as weighting factors in the present proposal is given in Table 3-3. It should be noted that the data is taken from the register data base, and that there are some errors in this data since codes are not always properly updated by local labor center clerks. Generally the register data provides a lower count of participants compared to information in the county monthly reports on ALPs, and counties which overestimate ALP participation in the unemployment register (e.g., Budapest and Somogy) have an unfair advantage in this factor. While it leaves room for errors, and perhaps fraud, the register data is available more quickly and it is simpler to summarize. For the foreseeable future there will be no active on-line connection between computer software for finance of ALPs and records of participants in the register.

The alternative or "final proposal" is presented in Table 3-4. It calls for 25% of 1996 funding distributed as in 1996, plus half of the additional HUF 10 billion allocated as in

the first proposal with the remaining HUF 5 billion allocated 2/3 on the basis of a wage cost index and 1/3 on an index of county unemployment rates.

The wage cost index, based on an annual wage survey done by the national labor center, captures cost differences which exist between counties. As for example between the high cost capital city of Budapest and other counties many of which are rural and have much lower wage and other program operation costs. Where wage costs are higher the cost of wage subsidies are higher, and the cost of inputs to training and public service employment are also higher.

The relative size of the unemployment rate shows the relative employment situations of the counties and therefore the way in which chances for reemployment differ between the counties. Reemployment is more difficult to achieve where unemployment is higher, and unemployment varies widely across regions, so this imputes a regional affect too. The county share of registered unemployed in the nation, which is used as part of the first model for budget allocation, is largely affected by the labor force size in the county. Budapest has a large share of the registered unemployed in the nation, but it also has a large labor force and relatively favorable reemployment conditions. Funding should depend on the number of registered unemployed, but it should also depend on the reemployment prospects in the county as reflected in the unemployment rate index.

Each of the factors in the model proposed will have advocates and detractors from different regions of Hungary. The registered unemployment index will be favored by high unemployment areas and not low, the wage cost index will be favored by high wage cost areas and not low.

Why should both the share of registered unemployed and the unemployment rate index be used as factors in the model? To illustrate why contrast Budapest with Borsod county. First note that the unemployment rate index and wage cost index measures are at opposite ends of the scales in Budapest and Borsod. Indeed, several counties fall naturally into extreme and opposite groups on these measures.

The final proposal for the new allocation model is presented in Table 3-4. By adding the influence of management performance, cost of wages and program operations, and reemployment prospects it offers a rich yet simple modification of the 1996 allocation model. As an alternative the NLMC might consider the first stage of the current proposal as presented in Table 3-2. It includes minor modifications of the 1996 model to encourage more cost effective use of money from the decentralized employment fund. While a more modest proposal, this change in itself is worth adopting.

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Table 1-1. Performance Indicators for Active Labor Programs in Hungary

RETRAINING OF UNEMPLOYED IN GROUPS

A11 Average cost per trainee employed at follow-up
A12 Proportion of trainees who are employed at follow-up
A13 Average cost per training program entrant
A14 Average cost per trainee per hour of training
A15 Proportion of entrants who successfully complete training courses.
A16 Proportion of employed trainees working in occupation of training at follow-up

RETRAINING OF UNEMPLOYED INDIVDUALLY

A21 Average cost per trainee employed at follow-up
A22 Proportion of trainees who are employed at follow-up
A23 Average cost per training program entrant
A24 Average cost per trainee per hour of training
A25 Proportion of entrants who successfully complete training courses
A26 Proportion of employed trainees working in occupation of training at follow-up

RETRAINING OF EMPLOYED

A31 Average cost per trainee employed at follow-up
A32 Proportion of trainees who are employed at follow-up
A33 Average cost per training program entrant

A35 Proportion of entrants who successfully complete training courses
A36 Proportion of employed trainees working in occupation of training at follow-up

SELF EMPLOYMENT ASSISTANCE

B1 Average assistance per person still self-employed at follow-up
B2 Proportion of persons still self employed at follow-up
B3 Average subsidy per self-employed
B4 Average added employment resulting from self employment assistance at follow-up

WAGE SUBSIDY FOR HIRING LONG TERM UNEMPLOYED

C1 Subsidy per worker still at subsidized employer at follow-up
C2 Proportion of subsidized workers who are in regular employment at follow-up
C3 Average cost of wage subsidy per subsidized employee

PUBLIC SERVICE EMPLOYMENT

D1 Average monthly subsidy per worker
D2 Proportion of subsidized workers who are in regular employment at follow-up

Table 1-2. Actual Measurement of Performance Indicators by County in Hungary for 1995

