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EDUCATION AND TRAINING FOR A NEW SOCIETY:
THE CASE OF ROMANIA

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Paris 1992

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EUROPEAN ECONOMIES IN TRANSITION

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EMPLOYMENT, LABOUR AND
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This document is one of a series of reports prepared for the Conference on Education and the Economy in Central and Eastern Europe which has been organised by the Directorate for Education, Employment, Labour and Social Affairs (DEELSA) and the Centre for Educational Research and Innovation (CERI) within the framework of the programme of the Centre for Co-operation with European Economies in Transition (CCEET).

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EDUCATION AND TRAINING FOR A NEW SOCIETY:
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1. The relationship between education and economy-conditioning factors in Romania

1. The relationship between education and the economy is a reciprocal one: on the one hand, changes in economic policy have implications for education and, more generally, upon human resource development; on the other hand, education plays an important role in promoting economic change. The relationship between the two is mediated by the specific political, social and cultural context.

2. In order to understand the educational effects of Romania's transition towards a market economy and a democratic society, it is useful to start with a brief look at the economic and educational sectors as well as the context in which change is taking place.

3. In the transition to a market mechanism, the Romanian economy is undergoing a rapid reform characterised by great complexity and uncertainty. In the absence of theoretical guidelines, a pragmatic approach is being followed. Experiments are under way, changes are being attempted, based more on trial and error than on a given strategy. This approach can be partially explained by the fact that, before the revolutionary events of December 1989, Romania had a strong centrally planned economy, with certain peculiarities.

4. One of them was the persistence of the dogmatic, rigid framework imposed during the Stalinist era. In this situation the private sector almost ceased to exist, heavy industry was overdeveloped and other economic sectors were underdeveloped. There was a very high ratio between accumulation and consumption, together with overcentralisation, etc.

5. Another feature was that, during the last ten years, the policy of integral payment of the foreign debt created various hardships. This led to severe impoverishment of the population, the absence of most food articles from the market, technological and organisational backwardness, autarkic economic development, isolation from the outside world and reduced participation in international economic competition.

6. Consequently, the Romanian transition from a centrally planned to a market economy has to be combined with overcoming the backwardness inherited from the previous regime. This process requires a major structural change of the economy, technological modernisation and an opening-up to international competition. All these steps had already been initiated before 1989 by other central and eastern European countries. The obvious disadvantage of the lack of information, expertise and, most

importantly, experience is partially offset by the possibility of learning from other people's mistakes.

7. The Romanian educational system was designed for a totalitarian, centrally planned society and functioned accordingly. In addition to the problems due to this communist heritage, the system is suffering from chronic underfunding as well as a lengthy isolation from the outside world. However, several features of the educational system may be qualified as opportunities for future developments: the existence of a well-organised, well-functioning system; good utilisation of buildings and equipment; very high enrolment rates in pre-university schools; a comparatively low student/teacher ratio; a high value attached to learning.

8. Due to the existing situation, Romanian education has to undergo a double reform: on the one hand, a transformation process from a system designed and used by a totalitarian power in the frame of a centrally planned economy, to a system appropriate for a democratic society with a market economy; on the other hand, a renewal process, artificially blocked for years in Romania but natural in any evolving society.

9. The two processes are rather distinct, the first dealing with the complete denial of certain features -- the "pendulum change" of Ferguson's typology (1980), the second being a gradual, integrative modification -- a combination of the "incremental" and of the "paradigm" change in the same typology. The impact of economic change upon education and vice-versa is shaped by the specific context inherited after 45 years of communist rule and 25 years of Ceausescu's dictatorship.

10. In order to control everything and to impose their own ways, communist regimes destroyed all the structures of civil society. This process was reinforced by terror and the intensive monitoring of the "Securitate" with its gigantic network of informers. In the flattened society which resulted, citizens lacked any political, civic or economic culture. A general egalitarian attitude was endorsed, as well as lack of initiative, fear of risk-taking and lack of managerial qualities. The only structures which survived were families and, to a certain extent, communities based on religious or land ties.

11. This uniform society is now being atomised. In this context, the fact that only family and community structures survived may prove to be an obstacle to the present transition to a market economy. The problem originates in the difference between the attitudes characteristic of *Gesellschaft* and those engendered by *Gemeinschaft* (Comisso, 1991). Modern market economies are based on the existence of free, independent citizens belonging to *Gesellschaft*. The communitarian values of people belonging to *Gemeinschaft* do not satisfy these demands. Moreover, family and clan ties tend to favour the development of connections, hostile towards other structures, based on shared interests and ideas (Sandi, 1992).

12. In conclusion, for Romania the successful transition to a market economy is tightly linked to the transition to a democratic society. In these transition processes, Romania is faced not only with the reluctance to change manifested by the remnants of the former omnipotent power, but also with a significant egalitarian legacy in institutions, society and

people. In this situation, populist and corporatist interests can easily be manipulated, especially when the inequities of the first stages of capital accumulation are felt.

2. An educational system in transition

13. The Romanian educational system is going through several stages of change. As a direct result of the revolutionary events of 1989, urgent corrective measures have been taken, aimed at eliminating ideology and dogmatism from curricula, allowing for younger teachers to change jobs and for pupils and students to participate in decision-making. In anticipation of a new education law, the educational system is functioning according to annually adopted governmental regulations.

2.1 The structure of the system

14. The structure of the educational system is given in the Appendix to this paper. Pre-primary schooling is provided for three- to six/seven-year olds. Education is free and compulsory for primary school (grades I-IV) and the gymnasium (currently grades V-VIII). At the secondary level the present system is segmented and highly specialised. The options are:

- academic or technical secondary school (grades IX-XII);
- secondary vocational school (grades I-III/IV));
- alternative programmes ("complementary" or apprenticeship).

15. Post-secondary education and training includes:

- higher education: colleges (two to three years) or institutes (four to seven years);
- post-secondary education (two to three years);
- foreman training.

16. Post-graduate education includes:

- Ph.D. programmes;
- programmes for upgrading skills.

17. Other categories of school exist for special education. Several projects for a new education law have been under discussion. The main issues being debated are:

- a) the extension of compulsory schooling from eight to nine years (four grades of primary school and five grades of gymnasium);
- b) restructuring of vocational and technical education in order to avoid over-specialisation at too early an age;
- c) the establishment of new forms of post-graduate education;
- d) the establishment of regulations governing the organisation and functioning of private education.

18. The project for the new law also comprises other topics, aimed at creating a broad framework for innovating education.

