



IMPACT ASSESSMENT STUDIES AND THEIR IMPLICATIONS FOR POLICY MAKING

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IMPACT ASSESSMENT STUDIES AND THEIR IMPLICATIONS FOR POLICY MAKING

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1. EVALUATION OF PUBLIC POLICIES

1

One of the missions of the European Training Foundation (ETF) is to contribute to shaping partner countries' education and training policies and to assess their impact on the development of human resources. The ETF's role is not limited to simply producing reports for the benefit of all those involved in policy making, nor does it claim to act as a judge of public policies. Rather, it is a facilitator, which, as we hope to demonstrate in the following pages, is aiming at assisting the institutions and their agents in gaining a better understanding of their own practices in the field of policy making.

Public institutions are increasingly seeking to improve their performance and this usually means critically examining what works and what can be improved. Measuring the impact of initiatives is one way of achieving this goal. This measurement is combined with target setting, performance monitoring and information provision to supervisory bodies and is linked to programming needs. A large number of countries currently share this concern, in particular, the countries

that are the ETF's natural partners, namely countries in the Mediterranean region, the Caucasus and Central Asia. This concern is also shared by multilateral donors, such as the European Commission. It is also, finally, a concern of the member states of the European Union (EU) in the framework of cooperation policies beyond differing timetables, cycles and strategies.

This study describes two evaluation projects with a common aim: to assess publicly-funded initiatives implemented in Russia and Morocco. Despite their differing contexts, these projects share many similarities; a large number of actors were involved, they were conducted over a lengthy period (three years), and their approach (research action) and the lessons learned were the same. The study is also the reflection of a synthesis workshop held in Brussels on 31 May 2006, in the presence of representatives of several member states, the European Commission and the projects' main protagonists. The workshop addressed the recommendations for actions included in the case study.

1.1 INSTITUTION AND EVALUATION

There has been a considerable increase in the level of evaluation of public programmes and policies undertaken over the past 15 years in a large number of countries (see Perret, 2001, for example). The main reasons for this increase in evaluation activity are listed below.

- Budgetary constraints mean that public interventions and expenditure must be more strongly defended and justified and their beneficiaries need to be increasingly more accurately targeted. What is sometimes known as the 'crisis of legitimacy of public action' calls, in virtually every corner, for better governance requiring a reinterpretation of target recipients and implementation methods.
- There is a need for rational thinking and transparency, with senior politicians, administrators and financiers quite rightly needing to know the consequences of their decisions.
- Decentralisation, European integration and, more generally, the intensification of international economic cooperation, have meant greater overlapping of legally autonomous levels of power. The subsequent complexity increases the need for shared information, coordination and regulation.

In order for evaluation to be integrated into public administration all recipients of the evaluation must be able to both take ownership of the results and the knowledge gained and integrate them in their own vision. Certain conditions must therefore be satisfied.

- The evaluation must answer the questions posed by the authorities, which means that the evaluation project has to be targeted and accurately specified.
- The information and the arguments presented must be credible and, as far as possible, comprehensible to all its recipients.
- The value judgements contained in the evaluation must be perceived to be based on legitimate arguments.

The purpose of an evaluation is, therefore, to provide knowledge that *can be appropriated* by its recipients. This is more than merely answering a question. In order to be able to agree on responses, agreement must first be reached on the questions to be asked and method to be used. The procedures used for the rigorous design and implementation of the evaluation project in various stages which were adopted in this case (questioning times, the selection of methods, the collection and the processing of data, and finally, the formulation of answers) enabled us to gradually construct the elements of a shared environment, a knowledge base and set of references common to the evaluators, the sponsors and the other actors involved. Although not an ultimate goal, one of the aims of the evaluation is clearly to encourage a convergence of views and cooperation between actors jointly engaged in the pursuit of the same action. The evaluation projects presented here followed a logical course which was based on the problems and questioning that prompted the evaluation, in order to formulate a set of questions and indicate the means employed in the attempt to obtain answers. But evaluation is neither pure knowledge nor a political mechanism. Equilibrium had to be sought in these projects between the constraints on public action and rigorous scientific procedure.

Evaluation and decision making

Evaluation aims to improve decision making at all levels, via a value judgement on the policy evaluated, while clarifying for the various players the meaning and consequences of their actions. This entails a decision-making goal – so as to lay the ground work for decisions connected with a policy – and a learning goal – so as to contribute to the training of the actors by helping them to understand the processes in which they are involved. Evaluation and research are both concerned with the production of knowledge.

As regards the decision-making goal, knowing whether and how the evaluation contributes to policy programming is not an easy task. For one thing, matching the length of the evaluation period with the

lifecycle of a policy is never easy and so the relationship between evaluation and decision making is rarely direct. In fact, the consequences of evaluation are often indirect and can take a long time to become manifest. But this does not render evaluation any less valuable when used as a tool for public efficiency and effectiveness.

As regards the learning goal, a constructivist point of view is invited. If evaluation is to bear fruit it must be incorporated in the vision of individuals and organisations. If evaluation is to be more than a mere method or an applied technology, the entire organisation must learn. Evaluation is embedded in the contexts that give it meaning and life. This is the learning process described in the two case studies.

The project methodology

The project takes the form of 'action research', i.e. it involves evaluative research, but the research must produce a result that can be used by the relevant authorities. This method comprises a system of relationships between the various actors and participants (the authorities and the proponents of the policy to be evaluated) which first had to be clearly established. To ensure this was achieved, a management group, a scientific committee and an operational team were appointed in both cases.

Management group

The management group had two kinds of duties:

- to supervise the evaluation work, i.e. to ensure that the tasks comply with the adopted work plan;
- to incorporate the evaluation materials, i.e. to receive the completed studies, validate their results, and respond to the questions posed by the evaluation project.

Scientific committee

This was the central element of the methodology because it maintained the

necessary buffer zone between science and politics. Its duties were of two types:

- to draft the evaluation project and translate the questions into a specification in the form of a methodology that would be acceptable to all parties;
- to ensure the scientific acceptability of the results obtained and to validate and interpret them.

Operational team

This was the team that conducted the surveys in the field.

The case studies show that interaction between the various levels of the methodology was not obvious. The foreword drafted by the Moroccan authorities underlines the fact that the coexistence of technical, political and scientific strands in a single project requires a discipline that cannot easily be guaranteed, in particular in the light of action research which, by definition, cannot ever guarantee an outcome. This problem is analysed in detail in the following section.

1.2 THE METHODOLOGICAL CONTEXT OF THE STUDIES

1.2.1 TYPES OF EVALUATION

The purpose of impact evaluation is to measure the effect that a political measure may have on its target recipients, whether these are individuals, families, companies or other organisations. This effect may be the same as the effect being researched, but unintended effects – even ones that run counter to the target effects (what sociologists call perverse effects) – may also be revealed by the evaluation.

Quantitative methods

Quantitative impact evaluation methods have changed considerably over the last few years (Baker, 2000). In fact, although researchers have traditionally identified the impact of an economic or social policy

measure by comparing a group who had been subjected to the measure and another group who had not been subjected to the measure, they have recently developed methodologies that take account of the fact that two groups are rarely completely the same in every respect (which forced the comparison to attribute any difference purely to the political measure being evaluated). In order to ensure that the measure being evaluated was the sole factor of relevance when comparing groups, a group that had been subjected to the measure (an experimental group, to use the term used originally in the medical and pharmaceutical field) and a group that had not been subjected to such a measure (a control group) were chosen at random from the population studied.

Current methods try to construct a counterfactual scenario, i.e. a situation in which it can be determined what the population that has been subjected to the measure would be if it had not been subjected to the measure. When the experimental and control samples are selected at random, the control sample is a perfect counterfactual sample, and the impact of the measure may be simply measured by the differences between the averages in the two samples for the variable assumed to indicate the effect (a patient's life expectancy, how long an unemployed person spends looking for a job, a company's profit, etc.). Based on the evaluation of a programme for a given population, these methods may also be used to predict the impact of that programme on another population.

In practice, the random allocation of a measure to certain individuals and not to others poses several problems. These problems may be of a practical nature associated with the selection procedures. The random selection of individuals who have been subjected to a measure has been used in certain procedures in the United States, Mexico and Kenya, for example. The random allocation of pupils and teachers to certain types of lessons was used in the state of Tennessee.

Quasi-experimental methods attempt to ensure evaluation conditions that are as close as possible to the situation described above, but without resorting to random allocation. These methods obtain control groups that resemble the experimental group – at least as far as observed characteristics are concerned – using econometric methods that include matching, difference-in-differences, and instrumental variables.

The main advantage of quasi-experimental methods is that they can use the data available, and are therefore faster and less expensive than purely experimental methods. Their main disadvantage is linked to the fact that the reliability of results is affected by poor statistical robustness, by the fact that the techniques are complicated, and by the bias which may still occur in the selection process, despite every precaution having been taken. In fact, the two groups may differ on account of non-observable characteristics, such as an individual's ability, the attitude of a company manager, etc. Current techniques try to minimise this bias, but it is impossible to be certain that all bias has been completely eliminated.

Amongst the quasi-experimental methods, matching techniques have made the greatest progress recently. Based on sophisticated econometric techniques, they attempt to produce a control sample that is as close as possible to the treated sample.

Qualitative methods

Qualitative methods are also used to measure impact. Their focus is on understanding processes, behaviours and circumstances from the individuals studied. Qualitative approaches generally depend on collecting information of a diverse nature, from open or semi-directed interviews with the actors and even from participatory observations during which the evaluator is immersed in the environment being evaluated. Interviews may then be directly analysed by the researcher or may first be processed by appropriate software. They may also lead to a quantification of items.

Given the small number of observations generally used in this procedure, the cases to be studied as part of a qualitative evaluation cannot be randomly sampled. Evaluators generally try to ensure that the variables deemed relevant for the phenomenon being studied are different in these cases. The saturation method is one such method used, which involves repeating the interviews until the information converges.

Qualitative methods can be used to obtain a concrete overview of the phenomenon studied and the perceptions of the various actors involved with regard to the impact of the measure, the processes employed, and the limitations and obstacles encountered. Evaluators try to flag up the indirect unintended (both desirable and non-desirable effects) of a programme. Their main limitations arise from the subjectivity of the persons questioned, their relatively restricted number and the absence of a control group, all of which give the results a limited statistical range.

Nowadays, evaluators try to combine the two approaches, for example, by carrying out an initial qualitative evaluation that they use as the basis for a larger scale and more systematic quantitative evaluation. It may also be valuable to undertake a qualitative evaluation after producing the results of the quantitative evaluation, in order to avoid certain erroneous interpretations being reached or completing the analysis plan. However, bearing in mind the resources allocated to evaluation operations and the production deadline requirements for results, the two types of approach are rarely simultaneously implemented.

Cost-effectiveness and cost-benefit analyses

Cost-effectiveness and cost-benefit analyses can also be performed as part of an impact evaluation. This kind of analysis relates the impact of the programme to its costs; in a cost-effectiveness analysis, effects are measured using physical variables (number of additional diplomas, number of jobs created, etc.) whereas in a cost-benefit analysis, effects are measured in monetary terms (salary increases, added

value, etc.). In the latter case, ratios such as internal rate of return can be calculated, so that the return on an investment for a particular programme can be compared with the return for other measures. Cost-effectiveness and cost-benefit analyses are powerful tools for assisting public decision making.

1.2.2 UNDERTAKING THE EVALUATION

Everybody acknowledges that evaluating the impact of a project carries risks and is expensive. Impact evaluation requires numerous issues to be addressed (Baker, 2000), starting with determining whether the evaluation is relevant and ending with the timely dissemination of the results.

Before commencing an impact evaluation operation, the cost, necessary deadlines and available political support have to be measured as well as any potential obstacles. It is perhaps better in the first place to restrict the project to an evaluation of processes (a process evaluation) and to the establishment of monitoring indicators, rather than create a complicated impact evaluation methodological structure. This may be the case with a project that is not yet fully operational, that is subject to change or that does not yet have the benefit of a suitably stable policy. Insofar as impact evaluation requires time, it is better to check that the results will still be exploitable once they have been obtained.

The institution of an impact evaluation implies a solid knowledge of the functioning of the system being evaluated. This knowledge may require recruiting actors onto the team with experience of the methodology (we will return to this subject later). Frequently, however, this knowledge must be obtained from a preliminary feasibility study in which the main groups of actors are interviewed, the presentation documents and statistical information are collected and analysed, and the evaluation method is outlined and discussed.

Given that impact evaluation is expensive – in terms of skilled experts, the collection of a large quantity of complex data and complicated processing operations – a

precise budget must be established for the operation and the necessary funds must be made available for the entire project. Similarly, the design, various stages and the preliminary conditions required of each stage of the evaluation so that the following stage can proceed successfully must all be clearly specified from the outset, so that all the parties are aware of the methodological risks and deadlines. This implies that the actual availability of the necessary data, the quality of this data and its exploitation within the methodological framework established should be rapidly verifiable. Thus, when databases obtained over several years or from several organisations have to be used, it must be ensured that these are compatible and that matching is possible. The variables designed to measure impact must be clearly specified from the outset and should be agreed by all the parties and the evaluation team. They must be checked to ensure that they are relevant to the problem to be studied and that they can be collected either from existing databases or from the surveys conducted. This is a critical stage in determining the course of the subsequent evaluation operation.

Political support is an essential requirement for the impact evaluation of a public system. Evaluation will frequently disrupt the routine activities of the actors working in the system. They may see evaluation as an attempt to monitor or even question personal advantages; and this reaction may be encountered at all levels in the system, from political decision-makers down to those who implement decisions on the ground. This is why the evaluation team must be able to rely on unwavering political support. It is therefore easy to appreciate that evaluation requires real political courage amongst the instigating government bodies, because, in addition to the negative reactions which the operation itself may engender amongst actors, the results of the evaluation may turn out to be contrary to expectations and lead to recommendations being made that could call into question the system being evaluated. But these recommendations may equally relate only to adjustments that will not call the system itself into question.

Evaluation must be able to rely on a team with access to a full range of resources. First of all, due to the complex nature of the operations involved, most team members will need to have experience of impact evaluation. A variety of skills may be called upon: seasoned econometrists, specialists in conducting non-directive interviews, lawyers, lexical software specialists, sampling experts, political science specialists, etc. But it must also be ensured that there is a capacity for synthesis and diplomacy, so that the team members can enter into dialogue with political decision-makers, who will not necessarily be familiar with the impact evaluation procedure. The presence in the evaluation team of local consultants – and even local actors – would seem to be necessary in order to avoid implementing a procedure that is cut off from the realities in the field (i.e. collecting and analysing data that do not accurately reflect the actual mechanisms studied). A local team must, nonetheless, be used for on-the-ground information collection operations. Setting up a body to monitor the evaluation procedure that is composed of representatives of all the actors involved in the project is a way of preventing it from veering off course. It may also facilitate access to certain sources of information.

Once the results have been obtained, it is important that they are communicated in a suitable form to all the parties. This procedure is not only democratic; it also represents an opportunity for joint acceptance of the conclusions and actions to be taken to improve the efficiency of the project.

Two different methodologies are described in this report. The impact evaluation of management training provided to Russian managers was conducted on the basis of a qualitative approach, which involved using data of diverse types (including statistical data) and in-depth interviews. However, a quantitative approach was used to evaluate the impact of publicly-funded continuous training initiatives in Morocco. National databases established for statistical and management information collection purposes were used, and also closed

questionnaire-based surveys of heads of companies and employees. Sophisticated econometric processing operations were also used.

1.2.3 OVERVIEW OF RESEARCH INTO THE IMPACT OF CONTINUOUS TRAINING

The literature basically deals with three questions in regard to continuous training: Does continuous training lead to increased wages? Does it increase company productivity and profitability? Who receives continuous training?

The general framework for the study is based on the theory of human capital: training increases worker productivity. The costs and benefits of training are shared in various ways depending on the type of training. Training may be general or specific, formal or informal. Early models adopted formal education and job experience as a measure of human capital. More recent models use the number of years' service in a company, participation in a training course, the duration of training courses and training expenditure. The qualification level of jobs is sometimes used to calculate the human capital stock of a company.

The terms of reference of the study define human capital as the knowledge that people acquire and use during their lifetimes in order to produce objects, provide services, or create ideas either in a market context or outside a market context. Very few studies make explicit reference to worker skills or to the influence of training on the development of these skills.

Generally results are based on wages as a measure of individual productivity. Some studies also look at the effect of training on inter-company mobility. Company performance is generally measured by added value – the value added by its workers or sometimes by sales.

