

Data Warehouse (DWH) Monitoring in the Public Employment Service (PES)

Statements and Comments

Alf Vanags

Baltic International Centre for Economic Policy Studies

1 Introduction

The Data Warehouse (DWH) monitoring system developed jointly by the Austrian PES and the Federal Ministry for Economic Affairs and Labour clearly represents an impressive achievement both at the technical level and in terms of collaboration between different state agencies. This note considers the relevance of such a system to labour market problems in Latvia; provides an assessment of transferability to Latvia and offers some general comments and questions relevant for making an evaluation of the system especially in the Latvian context.

2 Relevance to labour market problems and policies in Latvia

There are several levels at which the relevance of the DWH system for Latvia can be considered. One level is that of understanding the workings of the Latvian labour market as a whole, another is at the level of understanding and evaluating the impact of policy interventions in the labour market, including the active labour market measures for which Latvia's State Employment Agency (SEA), (Latvia's PES) is responsible.

2.1 Understanding the Latvian labour market

Latvia's recent existence as a market economy is rather short – indeed it was not until the 1999 EC Regular Report on the candidate countries that Latvia was acknowledged as a 'functioning market economy'. So, hitherto, it has not been possible to undertake much in the way of sophisticated research on Latvia as a market economy in general or on Latvian labour markets in particular. This is acknowledged in the priorities and measures of the ESF in Latvia where a sum in excess of 2m LVL (3m euro) has been allocated to labour market research. According to the Programme Complement of the Structural Funds this is to be directed to 'studies and research necessary for human resource and employment policy makers', these include the following areas:

- labour market monitoring,
- policy impact on the labour market,
- human resource development,
- regional aspects of the labour market,
- entrepreneurship,
- reasons for and duration of unemployment,
- estimation of informal employment

There is no doubt that the kind of data possibilities that the DWH system can make available will do much to underpin the quality of labour market research in Latvia.

2.2 *Evaluating labour market interventions*

As in any country Latvia has a variety of types of labour market interventions including:

- Active labour market policies (ALMPs)
- Passive policies such as minimum wage legislation
- Other policies which have an impact on the labour market such as child benefit/parental leave or pension reform

Active labour market policies

ALMPs are the responsibility of the SEA which is also responsible for monitoring their impact. At present this is done 'manually' ie when a person leaves re-training or some other measure he or she is 'placed' with a potential employer. If the person does not come back to the Agency, a phone call is made to check on what has happened. This is clearly an inefficient and unreliable procedure. Clearly, the follow-up monitoring possibilities enabled by the DWH system are much more comprehensive and informative than what is currently done in Latvia. Among other things the DWH system makes possible differentiating the impact of measures by employment status in the period before a person participates in a measure as well as much more reliable monitoring of what happens after exiting from a training scheme, which is all that is done at present.

As the ESF comes on stream in the near future there will a need to evaluate the effectiveness of measures taken in the ESF context and again the follow-up facility of the DWH offers much more than could possibly be done at present. Indeed it is interesting to note that in Austria the development of DWH was in part funded by the ESF and its reporting and monitoring requirements.

Passive policies

One of the Guidelines (no 8) of the 2004 Latvian National Employment Plan is to make "work pay through incentives to increase work attractiveness". The major measure under this Guideline is the aim to increase, over a period, the minimum wage to 50% of the average gross monthly wage. This is a very high percentage and it is well known that theory suggests that a binding minimum wage will reduce the demand for labour and hence have a negative effect on employment. A combination of career and enterprise monitoring data offers remarkable potential for evaluating the employment impact of raising the minimum wage.

Guideline 9 is aimed at transforming undeclared work into officially registered employment. Here at least two policies are relevant. One is the policy of raising the minimum wage. At present one form of undeclared work is through the so called 'envelope wage' system whereby workers are officially registered and receive an official wage at or close to the minimum wage and this is supplemented by a cash payment in the 'envelope'. As the minimum wage is increased the incentive for employers to pursue such a course declines. It would appear that

enterprise monitoring could offer a way of tracking employment developments by income levels and hence at measuring the impact of changing the minimum wage on the wage structure in enterprises. The other policy, more long term, aimed at reducing undeclared work is the pension reform which increases the incentive for workers to register in full. Here too a long term DWH system could be invaluable.