2.2 Enrolments

19. As already mentioned, one of the qualities of Romanian education is the high rate of enrolment in primary and lower secondary (gymnasium) schools. Places for secondary schools (lyceums) are decided at central levels by the Ministry of Education and Science (MES) for each type of school. Efforts are being made to modify the abnormal inherited situation in which 93 per cent of secondary schools were technical and only 7 per cent academic.

20. The problem today is to avoid early over-specialisation. Attempts are therefore being made to reduce the number of specialisations and to achieve a better balance between general education and vocational programmes.

21. Enrolments in higher education were extremely low before 1989, owing to the policy of restricting the access of younger people to this education level (686 students per 100,000 inhabitants in 1987). During the last two years, the number of places in higher education institutes has increased but the total number is still low, owing to the limited resources available. The inherited structure of higher education was also inadequate, with 68 per cent of students studying in technical fields, while only 9.41 per cent studied economics and business management and 1.43 per cent read law.

2.3 Organisation and management

22. Responsible for the organisation and management of the educational system at the pre-university level are:

- a) the Ministry of Education and Science (MES);
- b) the District School Inspectorates and the Houses of Teachers;
- c) the educational units.

23. At present the system is highly centralised, most responsibilities being held by the MES. Its decisions concern, among others: the financing of all schools and public higher education institutes from the State-allocated education budget, the establishment of schools, curricula, the professions and specialisations to be taught, admission and examination rules.

24. The District School Inspectorates are responsible for: ensuring that the MES decisions are followed, monitoring and controlling the maintenance of standards, hiring education staff. The Houses of Teachers are entrusted with the in-service training of teachers. Schools are managed by a director, assistant director(s) and a pedagogical council. Owing to over-centralisation, responsibilities at the level of schools are very limited.

25. Higher education institutions have more autonomy, although the MES retains many prerogatives. Chief executives, who are relatively

independent of the ministry, are elected by faculty members by secret ballot. Universities have autonomy in appointing and promoting faculty members as well as in curriculum design and the development of R&D projects.

26. Students are also allowed to have representatives in the University Senate, with veto power over decisions concerning teaching and learning. The new education law provides for a better decentralisation of management by the turning of more responsibility over to various councils. However, financial autonomy is still restricted by the fact that the main financial source is the national budget. More financial autonomy is given to higher education institutes, which can charge tuition fees.

2.4. Financing

27. All pre-university education is financed from the State budget by the MES. Allocation is made according to rigid norms, on a non-fungible line item basis. The district inspectorates are responsible for transferring funds to schools. There is no incentive for improving a school's internal efficiency, owing to the lack of financial decision-making autonomy at the local level. Local authorities have practically no sources for raising funds, as long as economic activity is still concentrated in big, State-owned enterprises. The educational system was, and is, severely underfunded. Spending on education in 1990 was only 3 per cent of GDP, out of which 66 per cent in higher education and 87 per cent in primary and lower secondary education went on salaries for teachers and staff.

28. To ease the difficulties of the transition period, the State is allocating financial aid to students. Grants are decided only according to a student's achievements and irrespective of the parents' economic situation, except in cases of serious hardship. Newly established private education units are organised, for the moment, on a commercial basis. Their funds come mainly from tuition fees paid by students, with a small portion covered by private donations.

2.5. Teacher training

29. Pre-primary and primary school teachers are trained in pedagogical lyceums (specialised secondary schools). The new law asks for this type of teacher to be trained in higher education colleges (short-term higher education institutions).

30. All gymnasium and secondary school teachers are trained in higher education institutes (universities), in the faculty corresponding to their disciplinary specialisation. Universities provide pedagogy and psychology programmes.

31. Pre-university teachers have to undergo, after their first three years of teaching, an examination qualifying them for the profession. Further career advancement depends on their passing further examinations. In-service training is provided both by universities (for career advancement) and the recently re-opened Houses of Teachers.

2.6. Curriculum, evaluation, admissions

32. Curricula for all categories of pre-university schools are provided, together with all textbooks, by the MES. Moves are being made to update and convert vocation-specific curricula to more broadly oriented programmes. Evaluation techniques are rather basic, with little constructive content and no national tests being applied.

33. In order to attend secondary schools, students are required to take entrance exams. The same applies to higher education. Changes are under way, however: first, these examinations are to be made a test for higher cognitive skills; second, a change in the nature of examinations is envisaged, making them standard rather than selection-oriented.

3. Main problems and priorities in economic policy and their implications for human resource development

3.1. The economic reform

34. Faced with the task of changing Romanian society from a totalitarian to a democratic, market-oriented one, the government has tried to define its economic and social policy for the transition period.

35. In the summer of 1990, the Council for Reform, Public Relations and Information published the first draft of the government's programme of economic and social reform. Briefly, this draft stated the main directions and sequences of action for the major social and economic policies as follows:

- a) dismantling of the command system
- b) restructuring of the economy
- c) price and tariff reform
- d) financial/fiscal reform
- e) banking system reform
- f) monetary/currency reform
- g) agricultural reform
- h) setting up of institutions that support the implementation of economic reform
- i) privatisation and promotion of private and mixed enterprises
- j) economic and social protection of the population during the transition period
- k) encouragement of attitudes in education and culture suited to a market economy
- l) social reform

36. Until now, the government has only partially achieved these objectives. Its main aims for the short term are: to ensure economic stability; to curb inflationary pressure; to restore general market equilibrium and to stimulate economic growth through market mechanisms. To

achieve its objectives, the government tried to develop fast a new legal regulatory framework. As a consequence, in a very short space of time a comprehensive set of laws was passed, defining the new economic environment.

37. During the preparation of legislation, however, it sometimes appears that quality and other ingredients have been sacrificed to speed. Important elements may be left out and as a result inconsistencies have developed among proposed laws in related areas. Such risks can be minimised by a selective and timely infusion of technical assistance, placed either at the centre or within the agencies preparing the legislation. Economic policy-makers should take into account national economic, social, political and cultural characteristics. These need to be borne in mind when reviewing the challenges facing the government in: managing the reform process; reforming the enterprise environment; implementing sectoral adjustments.

3.2. Management of the reform process

38. Coherence and consistency are required for: designing the conceptual framework of the reforms; the selection of options and the assessment of implications; the ordering of policies and actions. The practical development of the reform programme is severely affected by existing constraints, such as:

- a) a shortage of legal, economic and managerial skills;
- b) scarce information;
- c) lack of co-ordination between formal and informal channels of communication;
- d) lack of economic education among the majority of the population.