Studies of Malaysia (Tan, 2001) and Mexico (Tan & Lopez-Acevedo, 2003) are amongst the few studies that try to measure the impact of training on a company's performance, taking account of potential selection bias. Sometimes the companies that offer training are the most productive, but sometimes quite the opposite prevails, with the least productive companies benefiting from public measures.

Surveys have been conducted amongst employers – Continuing Vocational Training Surveys in Europe¹ – and amongst employees – the Generation 98 survey (enquête Génération 98)², the employment survey (enquête Emploi) and the survey on training and professional qualifications (enquête Formation Qualification professionnelle) in France, the National Longitudinal Survey of Youth and the Panel Study of Income Dynamics in the United States. Abowd & Kramarz (2006) combined two national surveys conducted in companies in France, one based on company data and the other on individual salary data. However, combinations of data collected from employers and employees are very unusual. Examples include the 1999 Canadian Workplace and Employee Survey, and the US Survey of Employer-Provided Training which asked employers and employees to record all training-related events as they took place on a calendar. The works of Nordman (2000 & 2002) referring to Morocco, Tunisia and Mauritius must also be cited.

The results of these surveys all show the same trend, namely that training increases wage levels and the productivity and performance of companies. Furthermore, the more highly trained have greater access to training, although training may have a greater impact on the productivity of workers with a low level of productivity.

Thus, for example, Carriou & Jeger (1997) show, from their sample of

¹ The results of the second European Continuing Vocational Training Survey (carried out in 2000/01) are available on the internet:

http://europa.eu.int/comm/education/programmes/leonardo/new/leonardo2/cvts/index_en.html

² See Céreq website for further information: www.cereq.fr

10,000 companies observed each year over the period 1987-92, that there is a significant link between continuous training and increased added value. The authors argue that continuous training offers decreasing returns, can be complementary to capital and can replace labour. However, the authors themselves note that the strong correlation between the increases in added value and the level of training in companies does not produce a direct causal link between these two elements.

The impact of continuous training is all the greater on company performance when it takes place in association with organisational changes in the workplace and is accompanied by changes in job structures. In the surveys conducted amongst companies, the correlation observed between training and the introduction of new technologies and innovation is still relevant. However, to be noted in this case is the high degree of complementarity between, on the one hand, training and material investment (the purchase of new plant, a changeover to a new work structure) – which highlights the essential character of training – and, on the other hand, the difficulty in measuring its return.

As regards the characteristics of employees, the positive link between technology and training noted amongst employers is also reflected in the fact that employees who use computers in the course of their work are more likely to attend training courses. Dearden et al. (2000) highlight the return on productivity (value added per worker), giving the example that if the proportion of trained workers in a sector is increased from 10% to 15%, work productivity increases by 4% but actual wages only increase by 1.6%.

1.3 CASE STUDIES

The methodologies referred to above were tested as part of projects conducted by the ETF, referring to two impact studies, as follows:

- in Russia: the effect on Russian companies of a management training programme organised under the European Tacis Programme aimed at preparing companies for the market economy and conducted in the context of the EU-Russia partnership policy;
- in Morocco: a programme referring to the use of special training contracts in Moroccan companies, forming part of a public policy to assist companies in improving their competitiveness in the light of the arrival of the free trade area (in 2010).

The aim of these two evaluation projects was to determine whether the measures in question had achieved their goals, and to measure their impact. In the Russian case, the project involved observing the effects of a programme, and in the Moroccan case, it involved measuring the effects of a programme.

These projects are examples of two different approaches. In the Russian case the effects of the policy observed were identified and described. Qualitative evaluations of the effectiveness of goals were undertaken to evaluate to what extent goals had been achieved. In the Moroccan case, the effects solely attributable to the policy had to be measured, which required the changes to the status quo brought about by the policy to be isolated. In other words, all things being equal, what would have happened if the policy or the programme had not been implemented?

As indicated above, impact studies are one of the ways of evaluating public policies. The ETF's role was to demonstrate the feasibility of impact studies and their value for the evaluation's actors.

2. THE RUSSIAN PERSPECTIVE: CASE STUDY OF A QUALITATIVE APPROACH

2

FOREWORD FROM THE RUSSIAN AUTHORITIES

The Programme for Training Managers for National Economy Organisations of the Russian Federation, known as the 'Presidential Programme', is being implemented in accordance with Decree No 774 of the President of the Russian Federation, dated 23 July 1997. Both Russian and foreign organisations participate in the programme. Since its inception the Presidential Programme has become an important element of state policy on raising the effectiveness of company management and broadening international economic cooperation.

In recent years, within the framework of the Presidential Programme 39,000 specialists recommended by state authorities of the Russian Federation have been trained by leading educational establishments in Russia. More than 9,300 young Russian managers have participated in internship

training in foreign companies, organised with the financial support of the governments of 13 countries and the European Union.

Having undergone training within the framework of the Presidential Programme, young managers are contributing significantly to the development of the economy in Russia, as well as to the strengthening of interregional and international links. This is attested to by the results for annual statistical research carried out by the Ministry of Economic Development and Trade of the Russian Federation for the purpose of determining the effectiveness of the Presidential Programme from the point of view of each specialist as well as from the point of view of the company that sent their specialist for training. This research has shown that approximately 70% of participants are from the small and medium enterprises that form the basis of the economy in the regions. In just the last two years, graduates of the

Presidential Programme – approximately 10,000 persons in total – have created more than 30,000 new work posts, and the amount of deductions to different level budgets has added up to more than a billion roubles.

Therefore regular research for determining the effectiveness of the Presidential Programme on the development of the economy in the regions and in Russia as a whole is an important instrument in quality management of the programme and a basis for conclusions as regards its usefulness and development.

During eight years monitoring, 28,000 questionnaires from specialists and 12,000 questionnaires from managers of companies were received and analysed. The need for an analysis based on questioning the specialists and the companies that had sent specialists for training required the use of, for the most part, quantitative research methods. While understanding the limitations of using only a quantitative approach, the Ministry of Economic Development and Trade and the Organisational Committee for Training Managers for National Economy Organisations of the Russian Federation had no possibility to conduct more insightful qualitative research.

The research carried out by the ETF in 2005-06 to a great extent helped eliminate this deficiency. This research, in which leading foreign and Russian experts participated, was based on qualitative methods of analysis. It was extremely important to receive feedback from the direct recipients of the results of specialist training, i.e. the managers of companies that had sent their specialists to training from various regions of Russia. It was of course impossible to implement the research in all the regions of Russia, and so it was restricted to several regions, including St Petersburg and the provinces of Nizhny Novgorod and Tver.

The basis of the research was the results from approximately 200 focus group interviews, which were conducted by ETF and external experts attracted to the project, and during which a number of staff

of companies from the respective regions were interviewed. These interviews served as a basis for further analysis and elaboration of recommendations. Apart from the company staff experts, interviewed also were representatives of regional and municipal authorities, teachers at the universities participating in the implementation of the Presidential Programme and members of graduates' societies.

While carrying out their work the researchers compared the answers of participants in the Presidential Programme with the answers and results of participants in other technical assistance programmes, as it would be impossible to perform such a comparison internally within the framework of only one programme. Moreover, the research carried out by the ETF was perceived by the participants of the Presidential Programme as an external evaluation, which, according to the Organisational Committee for Training Managers and the Ministry of Economic Development and Trade, resulted in an increase in the objectivity of the answers (reduction of complementarity).

The ETF project yielded interesting results that, on the one hand, have reinforced the conclusions reached by us during routine research using quantitative methods; on the other hand, however, the ETF project yielded new data, which allowed us to introduce a number of significant changes into the Presidential Programme.

Firstly, the general conclusion from the research reinforced the conclusion from the routine analysis of the effectiveness of the Presidential Programme, namely its positive impact on the development of management in Russian companies and, in turn, an improvement in their economic indicators.

Secondly, a number of particular conclusions from the research, e.g. the need to focus on the development of small and medium enterprises, strengthen the project approach in company management and train teachers in the universities

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participating in the programme, helped clarify ideas in regard to the concept of continuing the Presidential Programme for the period 2008-13. There is an enhanced role for the representatives of regional authorities in the new concept of the programme.

One of the most important conclusions was the need to retain and develop vocational training at different levels of the education system. This conclusion was reflected in discussions in 2006 about new trends of implementation of the Presidential Programme, especially as regards the training of engineers for the Russian economy, which is oriented towards the integration of industrial production technologies into different branches. Such trends are being considered as possible areas for bilateral cooperation with Germany and Norway.

The research has revealed an important, even if not yet fully explored, interdependency between training programme type (in terms of structure and content) and the stage of growth of a company. This is now reflected in the new format of training programmes, which incorporate project-oriented training.

On the whole the Organisational Committee for Training Managers greatly appreciates the results of the research and hopes for its continuation during the next stages of implementation of the Presidential Programme.

*A.V. Sharonov
Deputy Chairman of the Committee
State Secretary
Deputy Minister of Economic Development
and Trade of the Russian Federation
2007*

2.1 INTRODUCTION

Over the last ten years, enormous efforts have been made by the management training institutions of the Russian Federation to improve the quality of training techniques and methods, prepare teachers and internationalise training programmes. The positive effects of this process include expansion of the management training market and development of consultancy services in the country, which have generated a large demand amongst companies and young people wishing to become company managers. This situation has led to the establishment of a large number of service providers and a varied range of services in this field.

The existence of a large number of sponsors is the reason for the growth in this market. Their interventions have focused on supporting training organisations by improving institutional capacity, arranging personnel exchanges, and delivering courses, etc. The involvement of these sponsors in the restructuring and development of the private and the industrial sectors in general also explains the stimulation in the demand for management training. Nowadays, this is targeted partly at Russian service providers and partly at consultants in the international market. A large and diverse range of projects have therefore been established on the assumption that they will gradually contribute to the establishment of a market economy in the country.

An inventory drawn up by the ETF revealed the existence of more than 300 sponsor-supported management training projects set up in the Russian Federation since 1991. The European Union, under its Tacis Programme, is by far the largest sponsor and provider of technical assistance for management training.

The ETF has, over the same period, sought to expand its knowledge of the international cooperation context in this field. It has also examined issues relating to the evaluation of training needs, the

conditions necessary for improving the effectiveness of training, the characteristics of small and medium-sized enterprises in Central and Eastern Europe, the evaluation of international assistance in the field of management training, and aspects concerning training quality, etc. However, it had insufficient knowledge of the cooperation procedure that was instigated about ten years ago in the Russian Federation and of its impact in terms of the changes in manager behaviour, performance or reactions in response to training. It was therefore important to know which skills Russian managers had to possess in order to make their companies prosper in their socio-economic environments. For this reason, in 2003 the ETF decided to employ the concept of training impact, in Russia in particular, some ten years after the end of the Soviet era.

Impact evaluation, as presented in this project, goes beyond traditional evaluations insofar as it attempts to analyse long-term effects, and not only expected effects but also unexpected ones, as these could represent major learning opportunities. The impact study, which uses qualitative rather than quantitative approaches, covers about ten projects and focuses on individuals (rather than on processes or infrastructure), on their assessments and opinions and on their perception of the results and of the advantages to be gained from training. The conclusions that may be drawn can be used to better understand which groups are the real beneficiaries of the project and to give an insight into the durability of the results in the long term. The project therefore aims to learn more about the contribution made by management training to the growth of companies in the Russian Federation.

2.2 PROJECT BACKGROUND

This chapter presents the results of an impact assessment study carried out between January and September 2005 in the Russian Federation, in the areas of St Petersburg, Nizhny Novgorod and Tver.

The purpose of the study³ was to highlight the long-term impacts of management training initiatives developed in the Russian Federation, in particular, to analyse the impact of national and international training projects on management development in the last ten years, and to share the results of the study with the principal national and international stakeholders in order to support future policy making.

In designing and conducting the study, it was decided to follow an interpretative approach – from both an epistemological and methodological point of view – on the basis of a consideration that management training in developing economies might be viewed as an open-ended process, in which managerial change is complicated by general ambiguity about the direction of transformations, the agents of change and the objectives of change (affected by cultural, social, political and economic elements). Hence, an interpretative approach appeared to be better suited to answering issues such as:

- the need for understanding the ‘whys’ (for what reasons, under what conditions) and ‘hows’ (through what processes) specific effects/impacts were produced (or not);
- the need for a ‘rich, thick and articulated’ picture of training impact in order to soundly base, design and direct the guidelines for future investments (deriving from the increasing need by donors to perform ‘evidence-based policy making’ that depart from in-depth impact studies);
- the need to understand the special nature of Russian companies, managers and their context, where cultural features play a crucial role;
- the need to take into account and precisely reconstruct the very complex system of political interests (local, national and international) that surround the project and, more generally speaking, to address the issue of management training policies.

2.3 EPISTEMOLOGICAL APPROACH

The general lack of epistemological awareness that appears to characterise prevailing approaches regarding impact evaluation induced us to analytically reconstruct the implicit theories which appear to underpin the most widespread evaluation practices, so to render explicit the general theories of reference for the approach which we adopted, both from an oppositional stance and in parallel. The implicit concepts in an anthropological sense, precisely because they are such, constitute cultural premises of explicit discourses and intentional practices. For this reason, our analysis has been characterised by specific awareness of the cultural dimension of processes and phenomena, both those studied (the impact of training) and those acted out in the research. Hence, our approach is ethnographically oriented.

Two fundamental concepts were considered: the concept of change and the concept of learning.

2.3.1 THE CONCEPT OF CHANGE

The impact of any event, and in particular the impact of an intentional action (i.e. the change it has generated) can be either foreseen or expected (therefore planned) or unforeseen. When we start to evaluate the effects of an action, or a system of actions such as a policy, a training programme or an investment, our standpoint and our methodological choices also depend on the theories of individual and social change to which we refer (usually unconsciously). Such theories include specific concepts relating, on the one hand, to the diffusion of knowledge and innovations, and on the other hand, to the relationship existing between ideas, behaviour, decisions and the execution of decisions.

³ The European Union invited the ETF to undertake this task. In order to carry out the implementation phase, the ETF enlisted the support of an independent organisation with expertise in the field of management training evaluation.

The most widespread evaluation practices implicitly refer to a theory of programmable change, based on the assumption that decisions can be faithfully translated into concrete behaviour (assuming actors behave rationally), and that behaviour can reflect ideas and materialise desires and predictions. This conviction is based on a distinction that informs a key element in Western thought: the soul-body dichotomy, with the idea being that the soul is the seat of thoughts and ideas, whereas the body is the instrument of action (Brunsson, 1995). The soul-body model leads, in the construction of social order, to a division of work between those who think and those who do, between those who decide and those who carry out orders. This separation of thought and action, and the subordination of the latter to the former, ranks among the most important rationalisation criteria – for production but also, more generally speaking, for social life – in modern societies.

Such concepts – with Taylor (1911) being their most well known theoriser and mass production their most visible embodiment – have become part of the implicit cultural assumptions (i.e. common sense) observable in Western societies. Concepts which can be related to another idea that is equally as rooted in our culture, i.e. that knowledge (knowing) is fundamentally intellectual, together with the parallel tendency to undervalue the role of tacit or sensorial knowledge which, as a prerogative of the body, eludes control by the mind.

Yet this assumption of coherence and sequential order between ideas and actions is constantly contradicted by experience: actors and groups make aware choices and formulate specific programmes of change, yet these programmes, when translated into actions, display an infinity of unexpected consequences and unwanted or contra-intuitive results. The general view taken, however, is that the outcome would have been more in line with expectations if only the programme had been more analytic or in-phase control had been more rigorous. Hence, demands ensue and attempts are made so that unwanted

effects will be eliminated in a subsequent round. The adoption of a theory of programmable change induces the evaluator to measure the impact of an event with respect to the rational model of sequential causality incorporated in the design of the event, so as to verify whether what actually happened was in line with what was intended to happen, reserving reduced or zero level attention for those consequences which were not hypothesised by the model.

More problematic concepts of social change and the relationship between ideas and behaviour (such as the actor-network theory) to which we make special reference, lead one to consider that any input intended to produce an outcome is systematically transferred by the actors. In Latour's view (1986, p. 267):

'[T]he propagation in time and space of anything – claims, orders, artefacts, assets – is in the hands of individuals; each of them can act in different ways: they can neglect, modify, deviate or betray what they have been assigned, or even add something or appropriate it for themselves.'