Group Retraining Data for 1995						
County	Average cost per trainee employed at follow-up (A11)	Proportion of trainees who are employed at follow-up (A12)	Average cost per training program entrant (A13)	Average cost per trainee per hour of training (A14)	Proportion of entrants who successfully complete training (A15)	Proportion of trainees working in occupation of training (A16)
Budapest	349226	69.0	169777	83	70.4	44.8
Baranya	241686	37.6	87870	120	96.4	74.4
Bacs-Kiskun	220654	38.6	83069	134	97.5	77.6
Bekes	185116	46.0	78672	111	92.4	78.6
Borsod-Abauj-Zemplen	352604	32.1	100030	84	88.3	73.4
Csongrad	279533	33.5	88527	93	94.4	45.6
Fejer	430960	37.4	146494	116	91.0	68.4
Gyor-Moson-Sopron	422846	34.0	106703	114	74.2	65.3
Hajdu-Bihar	363321	29.4	98211	106	92.0	73.1
Heves	400306	25.8	91667	92	88.8	79.6
Komarom	264859	42.2	97178	128	87.0	73.1
Nograd	545689	26.1	123404	130	86.7	65.2
Pest	302020	39.3	107269	121	90.3	80.7
Somogy	221360	39.2	78758	88	90.8	83.4
Szabolcs-Szatmar	261145	34.5	86507	94	96.0	78.7
Jasz-Nagykun-Szolnok	348099	31.8	106684	115	96.5	55.8
Tolna	264883	34.9	82633	111	89.5	62.3
Vas	109216	56.3	55012	94	89.5	72.0
Vesprem	217532	45.0	92402	127	94.4	69.2
Zala	193968	33.6	64479	109	99.1	75.0
National average	298751	38.3	97267	109	90.3	69.8

Table 1-2. Actual Measurement of Performance Indicators by County in Hungary for 1995--continued

Individual Retraining Data for 1995						
County	Average cost per trainee employed at follow-up (A21)	Proportion of trainees who are employed at follow-up (A22)	Average cost per training program entrant (A23)	Average cost per trainee per hour of training (A24)	Proportion of entrants who successfully complete training (A25)	Proportion of employed trainees in occupation of training (A26)
Budapest	481348	35.1	159396	169	94.4	37.2
Baranya	111103	45.4	49312	130	97.8	80.9
Bacs-Kiskun	24800	100.0	24800	77	100.0	100.0
Bekes	31222	67.0	20020	77	95.7	82.3
Borsod-Abauj-Zemplen	53295	66.7	32569	214	91.7	100.0
Csongrad	71058	39.1	25590	56	92.7	69.8
Fejer	270624	29.1	78003	118	99.2	82.0
Gyor-Moson-Sopron	81828	69.0	53526	140	94.7	86.2
Hajdu-Bihar	72561	42.1	28557	84	93.4	84.7
Heves	190715	34.9	62324	99	93.7	91.2
Komarom	56455	69.3	39116	106	100.0	90.3
Nograd	78583	57.7	45336	63	100.0	93.3
Pest	122094	43.4	52814	130	99.7	88.3
Somogy	28363	55.6	15757	60	100.0	100.0
Szabolcs-Szatmar	59933	30.4	18194	79	100.0	64.7
Jasz-Nagykun-Szolnok	71308	56.2	40068	115	100.0	52.5
Tolna	73973	65.6	48143	129	99.2	78.6
Vas	36986	78.7	28181	154	96.8	83.8
Veszprem	47269	69.9	27029	148	81.8	87.3
Zala	40992	52.9	21702	83	100.0	69.4
National average	100226	55.4	43522	112	96.5	81.1

Table 1-2. Actual Measurement of Performance Indicators by County in Hungary for 1995--continued

Retraining of Employed Data for 1995					
County	Average cost per trainee employed at follow-up (A31)	Proportion of trainees who are employed at follow-up (A32)	Average cost per training program entrant (A33)	Proportion of entrants who successfully complete training courses (A35)	Proportion of employed trainees in occupation of training (A36)
Budapest					
Baranya	29731	93.9	29296	98.5	100.0
Bacs-Kiskun	146969	91.2	112388	83.8	100.0
Bekes	101446	100.0	99417	98.0	100.0
Borsod-Abauj-Zemplen	51644	100.0	51644	100.0	100.0
Csongrad	8592	86.4	8413	94.4	98.6
Fejer	66500	100.0	30692	46.2	100.0
Gyor-Moson-Sopron					
Hajdu-Bihar	54180	96.2	50993	97.8	100.0
Heves					
Komarom	41997	97.5	40947	100.0	100.0
Nograd					
Pest	51812	96.1	48959	98.3	98.2
Somogy	45680	62.5	28550	100.0	100.0
Szabolcs-Szatmar	16708	100.0	15813	94.6	100.0
Jasz-Nagykun-Szolnok					
Tolna	53350	100.0	53350	100.0	90.0
Vas	37148	100.0	34253	92.2	100.0
Veszprem	67583	80.0	51987	96.3	100.0
Zala	65668	100.0	65668	100.0	100.0
National average	55934	93.6	48158	93.3	99.1

Table 1-2. Actual Measurement of Performance Indicators by County in Hungary for 1995--continued

Self Employment Assistance Data for 1995				
County	Average assistance per person still self-employed at follow-up (B1)	Proportion of persons still self-employed at follow-up (B2)	Average subsidy per self-employed (B3)	Average added employment resulting from assistance (B4)
Budapest	72528	95.8	67936	0.1
Baranya	72632	81.1	55283	0.3
Bacs-Kiskun	69546	98.7	67150	0.1
Bekes	50303	97.6	48601	0.1
Borsod-Abauj-Zemplen	75909	85.0	63278	0.2
Csongrad	56831	92.7	51137	0.2
Fejer	77540	89.0	62967	0.3
Gyor-Moson-Sopron	75922	94.3	71023	0.2
Hajdu-Bihar	55138	94.5	51402	0.2
Heves	60348	100.0	57577	0.1
Komarom	50528	93.6	46831	0.1
Nograd	51535	88.5	47600	0.0
Pest	81804	87.6	69211	0.2
Somogy	42568	89.6	31188	0.1
Szabolcs-Szatmar	65595	96.8	61649	0.2
Jasz-Nagykun-Szolnok	76997	82.9	61102	0.1
Tolna	82396	85.6	69555	0.4
Vas	52807	92.1	50499	0.1
Veszprem	67816	91.4	57578	0.2
Zala	53950	93.4	49775	0.2
National average	64635	91.5	57067	0.2