39. These constraints are due both to the legacy of the past and to the rapid transformations which have altered the functional responsibilities of ministries and shifted the loci of strategic thinking and decision-making. They are also due to attitudes and behavioural practices which cannot be changed easily or quickly. Certain institutions of the executive, charged with implementing the reform, elude governmental control; consequently the rhythm, amplitude and actual implementation of reforms does not always correspond to the initial programme. One important problem faced by Romania, with direct implications for human resource development, is the lack of an efficient and competition-oriented organisational and managerial culture.

3.3. Reforming the enterprise environment, market institutions and practices

40. The four policy components are: privatisation, competition policies, restructuring enterprises and labour mobility.

41. A broad privatisation programme is envisaged. The chosen policy of guided partial privatisation, which was endorsed by legislation, states that 30 per cent of the commercial enterprise patrimony will be distributed

free of charge to citizens over the age of 18 through the newly established National Privatisation Agency (NPA). For this the spread of popular education concerning private ownership will be paramount. The co-ordination and implementation of this process requires institutional capacity as well as trained staff capable of developing feasibility studies, evaluating alternatives and managing change.

42. Neglected until now, the problem of small and medium-sized enterprise development is gaining more attention, since this could be of strategic importance in achieving as painless a transition as possible. Romania is one of the former socialist countries with the least developed SME sector, an extremely large and concentrated manufacturing sector, and seriously lacking in an entrepreneurial climate.

43. The working hypothesis is that the transition to a market economy will cause a rapid decline in employment and that new employment and an increase in value added will occur primarily in the non-manufacturing sector and especially in small and medium-sized enterprises. The government has therefore recently stressed the need for a comprehensive strategy in developing this sector. Such a strategy for SME and entrepreneurship promotion in Romania would require, inter alia, programmes and activities in the following directions:

- development of a positive climate for private business and entrepreneurship;
- development of curricula supporting entrepreneurship and self-employment throughout the educational system;
- development of service support systems for SMEs (legal counselling, tax advice, management development, accounting, computer support, etc.);
- development of entrepreneurial behaviour in existing enterprises through entrepreneurship programmes;
- development of industrial parks, technology centres and incubators;
- vocational training for SMEs;
- training of the unemployed for self-employment;
- transfer of technology for SMEs;
- development of financial institutions with specific skills to evaluate, finance and monitor SMEs, etc.

44. An important dimension of the productive transformation of the Romanian economy will be the redeployment of labour to the most economically viable uses. Several constraints, however, exist:

- An enterprise has the right to increase wages (supplementary allowance) on the basis of continuity in the same job; in addition, there is an insufficient wage differentiation to encourage mobility.
- Housing is in short supply, impeding the geographical mobility of the labour force.
- Worker retraining schemes need further development.

3.4. Sectoral adjustments

45. The main sectors considered for adjustments are: the financial sector, energy, industry, agriculture and the social sector (social protection, population and health, education and training).

46. Skill development will be a key ingredient in building a modern financial system. The development of the market economy will require sophisticated banking skills such as: foreign exchange dealing; credit assessment; customer service and marketing; modern bank administration, etc.

47. In the industrial adjustment of Romania's large and concentrated manufacturing sector, the specific situation to be taken into account includes such factors as:

- Industrial enterprises have been so insulated from world competition and technological changes that Romanian technology is obsolete and costly, product designs are out-dated and there are large gaps in new information-based technologies.
- After years of isolation, the quality of management is below international standards; quality control tends to be deficient; skills required for cost minimisation, strategic planning and marketing, and financial management are almost non-existent.
- Research and development expenditure in industry is low and includes design costs. Most R&D, carried out in specialised institutes, is deprived of foreign equipment and know-how and is not oriented towards dynamic innovation.
- Although Romania has a broad base of industrial skills, and its vocational training system imposes early specialisation, many essential specialised skills have not been developed.

48. The key challenges here are:

- a) to upgrade skills so as to modernise industry;
- b) to give adequate incentives for R&D;
- c) to encourage in-firm training as a critical ingredient of modern industrial competitiveness.

49. While the government is implementing its policy of decentralisation and privatisation in agriculture, it also faces the problem of economic growth and productivity and of domestic distribution. In the present resource-constrained environment, high priority should be given to the reorganisation, retraining and re-equipping of the research and farm information services. Meanwhile, the private agriculture sector needs financial encouragement and technological support.

50. The social reform programme is generated by concern for the social impact of overall reform. A number of reasonably good social insurance and assistance programmes (sickness and maternity benefits, pensions, family

allowances and local social assistance programmes) are already in place, as well as legislation on unemployment.

51. The most difficult social problems likely to arise during Romania's transition to a market economy will be unemployment and assuring a minimum living standard at an affordable cost. In February 1991, Parliament approved the establishment of the "Unemployment Insurance Fund" to provide unemployment compensation, labour market services and training for the unemployed. But the legislation contains no provision for adjudication of claims or regarding administration. Ensuring the provision of well-trained, efficient administrative staff and proper institutions is a challenge for the near future.

52. Democracy and the transition to a market economy will generate particular problems for the health system in a country with the health problems and demographic patterns of Romania. Health indicators are for the most part below other countries with similar levels of development (e.g. Chile, Costa Rica). High priority should be assigned to the rehabilitation of the health sector. This will have further implications for human resource development in the field, especially since the isolation of Romania from the outside world and the failure to train in key disciplines (social sciences and management) has compromised the quality of health service delivery. In its programme, the government has listed among priorities for the health sector: improving supplies to primary health care units; improving access to family planning and the quality of the abortion service; improving material and child health care; development of preventive health programmes, including health education, etc.

53. While the initial effort in the training of nurses is impressive and clearly demonstrates a strong commitment to addressing this problem, it is also over-ambitious. Most of the newly established centres are short of materials, equipment and textbooks. Many of the instructors have little familiarity with current nursing curricula in developed countries.

4. Educational policies and programmes consistent with a market economy

54. Major reforms are needed to transform the whole education system from one rigidly planned to respond to the manpower requirements of the productive sector, to one which takes an active role in developing resources for a decentralised market economy.

55. The new growth theory confirms that governments should avoid concentrating exclusively on business cycles. Four factors of production are taken into account in this growth theory: capital, unskilled labour, human capital (measured by years of education, for instance) and ideas (which might be measured by patents).

56. In a similar vein, Daniel Cohen (1992) has estimated feasible long-term growth rates for the reforming economies of central and eastern Europe (where standards of education are comparatively high). Though this may justify more optimism for the future, it should be remembered that human capital and ideas have different meanings in a market economy context.