In such cases change is conceived as transferral. To transfer, in this context, also means to translate but in addition it conveys the notion of transport and modification, forging links that did not previously exist and that modify both those who transfer and that which is transferred within a heterogeneous network of human and technological components, relationships between human beings and ideas, ideas and objects, behaviour and objects. The concept of change as a transfer within a heterogeneous network of human and technological components, and the awareness of unpredictability, arbitrariness, randomness, and irrationality in the translation processes, induces evaluators to focus at least as much attention on the unexpected as on the expected effects, maintaining an attitude of genuine curiosity in relation to the phenomena being studied and avoiding the construction of rigid analytic grills that make it possible to assimilate only some elements – and at times not even the most significant elements

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– within the real processes. The distinction between expected effects and unexpected effects (Scriven, 1967) constitutes the first axis of the theoretical matrix that we used for our study.

2.3.2 THE CONCEPT OF LEARNING

In current models and evaluation practices, the implicit theory of programmable change is combined with a cognitive and functionalist concept of learning (Turner, 1991), which considers learning to be an intentional, implicitly systematic, problem-driven process – caused by the need to resolve a problem. The implicit model is a feedback model: the participant is exposed to significant examples (new ways of seeing and doing), compares them with the desired results, and draws conclusions from the comparison. Inevitably, these conclusions influence one's ability to resolve the problem as well as future behaviour. Learning is an exquisitely individual phenomenon, and learning mostly means processing information that modifies a cognitive structure. To evaluate learning means measuring the modifications that have occurred within the cognitive structure of individual subjects.

A cognitive and functionalist concept of learning can today be countered by viewing learning as a socio-cultural phenomenon, enriched by non-intentional and non-instrumental aspects and elements. This view emphasises the importance of social experiences and the tacit knowledge they incorporate. Learning therefore represents not so much a way of knowing the world as a way of becoming part of a social world, of a community of practices (Lave & Wenger, 1991), whether professional or organisational. Within this community there is a progressive sharing – and unconscious assimilation – of customs, identity, and a symbolic universe, i.e. of a system of meanings that makes it possible to make sense of experience. This vision of learning emphasises less the individual mind than the participatory and interactive context within which an individual learns (including unintentionally). Moreover, it

emphasises the symbolic rather than factual consequences of training, and the fact that it can generate not only technical competencies or the acquisition of notions, but also different views of roles and reality.

A second axis in our matrix refers to the substantial/factual or symbolic/cultural nature of the effects of the intervention. This distinction – more problematic and subtle than the preceding one but just as important – was especially used in evaluating the effects of public programmes and policies (Edelman, 1964). The basic thesis is that any action can have substantial, factual and pragmatic results, which are potentially tangible and measurable in an objective manner, and also symbolic results, which can be evaluated on the basis of perceptions, feelings and values.

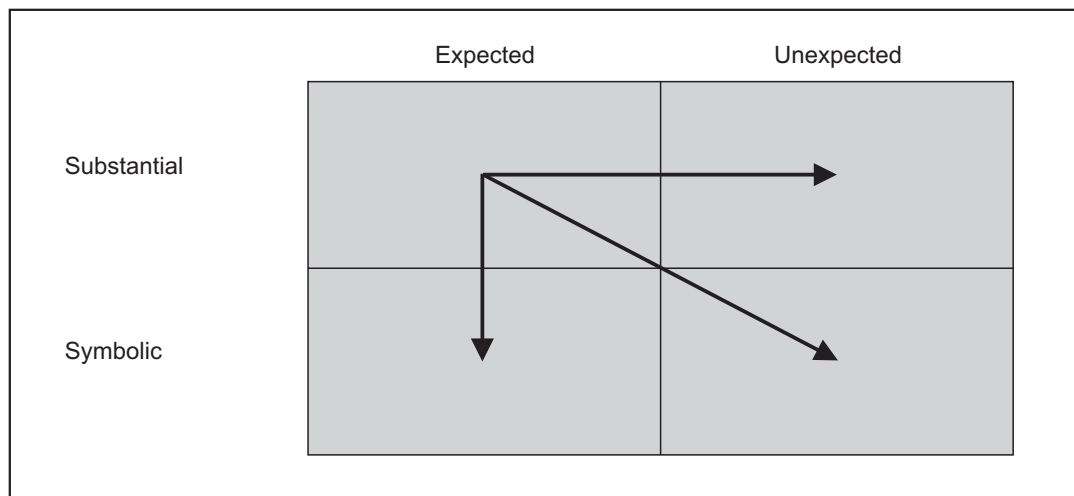
It can be argued that if an actor is satisfied with an intervention that can be defined as symbolic, then that intervention has real importance for the actor and cannot be distinguished from any other type of result. It is also important to emphasise that a symbolic result (for example, the modification of the meaning attributed to an event) can have substantial consequences over time and significantly influence behaviour. However, these two levels of analysis should be kept distinct from each other, both because they are weakly and imperfectly interconnected, and because they are the fruit of different processes and can be reconstructed through distinct methods of analysis.

2.4 RESEARCH DESIGN AND THE METHODOLOGICAL IMPLICATIONS OF THE THEORETICAL MODEL

2.4.1 THE DIFFERENT LEVELS

The interpretative approach meant adopting the logic of multiple case studies, with qualitative methods and field work as essential steps in the study. In designing case studies, reference was made to the model set out above while moving forward simultaneously on two parallel levels.

Figure 1. Theoretical model of impact analysis



On the one hand, an analytic scheme of interpretation was constructed based on existing training evaluation literature. As we have seen, this literature to a large extent adopts a theory of programmable change and has found its social and scientific legitimisation by its emphasis on the measurability (and therefore, inevitably, the substantial tangibility) of foreseen and sought-after effects. It hypothesises a temporal and determinist sequence of cause and effect relationships, which incorporate the implicit cultural assumptions that we mentioned earlier. Ideas are transferred from one mind to another, with minds receiving ideas and appropriating them, translating them into behaviour. The latter is translated into concrete results; next the aggregated concrete results are translated into the performance of a group, and subsequently into a progressively more extensive system. This linear sequence suggests two guidelines for collecting and organising data:

- reconstruction by clearly isolating the three phases: the situation prior to the training intervention, the features of the intervention carried out and its intentions, and the changes occurring after the intervention compared to the initial situation;
- reconstruction of the impact implying the subsequent exploration of a crescendo of effects: participant satisfaction, learning, application, results for the organisation, and results at the system level.

These guidelines suggest the type of information that should be gathered, whom one should interview, what questions should be put, and how the analytic summary should be structured. At the same time, however, the most problematic theoretical concepts described above led the evaluator to abandon the scheme each time that the reality of the data suggested other hypotheses, other relations or other sequences. They especially encouraged evaluators to investigate with particular care any unexpected indirect, occasional, desirable or undesirable effects. In addition, an attempt was made to grasp the symbolic as well as the pragmatic impact of the training event. Attention focused on the symbolic dimension inevitably involved viewing case studies as micro ethnographies (or situational ethnographies). It is in fact impossible to reconstruct the meaning of the course for participants without understanding the meaning-attribution criteria they used, and hence their culture. Since culture is the fruit of collective history and experiences, one seeks – albeit within the limitations of such short and focused investigations – to adopt an approach that is as longitudinal as possible, fully taking into account context, processes and past experiences. From this point of view the ‘before’ – which the traditional scheme essentially regards as a parameter to measure the ‘after’ – is also and above all used to understand the meaning attributed by the actors to the training event and its results.

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The attention devoted to the symbolic dimension does not imply any neglect of identification and analysis of the substantial impact of training.

The goal was therefore to identify only those effects that could be plausibly traced to the training initiative whilst noting any hypothetical correlations between the event and the general performance (increase in turnover, overall efficiency, increase in profits, etc.) each time the actors advanced such hypotheses. In this case, indeed, even if a correlation cannot be proven, the belief that it exists highlights the impact the course had on the actors' cognitive maps. Moreover, the behaviour that the said belief can induce – in terms of training policies, personnel motivation, commitment, etc. – may have important effects on a company's performance over the medium term. This is a typical case where a symbolic impact is translated over time into a substantial impact, even though it may be practically impossible to isolate and quantify.

2.4.2 CASE STUDIES: LOGIC, OPERATIVE MODALITIES AND OBJECTS

The main unit of analysis for each case study was the organisation. At the same time, attention was also paid during fieldwork to two other levels: the individual perspective and the local environment.

The cases to be studied were not chosen using a sampling logic – which assumes a certain number of analysis units as representing a more extensive population – but by using a replication logic where the objective was to verify whether the conclusions deriving from one specific case could be confirmed by other specific cases and could therefore merit general application. One case can replicate another in a literal sense – because it leads to identical or similar conclusions – or in a theoretical sense – when the various results can be interpreted in relation to characteristics that are different from the situations analysed (predicted *ex ante* in the case selection phase or emerging *ex post*). A case study – as a research strategy – cannot indicate the extent to which the

features of the phenomenon observed in specific instances (for example, the type of impact of the training in the cases being analysed) are present in the population from which the cases are taken, nor does it allow us to verify abstract and general relationships between variables. In contrast, however, it is particularly suitable for the study of processes through which a phenomenon is expressed, interpreting the 'hows' and the 'whys' of the phenomenon holistically within the specific context in which it is produced.

In the field, the following research methods were used.

- Analysis of available documents useful for reconstructing the characteristics of the intervention, actors, context.
- In-depth interviews, semi-structured with different categories of subject (client, trainers, direct addressees (participants), sometimes the final or indirect beneficiaries (for example, participants' colleagues or superiors), and any privileged witnesses). A semi-structured checklist of key points to be covered in the interview was drawn up and the interviews were conducted so as to loosely follow them, whilst allowing plenty of scope for the interviewees to develop themes of particular interest. This flexibility was important because it is often impossible to predict the issue that might emerge. Because the people being interviewed may not have always been totally open in their responses for a variety of reasons (reluctance to be critical, temptation to hide their own shortcomings, a desire to tell the interviewer what he/she wants to hear, sheer forgetfulness, etc.), it became important to crosscheck responses as much as possible to ensure reliability.
- Participative observation, in the sense that the researcher – for the reasons given earlier – tries to get as close as possible to the environment studied, to 'live' (even if for very few days) alongside the actors, observing their work and relational practices, and extending research data to encompass everything that happened to him/her within his/her short stay in loco.

The number of interviews varied considerably from case to case. After an initial exploration involving representatives of the different subject categories set out above, the two fundamental criteria used to decide whether or not it was necessary to continue gathering information were cross-referencing data control (i.e. the degree of coherence which could be observed in the data gathered using different methods) and what is referred to as analytic saturation of categories (i.e. the reasonable certainty that any additional data would not significantly modify the reconstruction and interpretation of the case under analysis).

Secondary data was used for comparison purposes for the results of the interviews – notably government reports and statistics, evaluation reports and other relevant publications – so as to crosscheck the overall coherence of the field data with existing knowledge⁴.

2.4.3 DEFINING THE SAMPLING CRITERIA

The full-scale study was developed in the three regions specified by the scientific committee: St Petersburg, Nizhny Novgorod and Tver.

Sampling in each region was performed according to the following main criteria.

- Typology of projects to be assessed. The projects comprised all the initiatives developed under Tacis (Productivity Initiative Programme, Managers' Training Programme, Tacis Enterprise Restructuring Facility Programme, Delphi Project and, to some extent, the Presidential Programme). In addition,

sampling also took into account programmes financed by the World Bank, with a particular focus on the Nizhny Novgorod area. The general criterion was to represent all the different kinds of initiatives undertaken.

- Significance of participation in training. This criterion was a fundamental pre-requisite for selecting a company for a case study. Analysed were the numbers of people involved and/or their level and role. Selected preferably were only companies with a significant number of participants or with few participants but positioned at the top management levels. This criterion was particularly important in the case of inter-company training.
- Sector and size of the company. Once the preliminary requirements had been satisfied, further sampling criteria addressed the sector/industry and the size of the company. Both small-medium and large companies belonging to the main industries of the region were selected.
- Effective accessibility and availability of potential contacts. Last, but not least, the definition of the sample was further refined by establishing whether the right contacts could be found in the field and by ensuring their availability.

The study was carried out in the three selected regions between February and September 2005. A total of 179 interviews were performed – addressed both to company managers and to a wider target of significant stakeholders (training providers, public administration employees, industry representatives and representatives of alumni associations). The typologies of the projects included in the sample were: the Development of Educational Links and Professional and Higher Education Initiatives (Delphi-2), the Strengthening of

⁴ In particular, the following reports were analysed: Presidential Programme Quality of Training Final Report (1998); Strengthening of the International Management Institute of St Petersburg (1992-95); Productivity Initiative Programme (reports since 1994); Tacis-ETF Evaluation of Activities in the Field of Management Training in the New Independent States (1991-93); President's Management Training Programme Main Findings (1997); The Translation of Human Capital through Capital Networks: a Case Study of Management Training in a Transitional Economy (2002); Rise and Influence of Alumni Associations in the Context of the President's Management Training Programme (2002); Assessing Management Training Needs, Moscow and Ural Regions, Russian Federation (1998); Ten Year Review of the Yeltsin Democracy Fellowship Programme (1993-2003); Specifics and Dynamics of Russian Business Education (1992); Post-Acquisition Managerial Learning in Central East Europe: Special Issue on Managerial Learning in the Transformation of Eastern Europe (1996); ICM Management Training in Russia: Traps and Gaps (1992); International Labour Organisation Interdepartmental Action Programme on Privatisation, Restructuring and Economic Democracy: Management Development in Russia (1997).

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the International Management Institute of St Petersburg, the Managers' Training Programme (MTP)⁵ and its related Presidential Managers' Training Programme (PMTP), the Productivity Initiative Programme, a joint European project of the Tempus scheme, the Tacis Enterprise Restructuring Facility (TERF-II), all funded under the Tacis Programme, and the Management and Financial Training Project financed by the World Bank. The sample was well represented in terms of both sectors and company sizes.

2.5 FINDINGS AND CONCLUSIONS

In this section, the evidences emerging from the impact assessment study are presented according to the three analytical levels along which data were collected: individual, organisation and local environment. Also presented in summary form are the main recommendations to Russian national and local policymakers and to international donors.

2.5.1 IMPACT AT THE INDIVIDUAL LEVEL

It is to this level that the interviewees assigned the most significant and lasting results of training. Their words reveal a very broad and articulated picture of substantial and symbolic effects.

Personal accountability, in a world where, until very recently, responsibility was a collective concept and issue, made people feel part of and concretely become involved in organisational decision-making processes.

'People began to understand what their role and responsibilities were in the new situation. Everybody was welcome to state his/her opinion about the strategy of company's future development. It became our motto to listen to all opinions including those that seemed to be strange initially. That was our first attempt to build a team of co-executives.'

Overcoming fears about the West and cooperation destroyed a mental/inner barrier and empowered people to cooperate and do business together.

'I would say our mentality has changed, so to speak, we are not afraid to cooperate with Western companies anymore. And this is of course a positive point in general. We know them, we are more confident, we are partners now.'

'In my opinion, training helped many people including myself to overcome the psychological barrier of contacting and cooperating with foreign people.'

Western managers and companies had to be – and were – convinced that their Russian counterparts were good and worthwhile to interact and deal with.

'During the internship in the host country we faced some arrogant attitudes in the people we were communicating with. In the beginning when I asked somebody questions I felt that they were exhibiting their superiority. But after meeting the management we were also able to show them our level of knowledge and experience and explained that we already knew everything they were teaching us. The level of the questions I asked convinced them to introduce us to specialists with proper knowledge. Only then did they start to take us seriously, communicate with us, ask our opinion and try to solve problems together.'

Career improvements both inside the company, by promotion to a higher position or by acquiring greater responsibilities within the same position, and through external mobility, seemed to be the most significant advantages offered by training.

'As for my personal status, yes, the programme helped me a lot in self-promotion. I started the programme as the head of a small department, now I am the financial director for the whole

⁵ Information on the Managers' Training Programme is available on the Internet: http://www.tacis-mtp.org/documents/english/english.htm?x=about_mtp.htm

organisation. Therefore, I have been transformed from the person who was taking orders into one who makes decisions.'

Regarding mobility, quantitative data confirm that training had a positive impact on career growth, with 50.8% of trainees experiencing internal or external mobility after training. Internal mobility was mainly within the same division/department. External mobility was an important event experienced by 33.3% of trainees. The main reasons for external mobility were new, promising opportunities (23.6%), and the lack of opportunity to apply knowledge, experience and development plans (12%).