Table 1-2. Actual Measurement of Performance Indicators by County in Hungary for 1995--continued

Wage Subsidy for Long-Term Unemployed Data for 1995			
County	Subsidy per worker still at subsidized employer at follow-up (C1)	Proportion of subsidized workers who are in regular employment (C2)	Average cost of wage subsidy per subsidized employee (C3)
Budapest	186533	70.8	116238
Baranya	138018	76.4	109226
Bacs-Kiskun	277810	62.6	178685
Bekes	128885	70.9	87591
Borsod-Abauj-Zemplen	121570	66.2	79482
Csongrad	172681	73.2	130197
Fejer	200592	80.2	184005
Gyor-Moson-Sopron	223253	72.0	160897
Hajdu-Bihar	139127	78.2	110576
Heves	184904	65.0	118598
Komarom	151779	81.4	125188
Nograd	129608	71.5	90191
Pest	123912	73.9	90527
Somogy	144151	74.2	103828
Szabolcs-Szatmar	134143	73.7	92335
Jasz-Nagykun-Szolnok	94681	73.1	66208
Tolna	129828	72.2	90854
Vas	180855	64.2	112521
Veszprem	147712	68.5	97345
Zala	124471	73.3	89563
National average	156726	72.1	111703

Table 1-2. Actual Measurement of Performance Indicators by County in Hungary for 1995--continued

Public Works Data for 1995		
County	Average monthly subsidy per worker (D1)	Proportion of subsidized workers in regular jobs at follow-up (D2)
Budapest	17127	5.2
Baranya	12435	0.5
Bacs-Kiskun	12505	7.3
Bekes	11058	8.5
Borsod-Abauj-Zemplen	14381	
Csongrad	14803	0.5
Fejer	11489	0.8
Gyor-Moson-Sopron	12196	1.5
Hajdu-Bihar	10331	2.7
Heves	12791	0.5
Komarom	13255	1.4
Nograd	15674	0.4
Pest	12056	
Somogy	10217	3.8
Szabolcs-Szatmar	14150	0.8
Jasz-Nagykun-Szolnok	12958	1.0
Tolna	11215	
Vas	13577	2.0
Veszprem	12549	0.0
Zala	11443	1.4
National average	12811	2.3

Table 2-1

Sample Performance Indicators Adjustment Worksheet

PERFORMANCE INDICATORS WORKSHEET		A. COUNTY NAME Borsod-Abauj-Zemplen			B. COUNTY NUMBER #5
C. PERFORMANCE PERIOD Calendar Year 1995	D. DATE CALCULATED 8/31/96	E. PERFORMANCE INDICATOR A11: Average Cost Per Trainee Employed at Follow-Up			
F. COUNTY FACTORS	G. COUNTY FACTOR VALUES	H. NATIONAL AVERAGES	I. DIFFERENCE (G minus H)	J. WEIGHTS	K. EFFECT OF COUNTY FACTORS ON PERFORMANCE INDICATORS (I times J)
1. UNRATE	17.9	12.0	5.9	27428.	161676.6
2. WAGECOST	98.3	100.0	-1.7	7752.1	-13217.4
3. PCTONUC	25.04	32.9	-7.8	9446.1	-73873.0
4. POPDENSE	103.0	276.4	-173.4	-31.1	5395.0
		L. TOTAL			79981.3
		M. NATIONAL DEPARTURE POINT			355070
		N. MODEL-ADJUSTED PERFORMANCE STANDARD (L + M)			435051.3
		O. ACTUAL PERFORMANCE LEVEL			352604
		P. % DEVIATION OF ACTUAL FROM MODEL ADJUSTED PERFORMANCE STANDARD ((O-N)/N)*100)			18.95%

Table 2-2. Data on Exogenous Variables used as Adjustment Factors

Exogenous Variable Data for 1995				
County	Unemployment rate (UNRATE)	Wage cost index (WAGECOST)	Percent long-term unemployed (PCTLONG)	Percent on unemployment compensation (PCTONUC)
Budapest	5.8	137.8	52.9	36.9
Baranya	11.9	98.9	64.8	35.7
Bacs-Kiskun	11.2	91.9	65.2	34.3
Bekes	14.2	93.6	72.6	28.5
Borsod-Abauj-Zemplen	17.9	98.3	74.7	25.0
Csongrad	10.1	100.8	64.3	34.3
Fejer	10.5	113.0	64.0	32.6
Gyor-Moson-Sopron	6.8	105.7	55.4	42.0
Hajdu-Bihar	15.1	97.5	70.2	26.1
Heves	13.5	100.6	70.8	29.3
Komarom	11.7	102.5	74.7	34.3
Nograd	17.5	88.4	64.0	28.7
Pest	7.7	98.7	74.4	42.5
Somogy	11.2	90.8	55.0	31.6
Szabolcs-Szatmar	20.3	93.4	65.5	22.5
Jasz-Nagykun-Szolnok	15.0	93.1	77.3	26.9
Tolna	12.8	102.8	68.2	33.9
Vas	7.0	92.8	59.8	39.6
Veszprem	10.1	101.0	65.4	34.3
Zala	9.3	98.5	57.5	38.3
National average	12.0	100.0	65.8	32.9

UNRATE - Average monthly registered unemployment rate in 1995 as a fraction of the previous year's labor force.