4.1. Initial and VOTEC education

Sensitivity to economic impact and capacity to generate economic change

57. Initial education and to a certain extent VOTEC education are not themselves directly affected by changes of economic mechanisms. But their possible contribution to furthering economic changes is important in the long term.

Demand for change: problems, progress

58. As there is a limited direct impact of economic change upon initial and VOTEC education, demand for change comes mostly from anticipated situations, obtained via theoretical knowledge as well as from comparative studies. Lack of information and of exposure to other educational systems are therefore major obstacles.

59. After the overthrow of a dictatorship, the need for further changes is felt, but not necessarily of a sort required by modern market economies. Education favouring the development of a different type of personality -- independent, creative, with entrepreneurial skills, willing to assume risks -- is quite unfamiliar to the majority of teachers, who were themselves educated in completely opposite attitudes. Many conservative teachers dream of returning to something which existed "before". They tend to forget that most of what was valuable in those traditions was highly influenced by the foreign models of the time, which in today's fast-moving world have become obsolete.

60. Aside from the inertia of the system, another obstacle is the scarcity of resources available to education. The value placed on performance encouraged by the popularity of academic Olympics further enhances change. Romanian students have already been world champions in mathematics, physics, chemistry and Olympic sports, as well as in international arts competitions. Quality has also been demanded by the high level of difficulty of entrance examinations for lyceums and institutions of higher education.

Initiated or anticipated changes

61. If there are few ways of triggering profound reforms in the existing system of initial and VOTEC education, certain adjustments are nevertheless under way. These include:

-- changes aimed at reducing over-fragmentation and over-specialisation at an early age;

-- curricula changes aimed at offering a more general preparation, adaptable to an unpredictable future;

-- changes for improving the balance between science and the humanities;

-- changes leading to the introduction of new subjects, at present optional, such as psychology, sociology and religion.

62. In order to pursue these changes, curriculum commissions composed of teachers, decision-makers and researchers have been created at the national level for every discipline. A national evaluation commission has also been established, aimed at promoting new assessment modalities.

63. Another major change is reflected in the diversification of the education providers, with the emergence of private as well as alternative education (schools in the Waldorf, Montessori, Frenet tradition).

Future strategies

64. In all the changes concerning initial and VOTEC education, the State has an important role as the main regulating and financing factor. Future strategies should aim at decentralisation, in order to increase responsibilities at lower levels, the quality of education and its relevance to local needs, etc. However, such steps depend upon changes in the general administrative framework, as well as a certain rate of economic growth, which is not as yet predictable.

4.2. Higher education

Sensitivity to economic impact and capacity to generate economic change

65. Higher education institutes are now able to assess more quickly their efficacy, since their students are confronted immediately upon graduation with economic and social reality. Students are no longer automatically assigned to jobs upon graduation, as they were under central planning. They quickly learn whether or not there is any demand for their specialisation and whether their qualifications meet the requirements of the available jobs. During a recession, however, it is a recognised fact - not only in Romania -- that young graduates are the first to suffer from unemployment.

66. This would explain why the higher education sector moved relatively quickly to initiate reform. Another factor may be the pressure exerted by the students themselves who, products of the system, become teachers after graduation and take on the task of accelerating reform in the secondary cycle. Generally speaking, higher education is in the best position to influence economic change in the short term, provided it succeeds in turning out well-trained young people.

Demand for change: problems and progress

67. The transition to a market economy has been sending clear signals to higher education about the outlook for new labour markets. These signals have implied direct as well as indirect demands for change.

68. An urgent direct demand was a quantitative one, i.e. a demand for more places in higher education institutes. Another direct demand was for the introduction of completely new programmes, as well as for dramatically raising the quality of certain existing programmes. Indirectly demanded was a general revision of curricula, necessary in order to ensure the preparation of students for a new type of society and economy.

69. Obstacles in the path of change, in order of seriousness, are of course: lack of resources -- financial, building, equipment and human; the limited number of qualified academics; and the reluctance to change of certain decision-makers. Students are the leading promoters of change; young, radical and more open-minded, they are also more aware of what is needed in the future.

Initiated and anticipated changes

70. In response to the direct, quantitative demand, more than 15 new higher education institutes have been established throughout the country. New faculties were established in fields where higher education did not exist, such as journalism and business management. Despite these efforts, however, public education is unable to meet the existing high demand. As a result, a new actor has appeared -- the private university. This caught decision-makers unprepared; the old education law had no provision allowing for, or regulating, such establishments. Until a new law is passed, therefore, these institutes are functioning as commercial enterprises, with no official means of accreditation. More than 30 private universities exist, thus seriously challenging the State monopoly. They provide education mostly in fields which do not require high investment in equipment. For the moment their activity is purely commercial. With few exceptions (the Ecology University for example), their aim is not to offer an alternative to public education but rather to supplement it, given the existing high demand.

71. Although higher education institutes have been given more autonomy, they are still subject to the numerus clausus principle. Now that the manpower demand approach for strictly planning the number of places for each discipline no longer applies, allocations are decided on a no-change principle. The consequence of this anomaly is a persistence in training for irrelevant or non-existent needs. Changes have, however, been made in this area by reducing the places allocated to certain disciplines and increasing those allocated to others.

72. In the category of indirect, qualitative change the establishment of new programmes is worth noting, the most favoured being: management, marketing, business. Existing programmes were also subject to a qualitative leap, especially those in computer science.

Future strategies

73. An increase in autonomy is one of the main strategies for the future development of higher education institutes. Another major issue concerns research carried out in universities and other institutes. Following the Soviet model, the majority of research activities were developed outside faculties, in special research institutes. The normal strategy of restoring research to higher education encounters difficulties such as: human resource problems, lack of infrastructure, and inertia. For the time being, all scientific and technological activities are stagnating or even declining, since there is no real economic demand on support for R&D.

4.3. Adult education and retraining

Sensitivity to economic impact and capacity to generate economic change

74. The impact of economic change is felt most acutely in the areas of adult education and retraining. Here, the time lag is reduced and even non-existent. Policies cannot always be anticipatory but have to be reactive. Yet the success of a smooth transition to a market economy obviously depends on the capacity of adult retraining programmes to turn out fast enough people equipped with the appropriate skills. Before the 1989 revolution, the system of adult education and training suffered from ideological interference, formalism and bureaucracy. Retraining courses, which became compulsory through various regulations, were formal and meant mostly to provide certificates entitling people to career promotions. There was no real motivation for learning, since competence was not a necessary criterion for employment. Labour mobility was discouraged, with the exception of the rural-urban exodus of the 1960s due to the forced industrialisation process.