The reasons why the impact was felt primarily at the individual level can be traced to the fact that:

- the programmes were mainly of a general-management nature, and therefore were more oriented towards developing managerial role attitudes than to acquiring specific skills;
- the motivation for taking part was primarily individual, connected with a desire to improve managerial awareness and competencies and sustain employability both within and outside the original company;
- a certain training model and shared standard was prevalent, namely the Master's in Business Administration, the recurring dream of every Russian high-potential executive, and based upon a strictly individual choice;
- internship was perceived as a relevant and exclusively individual experience, especially in the Tacis Managers' Training Programme, compared to the traditional training that came before;
- the donors' priority was to improve participants' individual skills as the main starting point.

The asymmetric relationship between individuals and the organisation was accentuated by other factors:

- an opportunistic attitude by individuals, due to the perspective of great benefits accruing to career and mobility;

- the authoritarian style of management in many organisations;
- the huge gap between what participants would have liked to do (in terms of changes) and what conditions around them allowed them to do;
- lack of proficiency in the English language and concern of superiors in regard to losing trained people prevented wider participation by any single company.

Only at a later phase, when the training experience was repeated, did participants begin to mediate between the two different contexts. In some ways, the training undertaken in order to develop both the individuals and the organisation ended up by accentuating the distance between them.

2.5.2 IMPACT AT THE ORGANISATIONAL LEVEL

The main impact at the organisational level concerns two specific areas. The first of these was human resources and people management; in some cases, this meant the development of a dedicated department and manager after training, whereas in other cases, it meant a considerable increase in the sophistication of the systems and tools adopted and the skills of managers in charge. The second area was marketing and sales, where the development of new commercial strategies required the creation of specific organisational structures and processes.

Also evident was the emergence of a learning organisation, which can be described in terms of various aspects. For example, someone takes formal responsibility for the training process (sometimes it is the entrepreneur/top manager himself, once he/she becomes aware that training can mean strategic leverage). All the people holding a managerial position – but especially the first line of managers who report to the top – believe in the relevance of training, are open to it and concretely support the implementation of training activities (nominating trainees, supporting application to everyday business, etc.).

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'The behaviour of our management was crucial. They were ready to accept any proposal for innovation and they sustained this process with very effective practice. After people had gone to training, they used to organise meetings in which new knowledge was shared with all the other colleagues and, during these meetings, they also tried to develop action plans.'

Thanks to training, many people inside the same company began to talk the same language, which works as a very effective device for communication, coordination and integration among different organisational structures and roles.

'When I talk of break-even point, now everyone knows what I mean!'

This gives the organisation a chance to open up and get in touch with the rest of the world, especially with foreign markets, but also with the professional communities existing outside the company.

Overall, at the organisational level, the impact appears to be more debatable. Indeed, the recurring lines are much weaker compared to the individual level and the situation is less clear-cut. These findings can be explained by considering the following factors and dynamics.

- The strong individual bias, as described above, helped to create a different set of priorities which were not always closely tied to those expressed by the organisation.
- Training was not tied to organisational development processes. Interviews with participants often revealed that there was little connection between training and company needs. As already mentioned, some of the impact on the company emerged only when training became a repeated practice – and this did not always occur. Generally speaking, the first part of training served to clarify ideas, while the second part enabled participants to associate training with a concrete task. In short, training had a focused impact at the organisational level only after the business model and company priorities had been defined. In the cases at hand,

this awareness came with time; it was interrupted by the political crisis of 1998, and has continued since in stages, though these are still hard to fully define.

- The findings show that the number of participants from each company has always been very low, except in certain cases. It is thus very difficult to establish a cause-and-effect relationship between training, working and organisational performance. When participation in the training programme was consistent and linked to a specific task with a clear goal, the results were tangible.
- In some cases there was formal adherence to managerial procedures, not necessarily linked to the concrete goals of the company. Here, the aims appear to be to demonstrate learning and project the image of an innovative and Western-compliant company.

2.5.3 IMPACT AT THE LOCAL LEVEL

At the local level, training contributed to the formation of a nucleus of local development associated with certain emerging factors constitutive of a social network such as:

- a shared business language as a crucial means for communication and integration in local areas and with foreign countries;
- improvement in overall managerial and entrepreneurial awareness and competencies;
- a focus on intellectual and social capital;
- the creation of relationships among participants, both from a formal point of view (the alumni) and from an informal one (personal connections);
- the development of a highly qualified labour market for managers.

'Whatever my needs might be – recruiting new employees, getting in touch with foreign partners, entering a new market or just having the chance to exchange opinions and get advice – I know that I can count on all the graduates from the programme [...] they cover every kind of business, every managerial field and I can find them all over Russia.'

‘Thousands of people went through different training programmes acquiring new skills and mentality, establishing contacts with foreign people, companies and business cultures [...] they represent our human and social capital, our guarantee for the future social and economic development of the region.’

Certainly some aspects still need to be fostered and reinforced, for example training provider capacity to adequately meet the real needs of companies, public/private dialogue and the capacity of the banking system to support company growth.

Nonetheless, it is already clear that training programmes have contributed to the emergence of a new social entity, namely the ‘new Russian manager’, a community sharing languages, approaches and experiences. This new entity has demands and specific goals that cannot be ignored in defining the priorities and new institutional frameworks for Russian civil society. These new managers are inspired by common values and are evidence, in the eyes of potential foreign partners, that Russia is a reliable place to do business.

As a matter of fact, training has strongly supported the development of a new image of Russian managers and companies in the eyes of potential foreign partners.

‘The global goal of such initiatives – as I see it – is to adapt “frightening” Russians to the Western model, so to speak, to make them more Western-oriented and thus more predictable in their actions. I agree, more or less, with the appropriateness of this global goal, since only concrete people, not big politicians, change the perceptions of foreigners. Also here I would say that these programmes form that intangible micro level of new innovative decision-makers, which in turn, contributes a lot to changing stereotypes globally. Achieving the global goal, I believe, becomes possible also by putting the human being at the centre of any economic, political or social activities, as in the West. And I feel this is the path our country should take as well, giving everybody value and treating them all in the same manner.’

This has had a positive impact on foreign direct investment. Training has clearly contributed to helping foreign investors overcome stereotypes about Russian businesses and creating an environment ready to attract foreign investment.

2.5.4 THE OVERALL PICTURE

To conclude we draw a synthesis of the main results presented in this section in accordance with the analytical framework for the impact assessment (Figure 1 above).

Overall, the pattern of analysis (expected/unexpected and substantial/symbolic) – which guided both the definition of the hypotheses and the fieldwork in the impact study – has proved it can work effectively. Indeed, it allowed many unexpected and symbolic effects to emerge. These represent a significant proportion of the impact generated by training, in addition to the expected substantial effects inscribed in the programme objectives themselves.

In particular, the unexpected effects can be summarised as follows:

- an individual understanding of responsibility;
- a common management and business language working as a communication infrastructure both locally and in connection with international partners;
- partial adaptation to European market standards in order to sustain business development;
- training as a very effective business incubator;
- a high rate of external mobility in the labour market;
- shrinkage in the technical labour market;
- organisations receptive to learning (in terms of developing structures, roles and plans for training inside companies);
- trainees becoming trainers for other managers in the local area on a voluntary basis (the multiplier effect);
- the constitution of a social network as the crucial asset on which to build future development;
- a new social entity which is the Russian manager.

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At the same time, significant symbolic effects were produced:

- self-confidence and the breaking down of cultural barriers which had generated feelings of inferiority and fear towards Western companies and managers;
 - a lifelong individual learning focus;
 - a learning organisation (in terms of widespread awareness of the need for training);
 - a positive vision and image of training with people inclined to see training as one of the main reasons for improvements in a company's financial and sales performance;
 - the perception that training contributed to creating a new image for Russian managers and companies (as reliable, competent and responsible) and for the business environment (as reliable, more interesting and safer than in the recent past) in the eyes of foreign partners and investors.
- Training can contribute to the creation and development of individual and professional identities and can favour the constitution of business and professional communities (new social entities) that are unlike traditional ones.
 - Particularly when goals are less concretely definable – as occurs with the development of management and managerial skills – participants are more likely to attach greater importance to the symbolic meaning of the event they are participating in and amplify the emotional dimension of the experience.
 - It is possible to draw a direct correlation between training and start-up businesses. Training helps participants improve their self-awareness and develop connections and tools for becoming an entrepreneur.
 - Training helps to effectively manage cultural differences and to go beyond stereotypes, and represents, furthermore, one of the crucial ways of supporting admission into the global market and society.
 - There is a direct correlation between the potential that can be expressed by a training event and the power that the trainees have within their organisations. This means that their impact on the organisation takes place only when company's decision-makers are involved and a critical mass of participants inside the organisation has been created.
 - Training actions that do not conform to company priorities in their growth process run the risk of creating over-structures that penalise the flexibility and competitiveness of the company.
 - In training, adults prefer active methods, working on the practical experience of participants. In the design of courses, it is crucial to leave more time for internship and individual coaching rather than for traditional one-way training.

2.6 LESSONS LEARNED AND RECOMMENDATIONS FOR FUTURE POLICY MAKING

The findings and main conclusions emerging from the impact study highlight some lessons that can serve as a basis for reflection on future activities and policy making both in the specific context of the Russian Federation and, more generally, transition economies.

In regard to management training policies and their design for transition economies, the main lessons learnt were as follows.

- Training programmes inspired and designed using Western managerial tools and practices tend to be adopted uncritically. They do not foster discussion of development priorities which inspire practices and analysis of whether these concepts are compatible with local cultures.
- Training policies are part of a wider local development system, where the consistency and the effectiveness of policies depend on a process of continuous dialogue and reciprocal adjustment to industrial policies.

The experience of developed economies suggests that the massive transformation of managerial techniques and culture is neither easy nor quick. Here, the need to develop a critical mass emerges both at

the company level and within the overall business community. In general terms successful transition to a market-based economy requires a large number of people to learn completely new commercial, financial and managerial skills.

The recommendation is to continue in this direction, involving regional areas, companies and individuals not reached by previous waves of training. At this stage the adopted format has proven it can work effectively and should be continued.

There are two areas for improvement, however:

1. accurate selection of the host company, according to training profile and needs;
2. more intensive training in the English language before/at the beginning of the programme.

The great increase in training for professional managers has also had some negative implications, as this newly emerging labour market is reducing the technical labour pool and creating a skills shortage. Technical roles are no longer perceived as appealing by younger generations because they are seen as distant from emerging social values. Yet the consolidated Russian tradition of highly qualified technicians is greatly appreciated by foreign companies interested in making direct investments and/or establishing partnerships with Russian companies.

The recommendation is to sustain technical training at different levels of the education system, both by colouring curricula with economic and business knowledge and topics and promoting it through systematic communication campaigns.

Training policy is defined by a process of negotiation where cognitive maps, value preferences, technical requirements, and different interests and visions of reality

interact. The result of this process is not the product of a single ordering mind, but a shared collective representation that emerges from negotiations and communication among different actors and stakeholders.

The recommendation is to activate working groups where training and industrial policymakers (at the federal, regional and local levels) negotiate and jointly define coherent development strategies and action plans. Moreover, Russian policymakers and international donors must prioritise the areas and the beneficiaries of future initiatives.

The unexpected beneficiaries of the training were mainly:

- micro businesses and self-employed individuals; after training, there was an enormous growth in business start-ups in trades and services, particularly by people that left mainly medium and large companies after training;
- large companies; individual training helped people to change their occupation and find employment in large companies, where from their point of view, managerial roles, careers and remuneration were more coherent with the objectives that originally led them to training.

In this framework, these activities have sometimes excluded small and medium-sized enterprises that had to face the transition phase alone.

The recommendation is to address further training to this target group of companies, which represent the link between the global environment and local areas and are also the main potential source of employment in the Russian economy.

This choice needs to take account of two crucial issues – business clusters and international standards – that are the

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driving force in response to which different actors (national policymakers, international donors, training providers and companies) are called to redesign future training programmes.

Business clusters

Projects should be strongly linked with industry and cluster trends. Market sophistication and globalisation has shifted the focus from individual companies to networks of companies. In a network the development of each company is closely intertwined with the trends present in the cluster in which the company operates. In this sense, innovation takes place at the cluster level, where the innovator company usually evaluates and fills needs – mainly managerial practices adopted to enhance integration – that all the other companies in the cluster need to comply with. From this point of view, the extent to which these practices are adopted depends on the role and the position of the company in the value chain. What this means is that needs analysis should be based more on a study of the cluster rather than on the specific needs of any single company.

This focus can help to address specific policies at a regional level, where the prevalent vocations and specificity of the area must be matched with the evolution of the cluster and the reinforcement of the small and medium-sized enterprise system.

International standards

Future training programmes should reflect the process through which Russian companies are complying with benchmarking international regulatory systems and should identify the gaps that need to be filled.

In this perspective, new topics for training not included in previous programmes emerge, including corporate governance, innovation, ecology, World Trade Organisation issues, international law and globalisation.

The first waves of training were conceived on a highly traditional – and to some extent universal – format in terms of learning

objectives, content and methodology, but coherent with the priorities that were on the agenda at that time. Nowadays there is an emerging need for training programmes more closely tailored to the real needs of companies.

The recommendation is to assess the competencies of training providers and to develop train-the-trainers programmes.

Future management training programmes should be developed following two main guidelines: the stage of growth of the company, and the training design and methodology.

Stage of growth of the company

Training programmes and development processes should be coherent with the stage of growth of the company in terms of specific needs. From this point of view, any training process must be anticipated by specific needs analysis aimed at defining the portfolio of competencies and practices to be developed and reflecting the specific growth stage of the companies.

Training design and methodology

The need for more embedded training requires adopting in-house training and counselling, strictly linked to the organisational development process and guaranteeing the maximum involvement of middle and senior managers.

The need to move towards a training format in which learning is based on the exchange of experiences among participants requires the adoption of different methodologies:

- coaching and mentoring on an individual basis;
- project work and action learning evolving within an organisational context;
- web-based training to improve interaction and promote learning communities among participants.

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3

FOREWORD FROM THE MOROCCAN AUTHORITIES

Improvement to human resources represents the best safeguard for both companies and their employees against economic uncertainties. Changes in the market and technologies, furthermore, require continuous restructuring of and adaptation to organisational structures and production tools.

In the light of these phenomena, since 1996 public authorities in conjunction with social partners have been engaged in thorough reforms with the support of inter-professional aid and advisory groups (groupements interprofessionnels d'aide au conseil, or GIAC) and special training contracts (contrats spéciaux de formation, or CSF) aimed at encouraging companies to provide continuous training for their human resources as an essential element in the success of their growth plans.

It is universally agreed that the skills acquired during vocational training enhance the productivity of beneficiaries and create added value for companies. However, a precise evaluation of the impact of training courses using accurate relevant information, generated within reasonable deadlines and at a reasonable cost, is of overwhelming importance when deciding how effective and efficient mechanisms are. This kind of evaluation also means that decisions can be made as to the improvement of project design and an appropriate formulation of future programmes.

The action research project conducted with the assistance of the ETF satisfied this objective in every respect. It also allowed Moroccan human resource departments to learn about the methodologies used in this type of research. Another special feature of this project is that it was managed by a scientific committee made up of experts from the European Union and the Maghreb

(Morocco, Algeria and Tunisia), which was responsible for establishing the working methodology and examining and validating all stages of the project.

This work was initially used to scientifically demonstrate the positive impact of training on the competitiveness of companies. It subsequently provided an opportunity to better understand our micro- and macroeconomic information systems, establish a transferable method that could be used in other countries in the region and, finally, familiarise Moroccan actors with the tools, techniques and methods employed in analysing the impact of training.

From our experience as regards implementation: (i) we learned the importance of carefully selecting the operational team, which was not always of a suitable standard, and on which the success of future similar projects largely rests; (ii) we became familiar with the information systems in the country concerned, since their inadequacy is a major constraint and hindrance that could potentially make the project unfeasible; and (iii) we learned that the local team must have the necessary prerequisite characteristics for successful skills transfer.

This section summarises the main results of a study, conducted by the ETF in conjunction with the Moroccan State Secretariat for Vocational Training, aimed at evaluating the public training measures implemented in Morocco. This study was part of an overall comprehensive modernisation strategy for the Moroccan economy that focused particularly on the promotion of active measures designed to increase the productivity and competitiveness of companies. These active measures included two initiatives – the CSF and the GIAC – instigated in 1996 that merit particular attention. These measures, financed by a tax of 1.6% levied on the payroll of liable companies, were designed in particular to encourage companies to incorporate training in their development plans.