WAGECOST Based on a May 1995 survey by the National Labor Center.

PCTLONG - Persons registered as unemployed for 12 months or more as a percentage of all registered unemployed on June 20, 1995.

PCTONUC - Persons collecting unemployment compensation as a percentage of registered unemployed on June 20, 1995.

Table 2-2. Data on Exogenous Variables used as Adjustment Factors--continued

Exogenous Variable Data for 1995 Continued				
County	Percent on unemployment assistance (PCTONUA)	Job vacancy rate (VACRATE)	Population density (POPDENSE)	Percent living in urban area (PCTURBAN
Budapest	35.9	9.6	3802	100.0
Baranya	42.4	3.9	93	58.3
Bacs-Kiskun	42.9	7.0	64	54.0
Bekes	49.8	6.6	71	61.2
Borsod-Abauj-Zemplen	56.8	4.8	103	54.2
Csongrad	38.9	13.4	103	73.4
Fejer	40.8	15.7	97	52.7
Gyor-Moson-Sopron	31.2	1.1	105	55.9
Hajdu-Bihar	50.5	5.7	88	74.2
Heves	50.0	1.8	90	46.0
Komarom	40.3	6.6	139	63.0
Nograd	53.9	5.2	87	45.4
Pest	33.1	6.0	151	36.5
Somogy	40.6	7.3	56	47.0
Szabolcs-Szatmar	57.9	2.7	94	42.2
Jasz-Nagykun-Szolnok	56.5	4.6	75	65.4
Tolna	46.6	5.1	67	48.7
Vas	36.3	6.0	82	55.5
Veszprem	41.2	3.0	81	56.7
Zala	33.9	9.4	80	54.5
National average	44.0	6.3	276	57.2

PCTONUA - Persons collecting unemployment assistance--the social type benefit for those who have exhausted unemployment compensation--as a percentage of registered unemployed on June 20, 1995.

VACRATE - Job vacancies per 100 registered unemployed on June 20, 1995.

POPDENSE Population density as of the 1994 census of the population.

PCTURBAN Percent of the population living in urban areas as of the 1994 census of the population.

Table 2-3. Performance on Average Cost of Reemployment through Group Retraining (A11) with Percentage Deviation from the Adjusted County Target

Adjustment Weights:	27428	7752.1	9446.1	-31.1	Actual	Departure Point	Deviation of Actual
Adjustment Factors:	UNRATE	WAGECOST	PCTONUC	POPDENSE	A11	355,070	from Standard
National Average:	12.0	100.0	32.9	276.4	298,751	Standard	
Budapest	5.8	137.8	36.86	3802	349,226	406,549	-14.1%
Baranya	11.9	98.9	35.71	93	241,686	377,045	-35.9%
Bacs-Kiskun	11.2	91.9	34.33	64	220,654	291,485	-24.3%
Bekes	14.2	93.6	28.47	71	185,116	331,156	-44.1%
Borsod-Abauj-Zemplen	17.9	98.3	25.04	103	352,604	435,314	-19.0%
Csongrad	10.1	100.8	34.34	103	279,533	328,862	-15.0%
Fejer	10.5	113.0	32.61	97	430,960	418,408	3.0%
Gyor-Moson-Sopron	6.8	105.7	42.04	105	422,846	349,171	21.1%
Hajdu-Bihar	15.1	97.5	26.11	88	363,321	363,321	0.0%
Heves	13.5	100.6	29.28	90	400,306	373,420	7.2%
Komarom	11.7	102.5	34.28	139	264,859	384,411	-31.1%
Nograd	17.5	88.4	28.71	87	545,689	383,209	42.4%
Pest	7.7	98.7	42.49	151	302,020	284,120	6.3%
Somogy	11.2	90.8	31.63	56	221,360	194,005	14.1%
Szabolcs-Szatmar	20.3	93.4	22.46	94	261,145	439,638	-40.6%
Jasz-Nagykun-Szoln	15.0	93.1	26.89	75	348,099	334,389	4.1%
Tolna	12.8	102.8	33.86	67	264,883	415,177	-36.2%
Vas	7.0	92.8	39.58	82	109,216	232,374	-53.0%
Veszprem	10.1	101.0	34.27	81	217,532	330,596	-34.2%
Zala	9.3	98.5	38.25	80	193,968	327,096	-40.7%

Table 2-4
Performance Indicators Adjustment Models based on 1995 Results
(t-statistic in parentheses)