Demand for change: problems and progress

75. During the first stages of the transition period, demand for adult education and retraining is above all due to the new phenomenon of unemployment. Another novelty is the significant individual demand for education and training in specific fields, considered to be important for future career development. Private firms were quick to respond to such demands in the fields of computers, foreign languages and secretarial work.

76. Despite the appearance on the work scene of new occupations or of jobs with a different content and function, and the modernisation process in general, a high demand for adult training and retraining has not yet been apparent. In response to existing demand, quick, improvised solutions are adopted, such as self-training, on-the-job training, short in-service programmes or short visits abroad.

77. Since the transition process relies heavily on the State as an agent of change, great importance should be attached to the training of people in policy-making and decision-making positions. Public servants are known to be among the most conservative of people. Usually middle-aged, selected on criteria no longer valid, they are reluctant to accept innovation and change because they usually lack the appropriate knowledge and information.

78. It is noticeable that no significant demand for training or retraining is made by enterprises. Many of them are now in economic difficulty, facing great uncertainty and not knowing what the future holds. As the economy has not yet undergone massive restructuring, and the "big" privatisation has not yet taken place, this lack of interest in training programmes is understandable, however.

79. Until the economy generates a real demand for training and retraining, existing demand will be scattered, or artificially maintained by interested parties. Other factors further inhibiting the demand for training and retraining include the lack of political and legal incentives for continuing education and of a new, democratic law for professional development, as well as of any new framework for developing adult educational activities. However, a major problem is the trainers' lack of

knowledge and skills and their diminished capacity to respond to real needs. Training the trainers therefore becomes one of the priorities of adult education.

80. The majority of adults also need to undergo re-education programmes, since the population was groomed for a now obsolete form of working life and is ill prepared for active life in a democratic society. Further education in areas such as citizenship and active participation in community life are indirectly required for future economic changes and consequently will have a bearing on those changes.

Initiated or anticipated changes

81. As the number of unemployed people began to mount, a new "Law on Social Protection and Professional Reintegration of the Unemployed" was adopted, providing a legal framework for dealing with the problem. A training fund was established as part of the newly created Unemployment Compensation Fund, as well as a network of labour offices at local levels. These organisations, among others, are assigned the task of training and guiding the unemployed. For the time being, the new labour offices are using the existing training structures available at the district level. There is a shortage of staff and adult training knowledge, there is little guidance, and unemployed people are being assigned to retraining programmes for the few occupations where jobs seem to be available, irrespective of their previous qualifications or personal aptitudes.

82. As in other fields, the organisations in adult education and training that existed during the communist regime tend to perpetuate their activity. Sometimes, however, the existing infrastructure forces the staff to look for action, even new roles. Such was the case of the Departmental In-Service Training Centre served several ministries and was engaged for the most part in formal, bureaucratic activities. It is now turning into a commercial activity and trying to adapt to new conditions and needs. In areas where changes are taking place, the departmental centres appear better organised and are operating successfully (for instance in food and light industries). Another training institute trying to reorganise its activity is the Romanian Institute of Management (IROMA) which offers management and data processing programmes.

83. An example of continuity is that of the programmes offered by higher education institutes, usually in the form of correspondence courses. These programmes cater for specific requirements of certain ministries or local authorities.

84. A special case is represented by the education sector itself. Here, further education and training takes several forms. First, there are career training schemes, which involve the participation of higher education institutes. In-service training is offered by "Houses of Teachers", affiliated to district inspectorates. The system has just been reorganised, but difficulties arise from the lack of qualified trainers and of suitable programmes. "Mobile teams" are to visit remote areas trying to meet the existing demand by offering on-the-spot courses.

85. The novelty on the supply side is represented by the appearance of a large variety of new providers. First, there are new, innovative governmental organisations which are offering dynamic, new programmes: the Romanian Chamber of Trade and Industry is organising training programmes, for example that offered to future stockbrokers with a view to establishing a Commodity Exchange and a Stock Exchange; the National Agency for Privatisation is also organising training programmes, such as the one for teaching the skills needed for evaluating which enterprises to privatise; the Romanian National Bank recently organised a Centre for Banking Training. Secondly, commercial organisations, training individuals according to their personal needs, have been established. These private firms have to be responsive to market needs, organising themselves on a competitive basis.

86. Trade unions are not yet significantly engaged in adult education and training. Until now, in order to respond to their pressing needs, they have organised training programmes for union leaders and activists. Recently, trade unions have offered to take on the retraining of the unemployed.

87. Regarding further education in general, several projects deserve a mention. Under the aegis of the Ministry of Culture, People's Universities and Folk Arts Schools are functioning. They try to adapt their programmes to the new needs of the transition period. Research is being carried out on the establishment of such new institutions as Peasants' Universities or a Mountain University. These initiatives aim at satisfying more specific, local needs.

Future strategies

88. The present economic and social instability is mirrored by the lack of co-ordination and control of the wide variety of forms of adult education and training. Nowhere is there any evidence of who is doing what or for whom it is being done. Duplication is thus inevitable, as well as a certain improvisation, usually in the selection of trainers.

89. A legal framework needs to be set up to define responsibilities and a coherent method of validating qualifications in an environment where providers proliferate. An urgent need is felt for developing evaluation studies, formulating strategies and establishing short, medium and long-term projects.

5. International co-operation in education and training

90. In the following section, the main actors involved in assistance to education through the transition process will be identified, and existing international, bilateral and multilateral agreements will be reviewed.

5.1. The institutional framework

91. A new institutional framework was set up, aimed at harmonising international assistance during the period of transition, the main actors including:

The Romanian Development Agency (RDA)

92. The RDA, established in March 1991, is directed by a Secretary of State. Its primary goal is the promotion of both large and small-scale foreign investments in Romania. RDA assists the government in defining and screening policy measures that relate to economic development based on foreign capital, in order to ensure that these measures fit the ongoing economic reform programme.

93. RDA is also responsible for the co-ordination of international aid to Romania and the related programmes of technical assistance. RDA is the Romanian agency charged with the co-ordination of relations with the PHARE programme (Poland and Hungary: Assistance for Restructuring of Economies) for all projects supporting the transition of central and eastern European countries to a market economy. RDA co-operates closely with the Irish Development Agency for the promotion of small-scale investments in Romania.