Although the anticipated results were, above all, obtained from a microeconomic measurement of the impact of continuous training on the performance of Moroccan companies and the skills of their employees, the study also provided the opportunity to train a Moroccan team in impact evaluation of continuous training and to create conditions for a transfer of the methodology from Morocco to Algeria and Tunisia.

In addition to the obvious value of such a project for Morocco's training policy decision-makers, its innovative character from both the scientific and organisational points of view needs to be stressed. In fact, studies to measure the impact of vocational training are few and far between, and previous attempts in Morocco had hitherto not been great successes. As regards organisational structure, the synergies established between experts and the officials responsible for training policy need to be highlighted.

Although this study was not without its problems (it would have been very surprising if it had been otherwise), the tenacity of the various parties ensured that these were overcome. Useful results from both the political and scientific points of view were obtained, the most important of which was the discovery of the positive effect of the use of CSF on company balance sheets, and in particular in companies that use these contracts as an integrated tool and as part of a true development policy. The most successful cases were those in which companies combined the modernisation of plant, the search for new markets, a human resources strategy and training. Companies solely interested in financial opportunities, however, did not manage to benefit from this positive impact.

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2007

3.1 CONTEXT OF THE STUDY

The project was implemented in response to a request for assistance from the State Secretariat for Vocational Training in Morocco to the ETF, at the start of 2003, in regard to producing a tool for analysing and measuring the impact of public policy in support of the development of human resources in Moroccan companies. This request formed part of a broader aim of implementing a general strategy for the development of the Moroccan economy and in particular the private sector, following the conclusion of an Association Agreement with the European Union, which described the establishment of a Euro-Mediterranean free trade area in the medium term, under a free trade agreement signed by the United States, Morocco and certain Arab and Mediterranean countries. This strategy was intended to prepare Morocco for the globalisation of its economy and trade, and to prepare Moroccan companies to open up the national market to international competition.

The quality improvement process that was initiated first involved the vocational training sector as a skills producer via its initial and continuous vocational training schemes and, in particular, its mechanisms for developing continuous training, known as *formation en cours d'emploi* (in-service training), established in 1996 with the assistance of the World Bank, as part of its support to the development of the private sector.

The challenges were to integrate the Moroccan economy into the global dynamics of competitiveness, improve the existing economic fabric in order to create conditions favourable for investment and upgrade human resources via training and skills refreshing.

Aware of what is at stake in this major challenge, the Moroccan authorities have, over the last ten years or so, been setting up reform processes designed to change the country's initial and continuous vocational training systems to ensure that they are capable of meeting the needs of companies. In this context, continuous

training is considered in Morocco to be an important method of improving the qualifications and skills of employees, so that they can cope with changes in the labour market and support the upgrading of companies.

The ETF-supported project specifically involved measuring the effects of continuous training on the skills and productivity of employees and on the competitiveness of companies in three sectors (the textiles sector, mechanical, metallurgical, electrical and electronics industries, and the hotel industry) using the CSF and the GIAC. It should be noted that these tools were designed to encourage companies to incorporate training in their development plans, identify their skills needs, and define, as far as possible, a sectoral strategy in order to better target investment in human resources, improve the productivity and competitiveness of companies, and strengthen relations with sectoral trade associations.

The project seemed to exhibit a certain degree of complexity with regard to its ambitious objectives that would apparently require the use of research tools based on the theory of human capital, whose reliability is essentially based on empirical studies and the choosing of an econometric model suitable for the problem set. On a practical level, the project had to answer the questions posed by the Moroccan public authorities about the impact of continuous training at the micro- and macroeconomic levels. In addition, there are very few studies available in this area whose results have been made public. Two exercises of the same type were conducted by the Moroccan authorities between 1997-99 and 1999-2004; these received the support of sponsors, but did not produce any realistic results, a fact which has been attributed to the poor quality of the existing databases and an inappropriate choice of econometric model. This is why the ETF chose an action research format for its project, combining scientific research tools and a requirement for operational results.

This project also had another, no less important, objective, which was the training

of Moroccans as evaluators so that they could apply the methodology in the future. This exercise represented another difficult challenge to meet insofar as the Moroccans to be trained did not have the desired profile for getting to grips with the econometric model selected.

The presentation of the project and its results below comprises five sections. Firstly, the work will be presented in the wider context of projects in the Maghreb countries. Secondly, we will describe the progress of the project and emphasise the institutional organisational structure and the methodological procedure developed. Thirdly, we will deal more directly with the issue of the impact of the CSF on the performance of Moroccan companies, and then go on to examine the impact of training on the professional career of employees. Finally, the fifth part will review the recommendations and the issue of transfer.

3.2 PREVIOUS WORK IN THE MAGHREB COUNTRIES

Several studies undertaken in large Algerian companies provide information on the budgets earmarked for training and the opportunities for accessing training depending on qualification levels. However, there is generally little information available concerning the costs of training in Algeria and training still does not appear to be considered an investment. A marked interest in quality issues was noted, nonetheless, with one company survey indicating that inadequate training is seen as an obstacle to the development of quality systems. Training, furthermore, is rarely subjected to any evaluation, particularly amongst its beneficiaries. The study conducted on a sample of former attendees on training courses at the National Institute for Vocational Training (Institut national de la formation professionnelle, or INFP) seems to be an exception.

An evaluation survey of continuous training was conducted in Tunisia in 2001, with objectives as follows:

- to evaluate and analyse the effects of continuous training, depending on the

- various tools used, on the balance sheets of companies and on workers;
- to analyse the factors that encourage employers to train their employees in the light of the demand for qualifications engendered by technological development and international competition;
- to evaluate the impact of the various continuous training initiatives on the promotion of continuous training, particularly among small and medium-sized enterprises;
- to evaluate the changes recorded in terms of the effectiveness and impact of continuous training between 1996 and 1998;
- to propose recommendations aimed at rationalising the tools put in place for the promotion of continuous training and improving the quality of services provided by the public agencies responsible for managing these initiatives.

Based on the study's terms of reference, a sample of 900 companies was taken from the population of companies that benefited from continuous training. A sample of 300 companies that had not benefited from any continuous training in 1998 was randomly taken from the National Statistics Institute directory of companies.

Two types of questionnaire were produced, one for the companies that had been involved in the continuous training scheme and one for the sample of control companies. The questionnaires were only sent to the companies, with employees only indirectly involved via the responses received from their employers. The questionnaire for scheme beneficiaries comprised three basic sections: (i) characteristics of the companies, the number of employees who had received training under the scheme, etc.; (ii) an assessment of the company vis-à-vis continuous training and the various procedures associated with continuous training initiatives; and (iii) quantitative aspects covering balance sheets for five years and the characteristics of employees.

The indicators used to measure the performance of companies set out in the

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questionnaire included the rate of change in turnover, the rate of change in added value according to the use made of continuous training, the rate of use of production capacities, the apparent productivity of capital, added value/capital, and added value/wage bill. Other indicators reflected the position of innovation within the company and the overall impact of continuous training on human resources.

The expectations of the survey were not always fully met, however. Companies were found to be reticent when replying to a questionnaire that they thought too long (about ten pages), and the inadequately trained interviewers were frequently unable to correctly explain the questions and record the relevant answers. In addition, in regard to questions related to the five-year company accounts or the distribution of employees according to education level and job grade, it was difficult to collect this information from any one person in the company (the questionnaire was aimed at financial managers, general managers, and personnel managers); a total of eight reminders therefore had to be sent out (via the interviewer or over the telephone). In addition, since most of the small and medium-sized enterprises subcontract their bookkeeping to an accountant outside the company who maintains the company's records, this means that the information requested is not necessarily located within the company.

Information collection took nine months. Although 800 questionnaires were collected of the 1,200 issued within the terms of reference, a large amount of information was unable to be collected or used. Consequently, it was not possible to establish the impact indicators.

Nordman (2002) undertook comparison work on the effects of continuous training in Morocco and Tunisia and, on the basis of two surveys conducted in manufacturing companies in these countries, was able to match employer and employee information. His results indicate how important it is to decompartmentalise duties and skills in a company in order to stimulate the dissemination of knowledge between workers. Tunisian companies seem to be in

a better position than Moroccan companies in providing their workers with on-the-job training. The author confirms the value of the organisational structure characteristics of companies (number of management grades, flexible working options, organisation in teams, etc.) in stimulating the effects of disseminating human capital in the workplace.

3.3 CONDUCTING THE PROJECT

The project was initially designed as true action research that involved theoretical research, the generation of operational results, the training of actors, and awareness-raising amongst actors.

3.3.1 INSTITUTIONAL ORGANISATION, PROJECT STAGES AND DISCREPANCIES WITH TARGETS

A management group was established at the political level to represent the project's beneficiaries. Comprising representatives from the Moroccan administration bodies and social partners, this group's mission was to outline the methodological proposals of the scientific committee, define the target recipients and the actors to be involved, facilitate access to information, and participate in the action-training element of the project.

A scientific committee appointed to oversee the scientific aspects comprised experts from the European Union, Morocco, Tunisia and Algeria. The main duties of this committee were to produce an international review of the status quo as regards impact evaluation of continuous training, by defining the problems and the objective of the research, designing the overall methodological approach and its econometric implications, and validating the procedure and the results of the operational team. An operational team instituted the methodology, collected and verified the information, performed the statistical and econometric processing, presented the results and described the training.

The project was designed to comprise four stages. The purpose of the first stage was to study continuous training activities in all Moroccan companies, using, for the first time, a combination of three sets of databases obtained from the Ministry of Industry and Commerce (ministère de l'Industrie, du Commerce et des nouvelles Technologies, or MICT), the National Social Security Fund (Caisse nationale de sécurité sociale, or CNSS) and the Office of Vocational Training and Labour Promotion (Office de la formation professionnelle et de la promotion du travail, or OFPPT). This phase was designed to enable an overall view of the impact of continuous training on the performance of Moroccan companies. The second stage was designed to study company activities in greater detail by conducting a survey amongst companies that had and that had not participated in the continuous training scheme in regard to their overall strategy and the position of training in this strategy. In the third stage, the study focus shifted to employees. Using a special questionnaire, employees were asked to explain the features of their involvement or lack of involvement in continuous training initiatives and any consequences of these initiatives on their skills, productivity and career. Finally, a fourth stage was aimed at developing a procedure for companies to undertake their own training evaluation, by assisting them from the moment initiatives are instigated until their impact is measured at the corresponding level.

Discrepancies between targets and what was achieved by the project referred to the population surveyed, the data used and the scope of the project. In fact, although the study was initially intended to examine textile/clothing/leather and tourism companies, a lack of information in the tertiary sector meant that the emphasis had to be shifted to industrial companies.

For reasons of statistical confidentiality it was not possible to use the databases of the CNSS, which are the only ones that contain individual employee data. Furthermore, the lack of a unique company identifier in the various databases means that lengthy and complex manual matching had to be carried out.

Although the study enabled us to understand better the ways in which the databases can be used and their potential for improvement, and to identify the impact of continuous training on company performance, not all the objectives were achieved. In particular, the aim of conducting surveys amongst employees was not a complete success (246 questionnaires filled in as opposed to the targeted 800). An initial survey test in 40 companies revealed the obstacles that employers and human resource directors were putting in the way of the surveys conducted amongst their employees. This means that the operational team could only carry out the employee surveys in companies where no opposition to this procedure had been expressed in the company survey.

Similarly, it was only possible to outline the phase referring to supporting training policies in companies.

3.3.2 METHODOLOGICAL PROCEDURE

The procedure was primarily based on the demanding job of establishing a single database from the 14 databases of the MICT – two for each year between 1997 and 2003, one containing economic indicators and the other containing the number of employees per occupational grade – and from the database containing the training initiatives for each company produced by the OFPPT. The MICT databases contained data on between 6,567 and 7,710 companies (depending on the year) and the OFPPT database contained data on 20,183 training initiatives organised between 1996 and 2004 and representing 4,591 industrial and tertiary sector companies that instituted planned and unplanned training initiatives in the period 1997-2003. Manual matching of the two databases (MICT and OFPPT) finally resulted in a database of 779 industrial companies that had instituted training initiatives during the period 1997-2003.

A main sample was extracted from this database, containing companies – numbering 322 in total – for which the

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following information was available: economic data for at least two years, including one year prior to 1999, at least one training year during the period 2002-03, and economic and training data for at least one year during the period 2000-03.

In order to minimise bias in the evaluation, a control sample was randomly selected from a population of 2,796 companies that had not participated in a publicly-funded continuous training scheme. Twelve strata were defined based on two turnover criteria (more than and less than 25,000 dirhams), two size criteria (more than and less than 50 employees) and three sector criteria (textiles, metallurgy and other industries). The sample comprised 322 companies, i.e. 200 that were intended to be surveyed directly, and 122 which could be contacted depending on the number of refusals by companies in the first group of 200.

Bearing in mind constraints associated with the survey procedure (a refusal to respond, companies which had shut down or whose legal status had changed), a total of 356 companies could be surveyed; 192 that had participated in a continuous training scheme and 164 that had not (including 21 that provided training but which did not use the publicly-funded system). The sample was deliberately restricted to the Casablanca region.

Three different questionnaires were produced. The first questionnaire was specific to companies that provided training using CSF. A second questionnaire was aimed at companies that provided training outside the special training system or which provided no training. The third questionnaire was intended for employees, irrespective of whether they had been trained in the company surveyed or in a previous company or had never benefited from a training initiative.

3.4 EFFECTS OF CSF ON COMPANY COMPETITIVENESS

After having compared the respective characteristics of companies that provided

training using CSF and those that did not provide any training using these contracts, as identified above, the specific database used for the econometric evaluation will be presented first and subsequently the results of this evaluation, which obviously constitute the most important aspect of this section.

3.4.1 COMPARISON OF COMPANIES THAT USE AND THAT DO NOT USE CSF

The comparison of the characteristics of companies that provided training using CSF and those that did not provide this sort of training initially revealed differences in general strategies (percentages for companies that did not use CSF are provided in brackets). Thus, 70% of companies using CSF (53%) stated that they attached great importance to improving skills in the various employee grades, 68% (55%) to developing new production processes, and 78% (68%) to reducing costs. Other strategic factors – such as the creation of new products, the differentiation of existing products and the improvement of product quality – did not vary much between the two groups of companies.

Companies that provided training using CSF were found to have more modern production plants, with 66% (49%) using computer-aided design, 63% (41%) using computer-aided drafting and 84% (74%) using computer-aided management. Furthermore, 18% (7%) had robots and 65% (42%) had numerical control machines.

Companies that provided training using CSF also seemed to be more frequently set on a trajectory of change. Thus, in the last five years, 85% (59%) have made organisational changes in production, 76% (51%) have introduced technologically new products, 74% (46%) have introduced new technology, and 69% (34%) have introduced a quality procedure. There are also differences, albeit not major, between the two groups of companies with regard to changes planned for the next three years.

The training initiatives undertaken by companies were primarily aimed at increasing profitability (84%), underpinning modernisation (66%), improving maintenance of plant (65%), conquering new markets (63%) and improving the quality of communications and human relations between employees (61%). Three quarters of the companies that provided training using CSF stated that they had informed employees of projects associated with their training policy.

The main objectives of companies as regards their employees were to enable them to meet the requirements of their jobs better and to improve productivity (cited by 86% and 84%, respectively, of the companies that provided training using CSF). Two thirds also emphasised an objective of improving knowledge transfer between employees in the workplace.

The impact of training on employee careers, as flagged up by the statements from company managers, does not seem to be systematic. In the case of 62% of companies that provided training using CSF, employees had been promoted on completion of their training courses. On the other hand, in 53% of cases, employees had not been promoted on completion of their training courses but had changed jobs. It may be noted that although 44% of companies that provided training using CSF declared that employees had received wage increases after training, 24% replied that no wage increases had been given, and 32% did not reply.

Although 60% of the companies that provided training using CSF consider that these have enabled them to incorporate training in their development projects and to identify skill gaps, and although half of them see CSF as an aid for better planning of their training needs, it should be noted that there was a group of opportunistic companies, who saw CSF as an opportunity for financing their training and which they thus exploited in order to reduce their personnel training costs (30% of the companies that used CSF that were questioned).