Performance Indicator	Constant	Variable 1	Variable 2	Variable 3	Variable 4	R^2	F
A11	-1106886 (-1.42)	UNRATE 27428 (1.53)	WAGECOST 7752.12 (1.80)	PCTONUC 9446.08 (0.82)	POPDENSE -31.11 (-0.60)	0.294	1.56
A12	118.92 (2.31)	UNRATE -2.05 (-1.73)	WAGECOST -0.39 (-1.36)	PCTONUC -0.60 (-0.79)	POPDENSE 0.01 (2.90)	0.677	7.85
A13	-159733 (-2.91)	UNRATE 2463.68 (2.01)	WAGECOST 2352.04 (4.17)	VACRAT 897.61 (0.73)	PCTURBAN -233.58 (-0.59)	0.637	6.58
A14	-51.70 (-0.45)	UNRATE 2.88 (1.06)	WAGECOST -0.21 (-0.51)	PCTLONG 0.71 (1.28)	PCTONUC 3.03 (1.79)	0.341	1.94
A15	120.77 (6.17)	UNRATE 0.09 (0.23)	WAGECOST -0.48 (-3.69)	PCTLONG 0.18 (0.95)	VACRATE 0.76 (2.20)	0.607	5.79
A16	215.62 (2.95)	UNRATE -0.11 (-0.06)	PCTONUC -1.82 (-1.53)	PCTONUA -1.11 (-1.34)	PCTURBAN -0.63 (-3.50)	0.575	5.08
A21	-634155 (-3.03)	UNRATE 3291.00 (1.08)	WAGECOST 7836.35 (4.02)	POPDENSE 51.66 (2.04)	PCTURBAN -1799.41 (-1.69)	0.866	24.29
A22	193.77 (3.82)	UNRATE -2.24 (-1.98)	WAGECOST -1.25 (-2.40)	VACRATE -1.33 (-1.17)	PCTURBAN 0.38 (1.05)	0.369	2.19

Performance Indicator	Constant	Variable 1	Variable 2	Variable 3	Variable 4	R^2	F
A23	-513764 (-4.57)	UNRATE -1738.83 (-0.68)	WAGECOST 2904.15 (8.70)	PCTONUC 3842.38 (2.36)	PCTONUA 3670.92 (2.94)	0.889	30.00
A24	-732.78 (-2.22)	UNRATE -3.10 (-0.41)	WAGECOST 2.10 (2.15)	PCTONUC 9.70 (2.03)	PCTONUA 8.03 (2.20)	0.429	2.81
A25	36.53 (1.29)	UNRATE 1.75 (2.10)	PCTONUC 1.08 (2.00)	VACRATE 0.53 (1.70)	POPDENSE 0.00 (0.50)	0.272	1.40
A26	116.93 (4.34)	UNRATE 0.50 (0.18)	PCTONUA -0.44 (-0.36)	POPDENSE -0.01 (-1.54)	PCTURBAN -0.35 (-1.10)	0.483	3.50
A31	-36043 (-0.23)	UNRATE -4798.00 (-1.90)	WAGECOST -505.84 (-0.34)	PCTLONG 4622.92 (2.53)	POPDENSE -1177.41 (-2.82)	0.491	2.42
A32	-214.34 (-2.08)	UNRATE 2.96 (1.10)	PCTONUC 4.64 (2.89)	PCTONUA 2.47 (1.79)	VACRATE 1.75 (2.00)	0.489	2.39
A33	-46561 (-0.70)	UNRATE 9221.41 (1.42)	PCTLONG 6721.59 (4.28)	PCTONUA -7287.75 (-2.06)	POPDENSE -1602.09 (-4.30)	0.696	5.73
A35	145.57 (4.95)	UNRATE 4.30 (1.58)	PCTONUA -2.50 (-1.87)	VACRATE -3.45 (-4.15)	PCTURBAN 0.51 (1.86)	0.655	4.74
A36	157.13 (6.64)	UNRATE -1.18 (-2.09)	WAGECOST -0.22 (-1.76)	PCTONUC -0.83 (-2.20)	POPDENSE 0.06 (1.90)	0.403	1.69

Performance Indicator	Constant	Variable 1	Variable 2	Variable 3	Variable 4	R^2	F
B1	-270763 (-3.00)	UNRATE 1146.03 (0.55)	WAGECOST 735.20 (2.74)	PCTONUC 4214.87 (3.22)	PCTONUA 2493.32 (2.49)	0.514	3.96
B2	203.27 (4.40)	UNRATE -0.53 (-0.56)	PCTONUC -1.75 (-2.37)	PCTONUA -1.02 (-1.79)	VACRATE -0.52 (-1.34)	0.285	1.49
B3	-222908 (-3.11)	UNRATE 1077.20 (0.66)	WAGECOST 660.46 (3.10)	PCTONUC 3474.47 (3.34)	PCTONUA 1974.97 (2.48)	0.550	4.58
B4	-1.52 (-2.66)	UNRATE 0.02 (1.31)	WAGECOST 0.01 (3.77)	PCTONUC 0.01 (1.17)	POPDENSE -0.00 (-3.40)	0.522	4.10
C1	212449 (1.07)	UNRATE -2836.52 (-0.90)	WAGECOST 1071.25 (0.59)	PCTLONG -1894.28 (-1.16)	POPDENSE -15.06 (-0.68)	0.274	1.42
C2	53.17 (3.08)	UNRATE 2.46 (2.73)	WAGECOST 0.24 (2.00)	PCTLONG 0.24 (1.34)	PCTONUA -1.14 (-2.77)	0.379	2.29
C3	-11062 (-0.08)	UNRATE -1223.85 (-0.57)	WAGECOST 2441.75 (1.98)	PCTLONG -1485.26 (-1.35)	POPDENSE -32.49 (-2.15)	0.392	2.41
D1	1103.70 (0.10)	UNRATE 466.71 (1.81)	WAGECOST -25.20 (-0.41)	PCTONUC 245.62 (1.48)	POPDENSE 2.04 (2.73)	0.498	3.72
D2	42.69 (1.97)	UNRATE -0.68 (-1.37)	WAGECOST -0.21 (-1.84)	PCTONUC -0.38 (-1.16)	POPDENSE 0.00 (1.81)	0.320	1.41