Other policies

Other policies where DWH can offer a much more effective data tool than is available at present include:

- Reduction of regional labour market disparities (Guideline 10 of the National Employment Plan)
- Latvia now has a ministry for children and the family which among other things is planning to increase parental and child care benefits. A DWH type system would be invaluable for an evidence based evaluation of changes in the family/child support regime.

3 Transferability

There is no technical reason why a DWH type system should not be introduced in Latvia. Indeed the SEA has plans to do exactly that. A Latvian system would involve the combination of SEA data, with data from the State Revenue Service database, and also with the data from the data bases of local authorities who administer welfare and income support payments. The SEA intends to put out to tender a contract for software that would do this job, when it has the resources to finance such a project.

This raises two practical issues regarding transferability. The first is cost. There is some confusion in the discussion paper (Mahringer (2004)) on cost – on the one hand at the end of para 2 on p4 it says that the 'financial resources devoted to the development of DWH amount to about 1.3m euro partly financed by the ESF' and then later at the end of para 3 on the same page 'the DWH altogether required financial resources of about 12m euro, which is about 3.5% of the IT expenses of the PES over a comparable period'.

The second issue is whether it is possible to directly transfer or the DWH software or adapt it to Latvian circumstances in a simple way or whether a Latvian system would have to be built from scratch. If the latter is the case and if we are looking at costs in the region of 12m euro then there is an issue of financial feasibility, though even that sort of sum is well within the reach of the structural funds.

A further issue, which also has financial implications, is whether special skills are required to run the system. Here again there are two levels – one is the professional IT skills that may be needed and the other is the skills needed to operate the system in the SEA.

In short we need quite a lot of practical information in order to make a judgment on the detail of transferability to Latvia.

4 Some economic considerations

Much of the material presented by the host country papers addresses the issues of how useful DWH is for the practical problems of the reporting needs and obligations of the PES. In other words the papers are designed to describe the DWH system and to illustrate its usefulness for practitioners in the PES. In BMWA (2004) it is pointed out that the output of, say, the DWH follow-up monitoring does not by itself evaluate the effectiveness of measures.

Proper evaluation requires 'additional research and in-depth analysis' (p12). It is noted (pp12-13) that two types of evaluation are needed – microeconomic and macroeconomic. Microeconomic evaluation uses statistical methods to identify in a causal the net effects of measures on the employment performance of participants in labour market measures and macroeconomic evaluation considers the indirect effects of measure eg crowding out or what are referred to as deadweight effects which refer to the phenomenon that that some of people who find jobs after participation in a measure would have been recruited anyway.

Needless to say such evaluation methods require expertise, and it is generally accepted that in Latvia the capacity for good quality economic research is in short supply. In addition to evaluation the data would be an input to more academic research and here too there is an issue of insufficient capacity. This is a factor in the timing of the introduction of a DWH type system in Latvia, with the capacity constraints suggesting that DWH should be introduced later or more gradually, rather than sooner.

The question of timing also raises the wider issue of the overall costs and benefits of the system. The impression is that both the Austrian PES and the Ministry of economic Affairs just wanted to see the system developed. There is no mention of an explicit cost/benefit analysis. For Latvia an investment of this magnitude should surely be subject to a cost-benefit test.

Finally, we do have other sources of information about the Labour market eg the Labour Force Survey, and while it is mentioned that it would be interesting to link up DWH and the LFS, this is not developed.

5 Concluding remarks

DWH or something equivalent is what the SEA in Latvia would like to have and intend to have when the resources are available. However, questions remain: how much would such a system cost in Latvia? Has Latvia the expertise to fully exploit such a data source? Would the introduction of DWH pass the cost/benefit test? What should be the timing? In the light of these issues it is perhaps premature to simply accept that Latvia should have such a system simply because it is technically feasible.

References

BMWA (2004) Labour market monitoring based on the Data Warehouse of the Public Employment Service, March 2004

Mahringer, H (2004) Peer review on data warehouse Monitoring in the Public Employment Service Austria 3-4 June 2004. Host country discussion paper, April 2004

National Employment Plan of Latvia 2004