Overall, if we disregard the opportunistic companies, the differences between companies that provided training using CSF and those that did not are accentuated, for example, the seeking of competitiveness based on price is more frequent amongst the first group. It should also be noted that 35% of the companies that provided training using CSF have implemented other types of initiatives.

If the reasons for not providing any training or not using CSF are examined, the companies in this group emphasise the fact that they prefer to recruit people who already have the necessary skills or that the current skills and knowledge of their employees meet the company's needs (70% and 68%, respectively, of companies); 37% of the same companies stated that they had not been informed about CSF (41% also failed to respond to this question). But 52% of these companies confirm that they intend to deliver training over the next three years; 37% wish to use CSF in order to achieve this, and 16% plan to train employees using their own resources and CSF.

These results demonstrate that the two categories of company – those that provided training using CSF and those that did not – are developing on the basis of representation models of the role of human resources that are quite different and that reflect their contrasting attitudes to continuous training. The first group believes in the virtues of knowledge being accumulated in the workplace as part of the modernisation process, while the companies in the other group persist with a static view of skills insofar as they think that these should be sought and found directly on the external labour market.

3.4.2 CONSTRUCTION OF THE ECONOMETRIC ANALYSIS DATABASE

In order to produce an econometric model of the impact of training on the company balance sheet, a panel of companies had to be established for observation at various times over a given period. The scientific committee had proposed establishing such

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a panel based on matching national databases and entering information obtained from the observations made during the surveys of the companies into the combined database.

The OFPPT database was frequently found to have gaps as regards planned expenditure variables, undertakings, payments and number of training initiatives. Thus, in 75% of cases, the number of training initiatives had not been indicated, which is why only information relating to the confirmation that at least one training initiative was implemented under the CSF system during the period 2000-03 was used.

Deviant values had to be removed from the MICT database, which left a database of 631 observations for the period 2001-03. The variables that could be used were turnover, export turnover, value of production, investment, personnel costs, permanent employee numbers, permanent female employee numbers, and number of days worked. This database comprised a non-longitudinal panel dataset, i.e. a database comprising several observations for each company (one per year for each variable). Because it was not possible to systematically observe any company for all the years, the number of annual observations may vary from one year to another. These 631 observations refer to 256 companies: 129 companies that provided training using CSF and 127 companies that did not provide training using CSF. Of the 256 companies, 9.7% appear once, 34.6% appear twice, and 55.7% appear three times.

This new database, which contains values that can be used for the major variables, differs slightly from the first one by covering 256 companies rather than 356. This refinement did not affect the characteristics of the companies that provided training using CSF and companies that did not provide training using CSF, as described above.

The distribution in terms of size was virtually identical for the two groups of companies. However, companies that provided training using CSF are more

common amongst metallurgical companies (25% as opposed to 15%), whereas companies that did not provide training using CSF had greater representation in the textile industry and other industries (45% as opposed to 39%, and 40% as opposed to 36%, respectively). Three quarters of the companies that provided training using CSF (74%) did not belong to a national group as opposed to 65% of companies that did not provide training using CSF; 13% of the companies that provided training using CSF were subsidiaries of multinational companies, compared to 4% of companies that did not provide training using CSF.

Seeking competitiveness on the basis of price and regarding innovation as important are equally as evident in this sample as they were in the sample used for econometric analysis.

3.4.3 ECONOMETRIC EVALUATION OF THE IMPACT OF CSF ON COMPANY PERFORMANCE

Based on the established panel dataset, the effect of continuous training was measured using econometric analysis. The effect of using CSF on the performance of Moroccan industrial companies was analysed using two categories of variables: turnover and value of production (defined absolutely and for each company). The analysis was restricted by the fact that only these two variables were available in the databases.

Before explaining the results of the estimation of the average effect of the use of CSF, we will describe the impact evaluation method.

In any evaluation of the impact of a public policy, a causality relationship is studied. We define this relationship as a company (a statistical individual) with a result variable, either with or without treatment (the institution or non-institution, respectively, of CSF). In this study, either turnover or production value was used as the performance indicator: for example y_0 represents turnover without any CSF,

whereas y_1 represents turnover with a CSF. Each company (or individual) is characterised by a treatment variable T (CSF), where $T=1$ indicates treatment and $T=0$ indicates no treatment.

For any single company on a given date, it is clearly impossible to obtain both turnover with training and turnover without training. The estimation of the average treatment effect (ATE) is in this case the answer to the questions: What is the turnover of a company that uses CSF? What would its turnover be if it did not use CSF? This requires two universes – the current universe and the counterfactual universe – to be compared. In this study, we disregarded any effect of a company's participation in this type of training on the turnover of another company (the effect of general equilibrium).

The measurement of the ATE requires calculating differences in average turnover with and without treatment, but with a few variations as follows.

- The ATE is the average treatment effect on the entire population. This is therefore the anticipated effect of training on the turnover of a company chosen randomly from the population: $ATE=E(y_1-y_0)$. The problem with this measurement is that it may include individuals that would never have been eligible for treatment.
- The ATET is the average treatment effect on the treated; in other words, the average effect of training on those who have participated in the training: $ATET=E(y_1-y_0/T=1)$. The ATET is often but not always equivalent to the ATE.
- A third measurement indicator is the local average treatment effect (LATE), which refers to the use of techniques involving instrumental variables. This is the type of indicator used in this study for the reasons that are explained below.

The assumption of random treatment was not applied in this study⁶. In the case of training, in fact, this means that it would be assumed that at the end of training the turnover of companies that provided training using CSF – even though they had not delivered any training – would be equivalent on average to the turnover of companies that did not provide training using CSF, and vice versa. Thus, the estimation of the average effect of training could be summarised as the difference between the average turnover of companies that provided training using CSF and the average turnover of companies that did not provide training using CSF. The assumption that the use of training is allocated randomly between companies is very unlikely in reality, and is not, moreover, applicable to the Moroccan case. In fact, if the characteristics of companies influence the fact that they are selected for training, and if these characteristics also have an impact on turnover, then there is a problem of selection bias in estimating the ATE.

Other hypotheses that are less restrictive may be used to estimate ATE, for example:

- an assumption of ignorability of the treatment conditional with regard to a set of observable variables x (regression using the ordinary least squares method with control variables);
- an assumption of the availability of one or more instrumental variables which determine participation in the treatment but not the result variable.

Based on the data we have, and in particular the non-availability of instrumental variables, the preferred estimation method is a two-stage estimation based on Mundlak (1978) and Hausman & Taylor (1981)⁷. The method comprises measuring the effects of CSF using a linear projection for the non-observed heterogeneity of companies on a set of production and human resource characteristics – including whether or not

⁶ This would mean hypothesising that the treatment indicator was statistically independent of the result variable, which would happen if treatment were randomly assigned between the agents (in this case $ATE=ATET$).

⁷ The recommended econometric tools also take account of the bias associated with the non-longitudinal nature of the panel data and correct the standard deviations of heteroscedasticity.

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CSF have been used – broken down for the various contexts. This technique enables any endogeneity bias in training to be corrected in the estimations. The procedure and its advantages are explained in detail in the final report on the project (De Lorenzo, 2006).

The results of the estimate of the average effect of the use of CSF on the performance of companies are now described in terms of overall effects and contextualised effects.

In terms of overall effects, and according to simple descriptive statistics, intuition suggests that using CSF has a potentially positive effect on turnover and production value. In companies that provide training using CSF, turnover is on average 25% better and the value of production is 23% better than in companies that do not provide training using CSF. Here we present the results that verify this assumption using a robust econometric specification.

The estimates are produced using two types of information about the same companies and adopting three different estimate procedures⁸. The first type of information used is whether or not the company has participated in the CSF scheme (information obtained solely from the OFPPT). A second set of variables then adds the information obtained from the surveys to the first set of variables, which mechanically overlay the use of CSF with the various contexts of use.

An initial result, which is drawn solely from the first database and which does not exploit the results of the survey, shows that when the econometric model is poorly specified the measured effect of training on turnover is very close to a simple mean difference (23.5%), and the effect on production value is 16.7%.

The result obtained from the two-stage estimate (the preferred estimator) refers to a low impact on turnover, indicating that

non-observed characteristics of companies associated with their turnover may induce them to provide more training than other companies. Disregarding the information from the survey carried out amongst companies, the treatment obtained from the national databases indicates an effect of CSF on turnover of 12.4% and of 17% on production value.

The question subsequently posed is to know whether these results are confirmed when the model is fed with the information drawn from the survey. When all the technological and human resource characteristics are entered into the model⁹, the effect of the CSF on the performance of companies disappears. Thus, the simple fact of monitoring these characteristics, which in one way or another correlate with the way in which training is managed in the company, introduces a considerable degree of relativity in the effect measured. The performance of opportunistic companies can thus be differentiated from that of companies using training as part of their development strategy. The success of the public intervention scheme would then depend on the involvement of the various actors concerned – in particular its direct beneficiaries, which are the companies.

In terms of contextualised effects, the criteria explaining in detail the use of CSF and drawn from official documents collected at the time of the survey have been entered into the analysis. There were four criteria, as follows: integrating training in the company's development plan; encouraging growth in the demand for training in the company; assisting with better planning of training needs in the company; and a simple finance opportunity in order to reduce the company's training costs. These variables are interesting because they show the context in which the CSF were used. The assumption is that the effect of public policy would vary according to the way in which the company took advantage of this scheme in its development plan.

⁸ These comprise: (i) a random effect model estimate; (ii) a two-stage estimate in which the individual effect is obtained at an initial stage based on a 'within' estimate and is then projected onto the variables assumed to explain it; and (iii) the preceding model corrected for heteroscedasticity.

⁹ These variables comprise, for example, the status of the company, its home sector, size, product type, structure and workforce, and the reasons for using training.

When turnover according to whether or not the company used CSF and integrated training in its development plan was considered, the average difference in turnover between companies that provided training using CSF and companies that did not provide training using CSF was approximately 29%, whereas this difference was only 25% when the only criterion used was whether or not CSF had been used. On the other hand, for companies that used CSF merely to obtain finance in order to reduce their training costs, this difference fell to 10%.

The results of the econometric analysis confirm that companies that integrated training in their development plans and identified their skills needs were generously rewarded. The more robust models estimate that these effects were 14.5% on turnover, 14.9% on turnover per employee, 11.4% on production value and 11.8% on production value per employee.

Beyond this initial contextualised effect, companies that used CSF merely to stimulate demand for training did not record any effect on their performance. The assumption is that they are not yet at the stage at which training can directly impact on their productive performance and use CSF simply to initiate this dynamic process. The question still remains of determining whether this stance will help them to realise their development projects in the future.

In the case of companies that used CSF in order to plan their training needs better, the econometric estimates identify the effects on turnover per employee to be approximately 12% and the effect on production value per employee to be over 13%. These values are very similar to those identified for companies that integrated training in their development plans and identified their skills needs. In any case, the use of public policy as a means to plan training needs and identify actual requirements pushes both production value per employee and turnover per employee upwards. However,

this effect is not apparent in total turnover and total production value.

Not only is the estimated effect frequently zero in companies that regard CSF as a source of finance and an opportunity to reduce their costs, it is sometimes significantly negative (-14.5% on turnover and -13.3% on production value). Thus, it would seem that when these companies adopt a freeloading attitude and use public funds earmarked for training, they are adversely affected. Why this happens, despite the fact that the companies should have benefited from training, is a question that remains unanswered. Field surveys should include these companies amongst those that need to be studied in greater depth so that more can be learnt about them.

The way in which CSF act on the performance of companies was also estimated, according to the way in which the companies utilise a certain number of resources and strategies in order to manage their training policy. The survey conducted – based on the procedure applied in the European continuing vocational training surveys – was used to identify five different mechanisms employed by companies to identify their training needs¹⁰. These variables were then assessed in terms of whether CSF had been used.

The most robust econometric results show the following characteristics.

- The existence of a training centre, the use of an external consultant for recommendations in the area of continuous vocational training or the establishment of a formal principle of needs identification did not have any significant effect. Thus, the availability of material resources – about whose quality we know nothing – does not seem to be sufficient to take best advantage of CSF. Similarly, following the simple principle of requiring an inventory of training needs is probably not the best formula for optimising the use of CSF.

¹⁰ These were: the existence of a training centre, the existence of a training manager, the use by the company of an external consultancy service for training policy, the institution by the company of a formal training needs identification procedure, and interviews held with employees to identify their training needs.

- Although the development of a training provision and strategy consultancy market can only have beneficial effects in maximising the gains to be obtained from training in terms of increasing company competitiveness, the results do not confirm this.
- The use of CSF in combination with a training manager is significant, as having an actor whose main mission is to translate company development plans in terms of training and optimising instruction and the use of CSF seems to have a crucial effect on company performance. These effects are of the order of 10% on turnover, 11% on turnover per employee and production value, and 12% on production value per employee.
- The effect of CSF is positive and significant when the company institutes structured interviews and works with all personnel in order to identify their specific training needs (13% on turnover and on turnover per employee, over 11% on production value and production value per employee).

It would therefore seem that when training and its programming are an integrated function in the general organisational structure of a company, the effects of participation in the CSF scheme are maximised, given that the efforts of the public decision-makers are translated into the effective allocation of training resources within the firm.

Other contextual variables confirm that if public policy is used for objectives such as the maintenance or modernisation of plant, the conquering of new markets, or even a reduction in workplace conflicts, its effects are quite visible (in particular on turnover).

From the methodological point of view, we would like to emphasise, finally, that the least robust econometric specification (the random effect model using the assumption that the distribution of CSF and their context is random) obtains results that are overestimates and close to the simple mean difference in turnover and productive value.

3.5 EMPLOYEE SURVEYS

A questionnaire was prepared that was to be sent to a sample of employees in each company surveyed. Its purpose was to directly identify the effect of training under the CSF scheme on productivity and employee skills. The questionnaire was intended to reveal the return on training in terms of wages, promotion and improvement in the working conditions of the beneficiaries. This survey, which was not difficult to carry out (although it is rarely undertaken in developing countries), revealed methodological and logistical problems that the operational group could not resolve.

A method suggested by the operational group was to collect employee data from the CNSS databases, and to match the companies surveyed with the companies in the latter in order to identify the employees that should be surveyed. Based on this matching, the population of employees recruited and their main characteristics (postal address and residence, social and professional category, age, etc.) could be determined at the companies surveyed. On this basis, it would be possible to accurately obtain a random sample of employees from the workforces of companies that provided training using CSF and companies that did not provide training using CSF¹¹.

Some 246 employees were surveyed. Whenever possible, employees were selected according to company size and grade structure.

The purpose of the first question in the employee questionnaire was to identify the context in which training was delivered, and answers indicate that of all the employees who responded, 25.7% were trained under CSF, 14.4% did not know, and 59.6% had not received any training. This training rate of around 25% is the same as that found in other French surveys of continuous training. Amongst the employees who had received training in the company in which they were working at the

¹¹ The advantage is being able to carry out the survey in the homes of employees and not necessarily at their workplace. According to the final report on the project, questioning employees at the workplace would involve enormous bias given the fear of sanctions should employees reply in a manner that does not meet the wishes of their employer.

time of the survey, 58.7% had attended a single training course, 11.9% had attended two training courses, 10.9% had attended three training courses, and 18.5% had been able to attend at least four training courses. The main purpose of this training was to improve wages or skills or productivity (40% of cases); 20% of employees, however, had undertaken training in order to obtain a diploma or a qualification, and 17% had undertaken training in order to meet their job specifications.

The majority of the employees surveyed had a compulsory education qualification (57.7% had diplomas, 35.4% had no diploma, and the remaining 6.9% failed to reply), and 34.5% had undergone technical training (a third of whom had obtained a diploma). Employees who had previously worked for another company gave the reasons for their departure, most of which were associated with a lack of career possibilities, resignation, a contract coming to an end, and dismissal (in one case). Only 11.4% of the employees in this group stated that they had received training.

3.6 RECOMMENDATIONS AND FUTURE TRANSFER POSSIBILITIES

Observations as listed below were made on the basis of the econometric analysis.

- **Relevance of the CSF scheme.**
CSF were found to be an effective measure of public policy as regards continuous training since they improved the performance of companies, in particular when they 'played the game'.
- **Equity of the CSF scheme.**
Companies that did not include training in their overall strategy and saw CSF merely as a means to reduce their training costs did not experience any impact on their training activities, whereas companies that made training an element of their overall modernisation, development, innovation and modernisation strategy were rewarded.
- **Effectiveness of the CSF scheme.**
Companies that used CSF in order to

meet public policy objectives obtained an additional benefit in terms of turnover and production value of 14.5% and 11.4%, respectively.