Table 2-5
National Departure Points for Performance Indicators

Variable Description	Variable	National Average	Departure Point
Retraining of Unemployed in Groups:			
Average cost per trainee employed at follow-up	A11	298751	355070
Proportion of trainees who are employed at follow-up	A12	38.3	32.8
Average cost per training program entrant	A13	97267	103163
Average cost per trainee per hour of training	A14	108.5	114.8
Proportion of entrants who successfully complete training	A15	90.3	87.6
Proportion of employed trainees working in occupation of training	A16	69.8	66.4
Retraining of Unemployed Individually			
Average cost per trainee employed at follow-up	A21	100226	122174
Proportion of trainees who are employed at follow-up	A22	55.4	41.8
Average cost per training program entrant	A23	43522	50304
Average cost per trainee per hour of training	A24	111.6	116.2
Proportion of entrants who successfully complete training courses	A25	96.5	96.2
Proportion of employed trainees working in occupation of training	A26	81.1	89.1
Retraining of Employed:			
Average cost per trainee employed at follow-up	A31	55934	64503
Proportion of trainees who are employed at follow-up	A32	93.6	88.8
Average cost per training program entrant	A33	48158	58083
Proportion of entrants who successfully complete training courses	A35	93.3	87.3
Proportion of employed trainees working in occupation of training	A36	99.1	98.0
Self-Employment Assistance			
Average assistance per person still self-employed at follow-up	B1	64635	70881
Proportion of persons still self-employed at follow-up	B2	91.5	89.5
Average subsidy per self-employed	B3	57067	60202
Average added employment resulting from self-employment assitance	B4	0.15	0.15
Wage Subsidy for Hiring Long Term Unemployed			
Subsidy per worker still at subsidized employer at follow-up	C1	156726	161437
Proprotion of subsidized workers who are in regular employment	C2	72.1	70.7
Average cost of wage subsidy per subsidized employee	C3	111703	119585
Public Works			
Average monthly subsidy per worker	D1	12811	13381
Proportion of subsidized workers in regular jobs at follow-up	D2	2.3	0.8

Table 2-6
Summary of Percent Deviation of Actual from Standard
for Reemployment Cost Performance Indicators by County

County	A11	A21	A31	B1	C1	D1
Budapest	-14.1	-4.3	.	-18.0	-2.3	-3.4
Baranya	-35.9	9.1	-46.4	-7.0	-16.5	-9.2
Bacs-Kiskun	-24.3	-51.3	49.4	3.0	74.3	-4.9
Bekes	-44.1	-49.3	-7.0	-22.4	-7.0	-15.5
Borsod-Abauj-Zemplen	-19.1	-57.3	-15.3	0.7	-5.5	3.4
Csongrad	-15.0	-15.6	-82.5	-9.5	-0.3	18.5
Fejer	3.0	24.1	42.6	11.1	8.0	-3.7
Gyor-Moson-Sopron	21.1	-42.9	.	-0.0	9.1	-4.1
Hajdu-Bihar	-0.0	0.0	-24.4	-8.9	-3.7	-19.6
Heves	7.2	33.9	.	-17.2	22.3	-0.2
Komarom	-31.1	-54.2	-9.1	-26.9	1.1	-0.0
Nograd	42.4	29.0	.	-32.0	-7.2	5.6
Pest	-6.3	-5.1	-0.0	4.2	-21.5	-10.9
Somogy	-14.1	-48.0	-25.3	-14.4	-18.8	-18.2
Szabolcs-Szatmar	-40.6	-48.1	-16.5	-1.4	0.0	-2.4
Jasz-Nagykun-Szolnok	4.1	34.8	.	2.2	-25.3	-1.0
Tolna	-36.2	-51.1	-44.1	-2.6	-19.3	-17.0
Vas	-53.0	-12.8	-48.3	-23.6	-0.7	8.7
Vesprem	-34.2	-58.8	-15.5	-1.1	-13.9	1.0
Zala	-40.7	-57.5	32.1	-16.0	-33.1	-12.6

A11 Average cost per trainee (group unemployed) employed at follow-up
A21 Average cost per trainee (individual unemployed) employed at follow-up
A31 Average cost per trainee (group employed) employed at follow-up
B1 Average assistance per person still self-employed at follow-up
C1 Subsidy per worker still at subsidized employer at follow-up
D1 Average monthly subsidy per worker

Table 2-7
Summary of Percent Deviation of Actual From Standard
for Reemployment Rate Performance Indicators by County