The National Privatisation Agency (NPA)

94. The NPA, reporting directly to the Prime Minister, consists of two separate departments: the first concerned with promoting privatisation, the second in charge of the development of small and medium-sized enterprises (SMEs). There is a NPA branch in each of the 39 districts of the country.

95. On the basis of the Privatisation Law, the NPA has until now dealt mainly with "privatisation from above", i.e. with the preparation and launching of a programme aimed at the transfer of property rights from more than 6 000 State-owned companies to private owners within a period of seven years. Some of the enterprises currently under State management are non-viable and even economically impractical. In such cases, the State acting as owner/manager is responsible for considerably reducing their size or scope of operation, or even closing them down.

96. The employees in such enterprises should by rights benefit both from generous assistance in the field of professional reconversion and retraining and from training in entrepreneurship and management. They should also be given the chance of buying the material assets of the enterprise on favourable terms. The PHARE programme offered technical assistance on the process of privatisation, on the creation of the State Ownership and five Private Ownership Funds. In the field of the development of small and medium enterprises, NPA was offered support by UNDP in creating a Centre of Services and Consultancy for private entrepreneurs. NPA, the Polytechnic Institute of Bucharest and the Academy of Economic Studies, together with Washington State University have created the Romanian Small Business Development Centre.

97. In working out the strategy for the promotion of SMEs in Romania, NPA, together with the Council for Strategy and Economic Reform, has co-operated with the Italian consultancy firm CNA Veneto (under PHARE financing).

The Ministry of Education and Science (MES)

98. After the revolution, the Ministry of Education and Science was restructured and is now responsible for all pre-school, primary, secondary and higher education, as well as for training and scientific research and development. MES is willing to use its vocational schools for retraining unemployed people if the Ministry of Labour and Social Protection decides to finance the courses.

99. In 1991, a World Bank mission to Romania completed an evaluation of Human Resource Strategies for the 1990s in Romania, making direct and precise recommendations for reform in education, training and scientific research. Subject to MES commitment to these reforms, projects for the short, medium and long terms have been offered financial support.

100. The MES is also the main partner for the TEMPUS programme (Trans-European Mobility Scheme for University Studies).

101. A co-operation agreement between the Ministry of Education and Science and the National Agency for Privatisation has been concluded on the first incubator project in Romania, taking as a model the European Business Innovation Centre.

The Ministry of Labour and Social Protection

102. Responsible for the retraining of unemployed workers, this Ministry is also concerned with social policies, social security and worker protection. Technical assistance for responding to the demands of future labour markets and of unemployed workers has been given to the Ministry through the PHARE programme.

103. Since 1990, the World Bank has evaluated social policy for the transition period and made recommendations for government-sponsored training/retraining programmes and know-how organisations.

5.2. Multilateral agreements

104. International co-operation is also promoted by means of multilateral agreements. At present, several international assistance/co-operation training programmes are being developed in Romania: First, there is the ROM 001/90 UNDP Project, designed for management trainers and managers. The ILO and IROMA (the Romanian Institute of Management) are the designated executants of this project which is spread over a period of four years. Extra funds were recently provided within this project for banking training. A second UNDP Project, ROM 002/90, is intended to offer training and consulting for small businesses, with UNIDO and the NPA as executive agencies.

105. The programme for non-repaid economic assistance, PHARE, has since 1991 included Romania among its beneficiaries. The structure of the PHARE programme for Romania consists of:

a) national programmes, including:

- assistance for the reorganisation of governmental institutions, and the development of institutions and infrastructure required in the transition towards democracy

and a market economy (National Bank, Ministry of Economy and Finance, Ministry of Industry, NPA, RDA, Ministry of Agriculture, Ministry of Labour and Social Protection, Ministry of Commerce and Tourism, etc.);

- the TEMPUS programme;
- other activities;

- b) regional programmes, i.e. ACE (Action for Co-operation in the field of Economics) and SIGMA (Programme of Support for Improvement in Governments and Management to Central and Eastern European Countries);
- c) humanitarian aid.

106. Some of these PHARE programmes have a clear training function:

- The ACE programme offers training for researchers in economics.
- The SIGMA programme offers training administration management.
- The TEMPUS programme offers exchange programmes for higher education students and teaching staff.

107. PHARE will also provide funds for the establishment of an International Management Foundation in Romania.

5.3. Bilateral programmes

108. Bilateral programmes have been concluded between RDA and the authorities of various countries:

United Kingdom

109. The Know-How Fund is assisting programmes concerning:

- a) the banking system (organising international seminars, banking training);
- b) small and medium-sized enterprises (management, training and development);
- c) the labour market (managerial training, training of the unemployed);
- d) politics and the mass-media (Parliament, TV, journalists);
- e) agriculture (technical assistance);
- f) legislation (seminars, training and scholarships for lawyers);
- g) diplomacy (training).

110. The British Council is also financing activities related to English language learning (in three secondary schools) and training the trainers in various fields.

Austria

111. The Federal Ministry of Economy and the Federal Chamber of Commerce and Industry are co-operating with the Romanian Academy of Economic Studies and IROMA in organising short-term management courses.

Belgium

112. The Ministry of Foreign Trade co-ordinates the programme for on-the-job management training in Belgian firms. So far, 15 scholarships have been offered.

Australia

113. The Australian Training Programme for East Europe (ATPEE) has offered 17 scholarships for management training in 1992.

Japan

114. The Japan International Co-operation Agency (JICA) organised the following activities in 1991:

- a) training programmes in Japan for 20 Romanians;
- b) visiting tours of Japanese experts (mainly for NPA, RDA, the Ministry of Economy and Finance and the Railway Trade Union);
- c) technical assistance for the health sector.

United States

115. In 1991, the United States offered technical assistance to: trade unions, professional organisations, management training, development of power plants, family planning, humanitarian aid.

116. In 1992, Romanians may be eligible for the following programmes:

- a) TDP -- Trade Development Programme
- b) AID -- Agency of International Development
- c) OPIC -- Overseas Private Investment Corporation
- d) Eximbank -- Export-Import Bank
- e) CCC -- Commodity Credit Corporation

Canada

117. A task force was created to co-ordinate the programme for economic assistance in Romania for the following activities:

- assistance and training in agriculture;
- public administration management;
- feasibility studies.

Netherlands

118. The Ministry of Economic Affairs has signed a Memorandum (together with RDA) for assistance in the following areas:

- a) creation of a new infrastructure aimed at stimulating private initiatives; assistance in transport systems; technical assistance and know-how in acquiring environmental protection techniques;
- b) privatisation in agriculture;
- c) co-operation in social welfare and in general health sector matters;
- d) human rights.