- **Mixed effect of CSF on management.**
CSF had a variable effect depending on the resources deployed by companies to manage their training policies. Companies that believed in the virtue of training achieved the maximum potential and benefits from the CSF.
- **Efficiency of the CSF scheme.**
Companies that used CSF as an essential tool to improve their performance gained the most advantages. Companies that worked in conjunction with their employees in order to identify skill requirements were able to ensure consistency between their objectives and public policy objectives.

As regards recommendations, it is obvious that the CSF scheme, and more generally, the public policy of assisting the development of companies by providing advice and training, deserves to be better known, in particular amongst smaller companies. Unfortunately, these companies are also, from the institutional point of view, less structured, even though the information and promotion activities are undertaken by sectoral federations.

This project is intended to help develop a culture of evaluation, which means not only evaluating procedure at the macro and micro levels but also evaluating performance. At the macro-national level, it is important that the personnel responsible for feeding the evaluation databases are trained, perhaps in an induction course. Once the various parties realise how important the quality of the data is for evaluation they will pay more attention to the data capture and maintenance operations. At the micro level, employers must be trained in impact evaluation techniques and in the establishment of their associated databases.

Numerous lessons can be learned as regards the transfer of experiences to other countries and contexts. First of all, the fact that the project was successfully completed is, in large part, due to an institutional

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structure (proposed by the ETF) that combined a management committee made up of administrators responsible for training policy and social partners. This organisational structure meant that problems could be addressed and solutions found. One of the difficulties was related to the deceptive quality of the information contained in the national databases. If a similar project were to be carried out again, a careful prior evaluation of the contents of databases and their accessibility would be required. Company surveying is another critical operation that requires meticulous preparation, with regard to sampling and the questionnaire and also the training of the interviewers. It is therefore essential that employer

organisations are involved from the very start of this phase.

Insofar as technical aspects are important in the methodology adopted, it is essential for the operational team to have the required skills. It is not, however, always easy to find people in administrations who are capable of rapidly learning the techniques, as a good econometric background would be required. Where it is not possible to find the right kind of people, in-depth training must be planned for a few people and a more general introduction to quantitative evaluation techniques should be given to a wider population and opened to social partners and employers.

4. COMPLEMENTARITY OF THE QUALITATIVE AND QUANTITATIVE APPROACHES

4

Both the Russian and Moroccan studies aimed to evaluate the impact of training – management training in the Russian project and in-service training in the Moroccan project – using a different methodological approach in accordance with the terms of reference of each project. The two projects are thus different in a number of ways.

- They have different objectives defined in different ways. Thus, the Moroccan project defines precise and delimited goals to be achieved in order to improve competitiveness and worker productivity. In this respect, the evaluation outcomes are already defined and clear for the evaluator, namely a quantitative estimate of the additional productivity brought about by training. The Russian project leaves more room to the evaluator to define the outcomes of the project since the

heading of the project is more elusive (referring to ‘management development’ in the final report on the project¹²).

- They use different evaluation methods. While the Moroccan project is concerned with the quantitative impact assessment of job training at the level of the firm, the approach developed in the Russian project is qualitative, with the main purpose being to increase knowledge as regards the contribution of management training to the development of companies in the Russian Federation.
- While the Moroccan project focuses on one specific training scheme (CSF), the Russian project involves the evaluation of management training in general through six actors and including different stakeholders.

While a qualitative, interpretative approach was chosen in the Russian case, a

¹² ‘The project aimed to analyse the impact of national and international training projects on management development in the Russian Federation [...]’ (ISTUD, 2006, p. 1).

quantitative approach was applied in the Moroccan case, with each methodology offering merits and limitations.

4.1 COMPARATIVE MERITS

4.1.1 INPUT TO POLICY DECISIONS BASED ON TWO DIFFERENT PERSPECTIVES

Both project reports present an assessment of public training policies and offer a major input for policies which could be implemented in the near future. In the Russian case, the training actions which have been investigated were promoted by several foreign public partners (European Commission, World Bank, etc.), whereas in the Moroccan case, the policy in focus refers to a local system for stimulating in-service training. In this respect, they can be considered as helpful for decision-makers, whatever their level (European, national, or company).

According to their respective terms of reference, the two reports present different measurements of impact. The Russian report (ISTUD, 2006) reproduces the opinions given by interviewed training beneficiaries, whereas the Moroccan report (De Lorenzo formazione, 2006) provides a precise quantitative measurement of training impact, estimated on the basis of increases in company outcomes due to training. Both reports confirm the usefulness of investment in training.

It is claimed in the Russian report that the impact of the programmes was very strong at the individual level, 'with the emergence of a managerial role characterised by a broad and rich set of competencies, skills and behaviours reflecting managerial profiles and models existing in international organisational contexts' (p. 85).

The Russian report gives an idea of the efforts by foreign agencies to enhance management in Russia, and also provides a good description of the problems linked to the implementation of the activities and of the main elements of the impact of training.

According to the Moroccan report, the national policy aimed at developing in-service training appears to be effective, with the companies which invest in training with the broad perspective of strengthening the competencies of their labour force tending to perform better.

4.1.2 THE LEVEL OF ANALYSIS

The organisation was chosen as the main unit of analysis for the fieldwork. In the Russian case, impact was examined at the organisational level: 'training, and internship especially, also had significant impacts on innovation since they provided a place and an opportunity for it' (p. 40). The findings indicate that the highest impact areas were in defining the business and a few primary management processes, especially marketing and personnel management. In Morocco, the grounds for sampling relied on the choice of specific sectors, and within those, of companies which were involved and not involved in the CSF policy.

In both reports, the results of the fieldwork were compared against other secondary data to crosscheck the overall coherence of the data from the field with existing knowledge.

It should be noted that the evaluation in Russia considered the services sector (e.g. tourism), which was not the case in Morocco. Labour productivity is more difficult to assess in services than in industry.

4.1.3 SOME SPECIFIC OUTCOMES

In the Russian project, the unexpected effects and symbolic effects of the training programmes were taken into account and analysed. Such a dimension enlarges the definition of outcomes in the impact evaluation. The networking between former trainees constitutes another relevant feature identified in the evaluation.

Regarding the project in Morocco, it has to be stressed that the methodology can be

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considered as rather original – as one that has been rarely implemented in developing countries. It is difficult to deal with the question of the economic impact of training, and so the solution implemented deserves particular credit.

The Moroccan evaluation project also undertook a thorough analysis of the existing databases and described the conditions to be fulfilled for an integrated use of the databases. A relevant aspect regards the involvement of partners from the Moroccan Ministry of Employment and Vocational Training in the operation, as this has enabled the beginnings of the development of a capacity building component.

Some results in the Moroccan report appear to be worthwhile, such as the fact that the companies involved in training more frequently declared that the competencies of their employees are part of their general strategy. The links between innovation and training represent another relevant result: innovative firms more frequently use training than other companies.

4.2 COMPARATIVE LIMITATIONS

4.2.1 THE CONTROL GROUP ISSUE

Contemporary methods of impact evaluation seek methodological rigour: an impact evaluation must estimate the counterfactual, that is, what would have happened had the project never taken place or what otherwise would have been true (Baker, 2000). Baker also points out that (p. 1):

‘To determine the counterfactual, it is necessary to net out the effect of the interventions from other factors – a somewhat complex task. This is accomplished through the use of comparison or control groups (those who do not participate in a programme or receive benefits), which are subsequently compared with the

treatment group (individuals who do receive the intervention). Control groups are selected randomly from the same population as the programme participants, whereas the comparison group is more simply the group that does not receive the programme under investigation. Both the comparison and control groups should resemble the treatment group in every way, the only difference between groups being programme participation.’

The advantage of a quantitative analysis over qualitative research such as implemented in the Russian project is that the evaluator may explicitly take into account exogenous variables that may interfere in the process of linking the treatment (job or management training) and the outcomes of the programme. The problem is that exogenous factors are not explicitly accounted for in the Russian project; furthermore, selectivity effects at programme entry are not purged from the outcomes. These facts may have consequences for the significance and interpretation of the outcomes if the treated elements are selected on the basis of unobserved characteristics that may affect both the probability of entering the programme and the outcomes of the programme. More specifically, what the evaluator would like to know is not only the answer to the question ‘how did trained managers behave after attending the training programme?’ but also, and more interestingly, ‘how would the same managers have behaved had they not been involved in the training programme?’. This is the counterfactual we may be interested in. We are not sure whether the Russian project can answer the second question despite the thorough and documented definition of the concepts and methods of the evaluation (a ‘holistic and interpretational approach’, as defined in the final report).

Selectivity effects were probably at work in the Russian project as the authors of the final report did not make it very clear what the selection criteria of firms involved in the case studies were. The criteria for selecting the managers seemed to even pose problems for the beneficiaries of the

programme themselves. This highlights how important selection is for assessing the potential outcomes of the programmes – even if one uses a qualitative approach – as selectivity issues may also affect the perception that the beneficiaries have of the efficiency of the programme.

During the programmes, cultural and economic environment, society and available information and technology may have evolved and caused an evolution in a manager's mind, independently of the courses undertaken.

As for the Moroccan project, the methodology implemented partially responds to this difficulty given that the impact evaluation was made *ex post* and the fact that it built up a control group, made up of companies with the same characteristics in terms of size, financial results and sector. Nevertheless, it did not make use of randomised evaluation techniques nor did it make use of *ex post* common approaches, such as matching estimators.

Initial descriptive statistics show that firms providing training differ from non-providing firms regarding their more frequent use of modern technology (computerised equipment) and their use of organisational changes (introduction of new technological products, use of a quality approach). Training may then have a positive effect on outcomes for a firm simply because global innovative processes are at work. The evaluators in the Moroccan project should have mentioned these principles in order to avoid presenting training as a systematic efficient scheme for increasing sales or production.

4.2.2 LIMITATIONS TO THE QUALITATIVE APPROACH

The major limitation of the Russian approach is linked to the chosen methodology, as the scope of the impact cannot be estimated with accuracy. Some examples can be given. In the report on the Russian project it is stated that 'career improvement both inside the company, either by promotion to a higher position or

by acquiring greater responsibilities within the same position, or through external mobility, seemed to be some of the most significant advantages offered by training' (p. 31). Four citations are given for illustrating such a statement, but the total number or the proportion of cases cannot be provided. The same comment can be made in relation to other statements such as 'all the people with a managerial position [...] believe in the relevance of training' or 'the top management is also profoundly convinced [...]' or again 'sometimes the outcomes are poor or non-existent' (p. 38).

In the report it is also stated that 'people confirmed that their financial, economic and sales performance had improved [after the programme]' (p. 45), adding that although they were not certain that this was due to training they were inclined to think that it was. This highlights the importance of assessing causality in a qualitative approach.

The report rightly proposes to evaluate the unintended effects of the training programmes. For instance, from the individual point of view, changing the life of people is presented as the main unintended effect. From the organisational perspective, the principal unintended effect was a high rate of external mobility. Certain questions remain unanswered, however. How many people considered their life had changed? What exactly was the rate of external mobility of trained people compared to that of a manager in their company? How often has the training arrangements become a sort of business incubator? Does this refer to specific situations or can it be considered as a rule?

4.2.3 LIMITATIONS TO THE QUANTITATIVE APPROACH

The approach developed in Morocco is obviously limited by a methodology based on the analysis of existing databases or information collected through questionnaires. The strategy of actors is described only through the dimensions considered *a priori* in these questionnaires, so no unintended effect can be taken into account.

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Some caution should be exercised when differences between training and non-training companies are considered in regard to competition through the quality of products or the introduction of new products or processes.

4.2.4 THE RELEVANCE OF SPILLOVER EFFECTS

The potential learning spillovers induced by the implementation of training programmes in firms are not tackled¹³. This is mainly due to methodological issues, in particular the difficulty in assessing the existence of within-firm human capital externalities in programme evaluations in general. This issue can be summarised in the following way. The endogenous growth literature emphasises the presence of technological or social externalities that generate higher returns to traditional factors, notably labour. It is likely that some of these externalities occur in the form of general knowledge that may be diffused in the economy. It is also possible that many externalities take place in the firm where the worker operates since that is where technological processes are most frequently exhibited and transmitted. In particular, many tasks require team work, with skills diffused across the workplace (Battu et al., 2003). For instance, some worker training may take place through imitation, i.e. through the observation of skilled workers executing a given task. Worker interactions are likely to enhance skills, and knowledge diffusion may be higher in a work environment that is well endowed with human capital. Thus, a worker with a given qualification may be more productive and thus better paid in a firm that is human-capital-intensive.

It is important to consider the two sources of human capital simultaneously because education policies and policies promoting vocational training may affect the worker's and the firm's human capital environment differently. In particular, not accounting for knowledge externalities within firms may lead to an underestimation of the benefits of such policies.

The report on training actions in Russia takes spillovers into account when it states that 'individuals seem to act like a stone thrown into a pond: they produce small but positive effects on everyone who is working around them. Therefore, through them, training indirectly affects a large part of the organisation'. Nevertheless, it can be asked to what extent such a generalisation can be made when nothing is said about the number of cases concerned.

4.2.5 LIMITATIONS DUE TO A SHORT OBSERVATION PERIOD

Both projects faced difficulties regarding the time lag between implementation of the training programmes and their observable effects on the firm's or organisation's outcomes. This is the case for firms in Morocco, where worker training may take several years to be translated into competitiveness, but also for the Russian project, in which 'regarding information technology, some effects are already visible and some others will probably be developed in the near future' (p. 41).

In the Moroccan project, results and conclusions should be viewed with more caution due to data limitations, in particular in regard to the short period over which training impact is measured.

4.2.6 LIMITATIONS DUE TO THE LEVEL OF ANALYSIS

While the Russian project paid attention to the individual level (as distinct from the organisational level), the Moroccan project failed to achieve an individual approach at the worker level. In fact, the evaluation conducted in Morocco did not implement any large survey with employees, as requested in the terms of reference.

Although participants in the training projects in Russia did not perceive any difference between the different projects, it could have been relevant to get more insight into each project and into training institutions in order to provide some guidance for other similar programmes.

¹³ That said, in the final report on the Russian project, mention is made of a learning organisation.

4.3 BALANCING QUALITATIVE AND QUANTITATIVE APPROACHES

Implementing both approaches in order to fully comprehend the complexity of the mechanisms linking firm performance and training policies may be viewed as complementary in terms of a comprehensive impact evaluation of training. In fact, in the case of projects with a training component, it is not just a matter of quantifiable change but also one of qualitative change, and other more subtle changes in the attitudes and approaches of the trainees. In this respect, the approaches of the two projects appear to be complementary. However, as pointed out by Baker (2000, p. 7):

‘[Q]ualitative methods and particularly participant observation can provide insight into the ways in which households and local communities perceive a project and how they are affected by it. Because measuring the counterfactual is at the core of impact analysis techniques, qualitative designs have generally been used in conjunction with other evaluation techniques. The qualitative approach uses relatively open-ended methods during design, collection of data, and analysis. Qualitative data can also be quantified.’

This indicates the complementarity between qualitative and quantitative approaches.

5. CONCLUSIONS

5

The main thrust of this report has been to take stock of both qualitative and quantitative impact evaluations of major continuing training policies and programmes in two different partner countries – Morocco and Russia. This broadly-based evaluative overview is relatively rare; furthermore, the action-research method adopted is valuable because it provides proof that such analytical work is feasible in partner country contexts and because the results can make a contribution to decision making.

In this last section, rather than focus on the results of the evaluations we focus on the characteristics of the evaluations and the organisational conditions that existed and allowed the impact studies to be successfully implemented, and we attempt to sketch a meta-evaluation of both projects (Stufflebeam et al., 2000). Demailly (2006) proposes several analytical concepts for exploring the social effectiveness of evaluation, including scientific relevance, strategic effectiveness, credibility, formative effectiveness, and changing effectiveness. Considering some

of these concepts, we finish by proposing a new perspective for the design and implementation of impact studies that is broadly framed in what we call policy learning and which deepens the discussions of the fundamental question of whether (and how) evaluation studies are used by organisations (Leeuw et al., 2000).

5.1 THE QUANTITATIVE/ QUALITATIVE DILEMMA

The core of this report is a description of two case studies that apply a quantitative or a qualitative evaluation model. We consider them to be models in the sense that each one is characterised by a clear conceptual framework and structure of evaluation work while at the same time taking into account the specificities of the national and programme contexts. Section 4 above presented the merits and limitations of these approaches.