County	A12	A22	A32	B2	C2	D2
Budapest	8.6	72.4		3.9	0.2	38.2
Baranya	25.9	-3.2	0.3	-7.1	6.4	-180.9
Bacs-Kiskun	11.6	94.3	-0.6	12.1	-7.9	314.2
Bekes	46.7	45.9	11.4	8.6	1.9	426.5
Borsod-Abauj-Zemplen	32.1	112.2	1.1	-3.2	-8.6	
Csongrad	-0.7	-6.2	-3.8	3.8	2.0	-33.5
Fejer	28.3	98.5	9.0	0.0	9.3	-156.9
Gyor-Moson-Sopron	0.0	31.1	.	2.7	0.8	-259.5
Hajdu-Bihar	-0.6	-6.6	17.8	1.3	9.6	138.8
Heves	-13.3	-11.3	.	9.7	-5.8	33.0
Komrom	39.8	68.9	13.7	3.2	5.7	-342.2
Nograd	-1.9	41.4	.	4.9	2.4	0.0
Pest	12.1	-4.8	3.1	1.8	-0.5	
Somogy	7.3	11.5	-15.3	-5.7	9.2	26.8
Szabolcs-Szatmar	51.7	0.0	7.4	6.4	0.1	-638.4
Jasz-Nagykun-Szolnok	2.9	14.8	.	-4.1	12.5	-43.9
Tolna	27.6	88.3	-0.0	0.4	1.7	.
Vas	41.2	27.7	16.6	4.4	0.3	-19.2
Veszprem	34.4	43.0	3.8	-1.2	-1.3	-100.0
Zala	-0.3	18.7	16.1	3.7	0.0	497.4

A12 Proportion of trainees (group unemployed) who are employed at follow-up
A22 Proportion of trainees (individual unemployed) who are employed at follow-up
A32 Proportion of trainees (group employed) who are employed at follow-up
B2 Proportion of persons still self employed at follow-up
C2 Proportion of subsidized workers who are in regular employment at follow-up
D2 Proportion of subsidized workers who are in regular employment at follow-up

Table 3-1. Decentralized Employment Fund Budget Allocation Models, 1991-96

1991	1992	1993	1994	1995	1996
County share of registered unemployed 45%	County share of registered unemployed 60%	County share of registered unemployed 60%	County share of registered unemployed, plus retraining and PSE participants 70%	County share of registered unemployed plus participants in all Active Labor Programs 80%	County share of registered unemployed plus participants in all Active Labor Programs 80%
County share of population 10%					
County share of school leavers 10%	County share of school leavers 20%	County share of registered unemployed school leavers 20%	County share of registered unemployed school leavers 15%	County share of registered unemployed school leavers 10%	County share of registered unemployed school leavers 10%
County share of low skilled registered unemployed 5%					
County share of registered unemployed from declining industries 15%					
County's previous share of Employment Fund 15%					
	County share of 6+ months registered unemployed 20%	County share of 6+ months registered unemployed 20%	County share of 6+ months registered unemployed 15%	County share of 6+ months UC, UA recipients, plus those without support 10%	County share of 6+ months UC, UA recipients, plus those without support 10%
Model HUF 3.416 b.	Model HUF 5.900 b.	Model HUF 7.000 b.	Model HUF 12.000 b.	Model HUF 9.000 b.	Model HUF 8.750 b
Total HUF 3.586 b.	Total HUF 6,785 b.	Total HUF 10.064 b.	Total HUF 13.837 b.	Total HUF 10.317 b.	Total HUF 11.368 b.

Table 3-2. First Proposal for 1997 Budget Allocation Algorithm

County	Registered Unemployed weight 30%	School Leavers weight 10%	UC 6+ mos plus on UA weight 20%	Number in ALPs weight 40%	1997	1997	25% of 1996 Allocation	Total Allocation for 1997 as carryover	1997 County Share of Total	1996 County Share of Total
Budapest	327496	134323	190392	459294	1111506	11.1%	338750	1450256	11.3%	11.9%
Baranya	133637	40255	91034	128600	393526	3.9%	118317	511843	4.0%	4.2%
Bacs-Kiskun	154003	45523	99976	166004	465506	4.7%	152897	618403	4.8%	5.4%
Bekes	142959	47014	98360	268331	556664	5.6%	137856	694520	5.4%	4.9%
Borsod-Abauj-Zemplen	334593	99376	254053	562105	1250127	12.5%	332937	1583064	12.3%	11.7%
Csongrfd	111297	41448	62058	104262	319066	3.2%	110856	429922	3.3%	3.9%
Fejer	122941	39361	75133	92509	329943	3.3%	115213	445156	3.5%	4.1%
Gyôr-Moson-Sopron	85784	31846	48771	62571	228973	2.3%	73425	302398	2.4%	2.6%
Hajdu-Bihar	207987	62420	144022	236388	650817	6.5%	188990	839807	6.5%	6.7%
Heves	110079	37770	79028	158399	385276	3.9%	103503	488779	3.8%	3.6%
Komarom-Esztergom	100247	31846	63108	128046	323248	3.2%	93616	416864	3.2%	3.3%
Nograd	98028	23716	75101	157915	354759	3.5%	92933	447692	3.5%	3.3%
Pest	203686	71048	120763	248004	643500	6.4%	192998	836498	6.5%	6.8%
Somogy	105238	36101	66513	197808	405660	4.1%	89688	495348	3.9%	3.2%
Szabolcs-Szatmar-Bereg	263350	93253	197486	370588	924678	9.2%	242453	1167131	9.1%	8.5%
Jasz-Nagykun-Szolnok	167057	50950	126402	151900	496309	5.0%	146819	643128	5.0%	5.2%
Tolna	85520	26837	58453	96242	267052	2.7%	77343	344395	2.7%	2.7%
Vas	57877	17951	34190	141529	251547	2.5%	57117	308664	2.4%	2.0%
Veszprem	106366	36856	69211	159574	372007	3.7%	100133	472140	3.7%	3.5%
Zala	81855	32105	45945	109932	269836	2.7%	76074	345910	2.7%	2.7%
Total	3000000	1000000	2000000	4000000	10000000	100.0%	2841918	12841918	100.0%	100.0%