Denmark

119. The Danish Investment Fund has offered assistance such as: loans for feasibility studies; financing of international projects and joint ventures; financial support for personnel training.

Germany

120. The Ministry of Economic Co-operation has included Romania among beneficiaries of a technical assistance programme in the following areas: agriculture, privatisation, finance and the banking system, tourism, small and medium-sized enterprises. The Federal Ministry of Industry has offered support in 1992 for privatisation pilot projects.

5.4. Non-governmental organisations

121. In addition to international agreements, mention should be made of the efforts of non-profit, non-governmental organisations (NGOs) towards adapting education to democracy and a free market economy.

122. The SOROS Foundation for an Open Society offers financial support for educational and training programmes as well as scholarships for Romanian students or specialists. In 1990/91 the Soros Foundation ran programmes such as:

- a) an English language programme, which included training the trainers and students, and the exchange of specialists;
- b) a social sciences programme: the Central European University offered cultural education co-operation in higher education for the central and east European communities with the help of specialists from western Europe and the United States;
- c) an economic sciences programme: the Foundation offered scholarships for students and specialists in economics; for 1992 two training programmes are planned in: public administration training and general management training;
- d) an environmental sciences programme: the Foundation offered scholarships for Romanian students;
- e) a mass-media programme: the Foundation offered international seminars on technical assistance for local television stations.

6. Decentralisation and democracy

123. One of the reasons for the present crisis of educational systems in the former socialist countries is that, having been strictly subordinated to the central political power, they have lost their self-regulating capacity. The solution to this problem lies in their being de-politicised and decentralised.

6.1. The significance of decentralising the educational system

124. Decentralisation is not a goal in itself. Rather, it is a useful means by which specific goals can be attained:

- a) political goals: democratisation of education;
- b) economic-financial goals: a better resource allocation; economic efficiency;
- c) educational goals: better quality of education; innovation;
- d) management-administrative goals: management and administration effectiveness.

125. Decentralisation can be applied to: decision-making structures, financial systems, educational decisions, innovation systems. A single-pronged decentralisation process stands little chance of success, and activities in all the above directions have to be envisaged. Financial decentralisation is usually dealt with first. Management decentralisation is less favoured, as the existing structures are resistant to change. It is interesting to remark that the World Bank, in its studies of the Romanian educational reform, deals only with financial and management decentralisation. The Romanian Ministry of Education and Science is even more reticent, talking only about administrative and financial decentralisation.

6.2. Decentralisation in the framework of educational reform

126. Educational reforms are traditionally aimed at specific educational changes, such as: curricula, age limit of compulsory education, educational technologies, etc. However, educational reforms in former socialist countries need to be basically revolutionary, aiming at macro-level structural changes: re-forming the policy-making and decision-making frameworks, thus enabling new actors to participate in the process of shaping educational policy. Such changes are needed for at least two reasons: First, in order to achieve a national consensus about the importance of education, a democratic environment must exist. This consensus is crucial, because the success of economic reform is highly dependent upon education. Secondly, education policy can no longer be formulated in a narrow, sectoral environment. Educational communities have now left the "enclaves" in which they once took refuge, and the new political forces -- professional groups, parents, students -- need to take a more active part in educational decision-making.

127. Apart from "top-down" reforms, provisions must be made for allowing a "bottom-up" approach, which will multiply options and encourage competition. Decentralisation allows for innovation to take place at lower levels.

6.3. The balance between the State and society

128. In conditions of austerity, the fact that the State assumes the responsibility of ensuring "education for all" is an indication of democracy. But only quantitative expansion can prevent qualitative inequities from developing between rural and urban regions, between the centre and the periphery. The State cannot deal efficiently with these problems because of the rigidity of its structures. Only involvement of the population can provide the needed flexibility and adaptation to real needs and challenges. Unfortunately, the currently compartmentalised societies of the post-totalitarian countries do not offer a basis for the successful participation of citizens.

129. Apart from families, clans and religious and ethnic communities, there are no structures which are able to participate, through their representatives, in the democratic process of educational decision-making. This explains why these groups in particular are the most eager to assume responsibilities in the educational process. Once the other structures of society have begun to gain momentum, it is essential that they also begin to involve themselves in educational problems. The participation of "users" in decision-making may contribute to the adoption of solutions more appropriate to local needs; to increased efficiency and reduced waste; to better quality through widened responsibility; and to the acceleration of innovation processes in education.

6.4. The relationship between the central authority and local communities

130. Various schemes for decentralising education systems exist. Generally speaking, the central authority reserves responsibility for overall guidance and for monitoring the education process by means of:

- a) establishing the goals of education;
- b) establishing curricula and standards of attainment;
- c) evaluating results at national level;
- d) financing a system which ensures a minimum quality standard in education;
- e) financing special programmes aimed either at ensuring equity between different zones or at special education or innovation;
- f) assisting education in fields of national interest, identified by development strategies (computers for instance).

131. Local communities have responsibility for:

- a) education at certain levels (primary, lower secondary, upper secondary);
- b) educational planning (forecasting of qualifications required at the local level; projecting of investment needs);
- c) the functioning of educational units.

6.5. Stages of decentralisation of an over-centralised educational system

132. Decentralisation is a lengthy process, which may require several stages such as:

- a) the delegation of power: the legal framework remains unchanged, but the central authority temporarily delegates certain responsibilities to lower levels;
- b) administrative deconcentration: the central authority sets up sub-units at lower levels aimed at improving efficiency;
- c) administrative decentralisation: the responsibility of local authorities is increased in order to improve their efficiency;
- d) political decentralisation: a power transfer is made from central to local authorities.

133. Decentralisation should not start as a comprehensive process. A trial and error strategy should be followed, by setting up pilot centres and zones, experimenting with partial nuclearisation, and creating territorial co-ordination centres.

6.6. The problems of decentralisation

134. Decentralisation is not a neutral process and may generate problems or encounter obstacles. Under cover of transferring responsibilities, central authorities may try to delegate the task of solving problems to lower levels, without providing the necessary resources. Autonomy cannot be improvised, and structures at local levels generally lack the knowledge on which to base decisions. Comprehensive information and training programmes should therefore precede any decentralisation moves.

135. Teachers may raise objections when faced with changes -- changes which may threaten job security or seek to introduce strict performance criteria in assessments; correlation of wages with performance; free choice of schools; or the control exercised by parents, local councils, etc.

136. A too rapid diversification of decision-making processes may cause problems of co-ordination. Decision-making can in fact be slowed down by the proliferation of decision-making centres, which would demand an increase in personnel and consequently raise costs. At local level, decisions could be prone to influence by various pressure groups.