It is important to emphasise that the two impact assessment models should not be considered as two mutually exclusive options. While they may differ in important

aspects such as in the treatment of objectives, including expected and unexpected effects (Russia), and the use of experimental controls to measure the effect of an instrument (Morocco), they also overlap. A clear example of overlap is the objective of having inputs to policy decisions. The practical implication of the concept of overlapping models is that users may combine elements from different models as they design a particular evaluation (Stufflebeam et al., 2000). This is the case with the Russian project as described by the Russians authorities in the foreword.

The solicitation of views and opinions of individuals (Russia) was shown to be highly instructive and critical in the evaluation of the Russian programme. It seems that the kinds of information obtained from this type of evaluation can complement the more quantitative evaluations (cf. the Russian foreword) by making it more comprehensive.

5.2 THE ACHILLES' HEEL OF IMPACT STUDIES

Equally important, this report discussed a number of issues that are by and large overlooked in evaluation publications. First, as mentioned in the Moroccan foreword, special attention should be given to the organisation arrangements for the impact study (organisation chosen to conduct the study, expertise of international and local consultants, timeframe, cost, etc.). Secondly, both studies, but Morocco in particular (see Section 3 above), suffered from problems of coordination between the many different sources of information and from bureaucratic problems of identifying, formatting, transmitting and processing data and information. In fact, impact studies involve the collection of a sizable body of information and both projects show that the availability and the quality of information is the Achilles' heel of impact studies. Thus, considerable attention should be given to the procedures for identifying and gathering such information. To ensure that cooperation is more than episodic, a sustained commitment to producing coherent and useful information

and working with the producers and users of information is imperative.

A final question pertains to the way results are presented. Dissemination seminars held in both countries and also participated in by donor communities showed that evaluators need to adapt their evaluative discourse to the target audiences and that overly technical presentations may lead to confusion and misunderstanding.

5.3 POLICY LEARNING-FOCUSED EVALUATION

The emphasis of the two models on policy implications coincides with a shift in focus in policy debate in the human resources development sector. The shift referred to is from input alone to policy outcomes (ETF, 2003; Grootings & Nielsen, 2006; Mingat et al., 2003). This change also coincides with an increasing emphasis on the need for evidence-based policy making (OECD, 2007), which supports the attempt to ground policy making in more reliable knowledge of what works (Sanderson, 2002). Finally, it is also linked with the need for effective governance informed by policy and programme evaluation. How are evaluation in general and impact assessment in particular used? And how can evaluation be conducted in ways that lead to use? These are questions that partner countries should address, not just in general, but within the particular framework of learning-focused evaluation.

Learning-focused evaluation begins with the premise that evaluations should be judged by the new knowledge they bring to systems and its actual use by different stakeholders. As Patton rightly puts it (2000, p. 427): 'In any evaluation there are many potential stakeholders and an array of possible uses.' The guiding principle of ETF intervention should be the facilitation of a policy learning approach (Grootings, 2004; Grootings & Nielsen, 2006). As Grootings & Nielsen (2005, p. 155) define it: 'The basic assumption underlying the concept of policy learning is not so much that policies can be learned but that the policies themselves are learned policies.' Additional

questions to be considered are: How are the various stakeholders relating to the evaluation process? What are the main conclusions and lessons they are making (cf. the forewords)?

Learning from evaluations is not simply the transfer of expert knowledge or behaviour from one person to another but rather the acquisition of understanding and competence through participation in evaluation projects that should be then considered as learning processes. This approach requires an intensive focus on how to organise collaborative and shared experiences among different stakeholders, including policymakers, social partners, steering committee and local consultants. This is especially important when the aim is to develop national capacities in leading this type of evaluation. The Morocco experience shows that ETF commitment to enhancing use has been reflected in the identification of user training needs, the design of training in evaluation processes and the uses of information. Training Moroccan stakeholders in evaluation methods and processes attends to both short-term needs (understanding the methodology and the results) and long-term needs (developing the capacity of decision-makers so as to contribute to greater use of evaluation over time).

Having pointed to the significant policy learning benefits of an impact study, it is

well to note several caveats. First, the present discussion is tentative, given that the report discusses the findings for only two cases. Furthermore, the learning that occurred is hard to pinpoint at the organisational level and outside the discourse of the ETF counterparts. Even harder is trying to identify the particular decision or policy redirection that can be attributed to the impact study. Policy learning, in the framework of impact studies, cannot be taken for granted. The strength of the impact study framework is that it provides a context by which not just involvement but active engagement of national stakeholders in steering the process and developing their own understanding of policy issues is possible. A last lesson to be drawn from this project is that conducting impact studies is precarious, difficult, costly and time consuming. Thus a strong recommendation is towards stimulating local capacities for carrying out impact studies, as this will help to ensure that evaluations will be useful, feasible and sustainable.

A pilot project starts out by being successful (the Hawthorne effect). A single evaluation of a given kind can reveal promising results. But only the transfer and reproduction of an experience will reinforce its experimental nature. Experience has shown that only a sufficient stock of evaluations will constitute a resource that proves adequate in supporting decisions.

ACRONYMS

ATE	average treatment effect
ATET	average treatment effect on the treated
Céreq	Study and Research Centre on Qualifications (Centre d'études et de recherches sur les qualifications)
CNSS	National Social Security Fund (Caisse nationale de sécurité sociale)
CSF	special training contracts (contrats spéciaux de formation)
CVTS	Continuing Vocational Training Survey
ETF	European Training Foundation
EU	European Union
GIAC	inter-professional aid and advisory groups (groupements interprofessionnels d'aide au conseil)
LATE	local average treatment effect
MICT	Ministry of Industry and Commerce (ministère de l'Industrie, du Commerce et des nouvelles Technologies)
OFPPT	Office of Vocational Training and Labour Promotion (Office de la formation professionnelle et de la promotion du travail)
Tacis	technical assistance to the Commonwealth of Independent States

BIBLIOGRAPHY

- Abowd, J.M. and Kramarz, F., 'Human Capital and Worker Productivity: Direct Evidence from Linked Employer-Employee Data', 2006, see www.crest.fr/ckfinder/userfiles/files/Pageperso/kramarz/abowdkramarzpaper20060212.pdf
- Altonji, J.G. and Spletzer, J.R., 'Worker characteristics, job characteristics, and the receipt of on-the-job training', *Industrial and Labor Relations Review*, 45(1), 1991, pp. 58-79.
- Bacharach, S.B., Gagliardi, P. and Mundell, B. (eds), *Studies of organizations in the European tradition*, JAI Press, Greenwich, CT, 1995.
- Baker, J.L., *Evaluating the impact of development projects on poverty: a handbook for practitioners*, Directions in development, World Bank, Washington, DC, 2000.
- Barron, J.M., Berger, M.C. and Black, D.A., 'Do workers pay for on-the-job training?', *Journal of Human Resources Education*, 34(2), 1999, pp. 235-52.
- Barron, J.M., Black, D.A. and Loewenstein, M.A., 'Job matching and on-the-job training', *Journal of Labor Economics*, 7(1), 1989, pp. 1-19.
- Barron, J.M., Black, D.A. and Loewenstein, M.A., 'Gender differences in training, capital and wages', *The Journal of Human Resources*, 28(2), University of Wisconsin Press, 1993, pp. 343-64.
- Bartel, A.P., 'Training, wage growth, and job performance: evidence from a company database', *Journal of Labor Economics*, 13(3), 1995, pp. 401-25.
- Battu, H., Belfield, C.R. and Sloane, P.J., 'Human capital spillovers within the workplace: evidence for Great Britain', *Oxford Bulletin of Economics and Statistics*, 65(5), Blackwell Publishing, 2003, pp. 575-94.
- Black, S.E. and Lynch, L.M., 'Human-capital investments and productivity', *American Economic Review*, 86(2), 1996, pp. 263-67.
- Brunsson, N., 'Ideas and actions: justification and hypocrisy as alternatives to control', in Bacharach, S.B., Gagliardi, P. and Mundell, B. (eds), *Studies of organizations in the European tradition*, JAI Press, Greenwich, CT, 1995.
- Carriou, Y. and Jeger, F., 'La formation continue dans les entreprises et son retour sur investissement', *Economie et Statistique*, 303(3), 1997, pp. 45-58.
- Cracknell, B., *Evaluating development aid: issues, problems and solutions*, Sage Publications, London, 2000.
- Dearden, L., Reed, H. and Van Reenen, J., 'Who Gains when Workers Train? Training and Corporate Productivity in a Panel of British Industries', CEPR Discussion Papers 2486, Centre for Economic Policy Research, London, 2000.
- De Lorenzo formazione, 'Évaluation de l'impact de la formation continue sur les performances des entreprises marocaines', Final Report, De Lorenzo formazione, 2006.
- Demailly, L., 'Évaluer les évaluations', in Figari, G. and Mottier Lopez, L. (eds), *Recherche sur l'évaluation en éducation*, L'Harmattan, 2006, pp. 203-10.

- Destré, G. and Nordman, C., 'The impacts of informal training on earnings: evidence from French, Moroccan and Tunisian employer-employee matched data', 2002. Published in French in *L'Actualité économique*, 78(2), Montréal, 2002, pp. 179-205.
- Easterby-Smith, M., Thorpe, R. and Lowe, A., *Management research: an introduction*, Sage Publications, London, 1991.
- Edelman, M., *The symbolic uses of politics*, University of Illinois Press, 1964.
- ETF, *Learning Matters: Sharing Experiences from the Past for the Future*, ETF Advisory Forum Conference, 5-7 November 2003, Final Statement, European Training Foundation, Turin, 2003.
- Frazis, H. and Loewenstein, M.A., 'Reexamining the returns to training: functional form, magnitude, and interpretation', BLS Working Papers 325, Bureau of Labor Statistics, 1999.
- Gagliardi, P. and Quaratino, L., *L'impatto della formazione: un approccio etnografico*, Guerini e Associati, Milano, 2000.
- Grootings, P., 'Facilitating policy learning: active learning and the reform of education systems in transition countries', ETF Working Paper, European Training Foundation, Turin, 2004.
- Grootings, P. and Nielsen, S. (eds), *ETF Yearbook 2005 – Teachers and Trainers: Professionals and stakeholders in the reform of vocational education and training*, European Training Foundation, Turin, 2005.
- Grootings, P. and Nielsen, S. (eds), *ETF Yearbook 2006 – Skills Development for Poverty Reduction*, European Training Foundation, Turin, 2006.
- Guba, E. and Lincoln, Y., *Effective evaluation*, Jossey-Bass Publishers, San Francisco, 1981.
- Gurkov, I., 'Mapping HRM in Russia: the results of repeated surveys of CEOs', Paper to be presented at the Chemnitz East Forum on HRM Management, 1997.
- Hausman, J.A. and Taylor, W.E., 'Panel Data and Unobservable Individual Effects', *Econometrica*, 49(6), The Econometric Society, 1981, pp. 1377-98.
- Heckman, J.J., 'Dummy endogenous variables in a simultaneous equation system', *Econometrica*, 46(4), The Econometric Society, 1978, pp. 931-59.
- Heckman, J.J., 'Sample selection bias as a specification error', *Econometrica*, 47(1), The Econometric Society, 1979, pp. 153-62.
- Heckman, J., Ichimura, H., Smith, J. and Todd, P., 'Characterizing selection bias using experimental data', *Econometrica*, 66(5), The Econometric Society, 1998, pp. 1017-98.
- Hotz, V.J., Imbens, G. and Mortimer, J., 'Predicting the efficacy of future training programs using past experiences at other locations', *Journal of Econometrics*, 125, 2005, pp. 241-70.
- ISTUD, 'Impact assessment of training for company development in the Russian Federation', Final Report, Istituto Studi Direzionali, 2006.
- Kets de Vries, M., Shekshnia, S., Korotov, K. and Florent-Treacy, E., *The new Russian business leaders*, Edward Elgar Publishing, Northampton, MA, 2004.
- Latour, B., 'The powers of association', in Law, J. (ed.), *Power, action and belief: a new sociology of knowledge?*, Routledge & Kegan Paul, London, 1986, pp 264-80.
- Lave, J. and Wenger, E., *Situated learning: legitimate peripheral participation*, Cambridge University Press, Cambridge, 1991.
- Leeuw, F.L., Rist, R.C. and Sonnichsen, R.C. (eds), *Can Governments Learn? Comparative Perspectives on Evaluation and Organisational Learning*, Transaction Publishers, 2000.

- Leuven, E. and Oosterbeek, H., 'A new approach to estimate the wage returns to work-related training', IZA Discussion Papers, 526, Institute for the Study of Labor, 2002.
- Lynch, L.M., 'Private-sector training and the earnings of young workers', *American Economic Review*, 82(1), 1992, pp. 299-312.
- Mincer, J., *Schooling, experience and earnings*, Columbia University Press, New York, 1974.
- Mincer, J. and Jovanovic, B., 'Labor mobility and wages', in Rosen, S. (ed.), *Studies in labor markets*, University of Chicago Press, Chicago, 1981, pp. 21-64.
- Mingat, A., Tan, J.-P. and Sosale, S., *Tools for Education Policy Analysis*, World Bank, Washington, DC, 2003.
- Mundlak, Y., 'On the Pooling of Time Series and Cross Section Data', *Econometrica*, 46(1), The Econometric Society, 1978, pp. 69-85.
- Nordman, C., 'La formation sur le tas par diffusion du savoir: estimations sur données marocaines et mauriciennes', *Revue d'Économie du Développement*, 4, 2000, pp. 79-103.
- Nordman, C., 'Formation du capital humain et diffusion du savoir dans l'entreprise: analyse économétrique sur données appariées marocaines et tunisiennes', Thèse de doctorat en sciences économiques, Université de Paris I Panthéon-Sorbonne, 2002.
- OECD, *Evidence in Education: Linking Research and Policy*, OECD-CERI, Paris, 2007.
- OECD/PUMA, 'Guide des meilleures pratiques à suivre pour l'évaluation', PUMA Note de synthèse No 5, Paris, 1998, see <http://portals.wi.wur.nl/files/docs/ppmefr/OECDsuivi%C3%A9valuation.pdf>
- Parent, D., 'Wages and mobility: the impact of employer-provided training', *Journal of Labor Economics*, 17(2), 1999, pp. 298-317.
- Patton, M.Q., 'Utilization-Focused Evaluation', in Stufflebeam, D.L., Madaus, G.F. and Kellaghan, T. (eds), *Evaluation Models: Viewpoints on Educational and Human Services Evaluation*, Kluwer Academic Publishers, 2000, pp. 425-38.
- Perret, B., *L'évaluation des politiques publiques*, La Découverte, Paris, 2001.
- Popham, W.J., 'Objectives and instruction', in Stake, R.E. (ed.), *Instructional objectives*, Rand McNally, Chicago, 1969, pp. 31-64.
- Puhani, P.A., 'The Heckman correction for sample selection and its critique', *Journal of Economic Surveys*, 14(1), Blackwell Publishing, 2000, pp. 53-68.
- Sanderson, I., 'Making Sense of "What Works": Evidence-Based Policy Making as Instrumental Rationality?', *Public Policy and Administration*, 17(3), 2002, pp. 61-75.
- Scriven, M., 'The Methodology of Evaluation', in Tyler, R.W., Gagné, R.M. and Scriven, M. (eds), *Perspectives of Curriculum Evaluation*, Rand McNally, Chicago, 1967, pp. 39-83.
- Stufflebeam, D.L., Madaus, G.F. and Kellaghan, T. (eds), *Evaluation Models: Viewpoints on Educational and Human Services Evaluation*, second edition, Kluwer Academic Publishers, 2000.
- Tan, H., 'Do training levies work? Malaysia's HRDF and its effects on training and firm-level productivity', Working Paper, World Bank, 2001.
- Tan, H. and Lopez-Acevedo, G., 'Mexico: In-firm training for the knowledge economy', World Bank Policy Research Working Paper Series, 2957, World Bank, Washington, DC, 2003.
- Taylor, F.W., *The Principles of Scientific Management*, Harper Bros, New York, 1911.
- Turner, B.A., 'Real men don't need soft data', Working Paper, 1988.
- Turner, B.A., 'Rethinking organisations: Organisational learning in the nineties', Paper presented to the EFMD Research Conference, Palermo, 1991.
- Veum, J.R., 'Sources of training and their impact on wages', *Industrial and Labor Relations Review*, 48(4), 1995, pp. 812-26.

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