Table 3-3. Factors for performing 1997 Allocation of Decentralized Employment Fund.

Averages across the 12 months September 1995 to August 1996						
COUNTY	Registered Unemployed	School Leavers	LTU 6 mo UC + UA	In ALPs	Wage Cost Index	Unemployment Rate Index
Budapest	54593	6757	29575	6643	137.8	54.4
Baranya	22277	2025	14141	1860	98.9	109.8
Bacs-Kiskun	25672	2290	15530	2401	91.9	98.8
Bekes	23831	2365	15279	3881	93.6	125.8
Borsod-A-Z	55776	4999	39464	8130	98.3	160.7
Csongrad	18553	2085	9640	1508	100.8	86.3
Fejer	20494	1980	11671	1338	113.0	97.9
Gyor-M-S	14300	1602	7576	905	105.7	66.1
Hajdu-Bihar	34671	3140	22372	3419	97.5	137.8
Heves	18350	1900	12276	2291	100.6	122.3
Komarom	16711	1602	9803	1852	102.5	107.4
Nograd	16341	1193	11666	2284	88.4	153.9
Pest	33954	3574	18759	3587	98.7	72.0
Somogy	17543	1816	10332	2861	90.8	111.8
Szabolcs-S	43900	4691	30677	5360	93.4	178.9
Jasz-N-S	27848	2563	19635	2197	93.1	136.0
Tolna	14256	1350	9080	1392	102.8	117.9
Vas	9648	903	5311	2047	92.8	65.0
Veszprem	17731	1854	10751	2308	101.0	91.4
Zala	13645	1615	7137	1590	98.5	89.9
Totals	500094	50304	310675	57854	100.0	100.0

Table 3-4. Final Proposal for 1997 Budget Allocation Algorithm

County	1/2 of first Allocation of 10 billion for 1997	1/3 of first Allocation of 10 billion for 1997	1/3 of first reallocated by a wage cost index	1/6 of first Allocation of 10 billion for 1997	1/6 of first reallocated by unemployment rate index	1997	1997	25% of 1996 Allocation as carryover	Total Allocation for 1997 as carryover	1997
Budapest	555753	370502	501486	185251	87451	1144689	11.4%	338750	1483439	11.6%
Baranya	196763	131175	127429	65588	62492	386684	3.9%	118317	505001	3.9%
Bacs-Kiskun	232753	155169	140068	77584	66517	439338	4.4%	152897	592235	4.6%
Bekes	278332	185555	170595	92777	101281	550208	5.5%	137856	688064	5.4%
Borsod-Abauj-Zemplen	625063	416709	402351	208354	290551	1317965	13.2%	332937	1650902	12.9%
Csongrfd	159533	106355	105302	53178	39824	304659	3.0%	110856	415515	3.2%
Fejer	164972	109981	122072	54991	46717	333761	3.3%	115213	448974	3.5%
Gyôr-Moson-Sopron	114486	76324	79242	38162	21890	215618	2.2%	73425	289043	2.3%
Hajdu-Bihar	325409	216939	207760	108470	129706	662875	6.6%	188990	851865	6.6%
Heves	192638	128425	126902	64213	68148	387688	3.9%	103503	491191	3.8%
Komarom-Esztergom	161624	107749	108482	53875	50210	320316	3.2%	93616	413932	3.2%
Nograd	177380	118253	102679	59127	78963	359022	3.6%	92933	451955	3.5%
Pest	321750	214500	207952	107250	67009	596711	6.0%	192998	789709	6.1%
Somogy	202830	135220	120600	67610	65593	389023	3.9%	89688	478711	3.7%
Szabolcs-Szatmar-Bereg	462339	308226	282771	154113	239251	984360	9.8%	242453	1226813	9.6%
Jasz-Nagykun-Szolnok	248154	165436	151286	82718	97621	497061	5.0%	146819	643880	5.0%
Tolna	133526	89017	89885	44509	45537	268948	2.7%	77343	346291	2.7%
Vas	125773	83849	76430	41924	23647	225851	2.3%	57117	282968	2.2%
Veszprem	186003	124002	123018	62001	49176	358197	3.6%	100133	458330	3.6%
Zala	134918	89945	87023	44973	35084	257026	2.6%	76074	333100	2.6%
Total	5000000	3333333	3333333	1666667	1666667	10000000	100.0%	2841918	12841918	100.0%