6.7. Decentralisation in the financial field

137. Goals for financial decentralisation should include:

- a) mobilising greater resources;
- b) increased efficiency in the use of financial resources; avoidance of waste;
- c) improving the quality of education through financial leverage.

138. Consequently, decentralisation in this field entails:

- a) diversification of financial sources and of ways of financing;
- b) cost recovery;
- c) transfer from the central to lower levels of decisions concerning budget preparation, control and implementation.

139. The multiplication of financial sources is only one facet of decentralisation in the financial field. Owing to low living standards in Romania, the introduction of school tuition fees is not a viable policy. If this policy were adopted, it would undoubtedly lead to strong populist reactions, linked to memories of traditional free education in Romania. The implementation of an indiscriminate fee system appears unjust for at least two reasons:

- a) the cost of education institutions varies markedly;
- b) the financial possibilities of families are and will remain widely divergent.

140. It is, however, useful to study different loan schemes, grants made by economic agencies, and tax deductions corresponding to education tuition fees, etc.

6.8. Proposals for further developments

141. What will happen if the Romanian educational system is not decentralised? For several reasons, the present rigid, over-centralised system will be paralysed if forced to function in a changing environment. On the one hand, the simple act of enrolment of all children in school will no longer be sufficient. More and more, the quality of education will become important, with the future of young graduates depending on it. Quality will not be forthcoming as long as responsibilities and means are not in the proper hands.

142. On the other hand, resources available to education will continue to diminish and to be wasted. In order to ensure the quality of the education of their children, parents will opt for private education, offered either by the black market system of private lessons or by private institutions. Public education will then be unable to ensure equal education for all, and social inequities will further increase. With decentralisation, however, positive effects should begin to develop: increased efficiency of the school system, improved quality of education, opportunities for innovation at the school level, better adaptation to local needs.

143. The priorities, therefore, for decentralisation include:

- a) increasing the awareness of high-level political decision-makers of the need for decentralisation and of the guidelines to be followed;
- b) informing and educating the school environment, as well as the public, about the logic of decentralisation;
- c) providing assistance in developing studies on topics such as: analysis and assessment of current decision-making structures (how decision-making is practised at each level and whether

- it is satisfactory); assessment of the human and material resources implied in changing decision-making structures; the legal framework of decentralisation;
- d) developing the information system and data base required by a decentralised educational system;
 - e) offering training programmes for educational managers and administrators;
 - f) experimenting with different decentralisation schemes, such as: delegation of responsibilities; pilot centres and zones, etc.; assessment of the results.

7. Conclusion: the need for social innovation

144. Western countries, benefiting from the favourable conditions offered by democracy, have developed over time a network of evolved regulations and institutions. Well adapted to national characteristics, it cannot, however, be automatically transferred to other societies. This also applies to the structure and functioning of educational systems.

145. Consequently, each central and eastern European country has to develop its own way of restructuring its educational system. The main difficulty being that the required transition has never been tried before, educational as well as economic changes will be heavily dependent on the pace of social innovation.

146. Social innovation was one of the processes blocked by totalitarian regimes. With no experience in generating such innovation, the new leaders in these countries need to find the means to stimulate broad participation in the processes of creating new regulatory and organisational frameworks. Here, international assistance can catalyse such processes.

147. History in Romania has proved that in peaceful and favourable times, Romanians have been able to progress very rapidly. In the period between the two world wars, they showed great capacity for adaptation and innovation, succeeding in a relatively short period in developing an advanced, modern society. With more propitious conditions for such a mobilisation of efforts, the prospects for a successful transition to a new society are indeed promising.

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9. Appendix
Tables of basic data*

1. Economic Data

GDP output (billions lei)	1980	1985	1989	1990		
	616. 9	817. 4	798. 0	844. 0		
Population consumption price index (%)	n.a	126. 9	135. 4	141. 1		
	1985	1986	1987	1988	1989	1990
Indices of GDP (1980 = 100%)	116.8	119.6	120.5	120.0	113.0	104.7
Social labour productivity (lei)**	71,67 7	72,43 0	72,21 6	71,82 7	64,32 4	67,891

1.1. Distribution of Output by Branches of the National Economy

All activities	1980	1990
	100%	100%
1. Agriculture and forestry	12.6	18.0
2. Research, informatics and domestic industry	2.7	3.3
3. Industry	52.7	48.2
4. Social and cultural services	4.1	5.3
5. Construction	7.7	5.7
6. Trade	5.9	7.0
7. Transport and telecommunications	7.1	6.7
8. Banking finance services	2.5	1.6
9. Municipal services, housing and others	2.3	1.5
10. Administration, defence	2.4	2.7

*Source: National Commission of Statistics

** National income per person employed in economic enterprises

2. Employment Data

	1980	1985	1989	1990
Total Employment (in thousands)	10,350	10,586	10,945	10,839.
Males %	56.1			5
Females %	43.9	55.1	54.8	53.8
		44.9	45.2	46.7
Labour force participation rate	46.4	46.5	47.1	46.7

2.1. Public Sector Employment by Sex for Different Age Groups

		1986	1990
16-61 years:	Total	7,726.1	7,878.
(thousands)		4,679.8	2
	M	3,055.3	4,613.
	F		6
			3,264.
			6
16-24 years:	Total	1,073.9	1,271.
	M	588.2	6
	F	485.7	689.8
			581.8
25-34 years:	Total	2,371.8	2,271.
	M	1,326.0	7
	F	1,045.8	1,248.
			1
			1,023.
			6

35-44 years:	Total	2,113.3	2,433.
	M	1,249.1	6
	F	864.2	1,387.
			4
			1,046.
			2
45-54 years:	Total	1,577.4	1,493.
	M	1,018.4	8
	F	559.0	
			960.8
			533.0
55-61 years:	Total	589.7	
	M	489.1	407.5
	F	100.6	
			327.5
			80.0

2.2. Level and Distribution of Employment by Industry

	1980		1990	
	Level (thousands)	Distribution	Level (thousands)	Distribution
All activities	10,350.1	100%	10,839.5	100%
1. Agriculture	3,048.1	29.4	3,056.4	28.2
2. Forestry	39.5	0.4	40.5	0.4
3. Industry	3,678.7	35.5	4,015.1	37.0
4. Municipal services, housing and other non-productive services	390.9	3.8	527.7	4.9
5. Construction	857.6	8.3	653.1	6.0
6. Trade	619.9	6.0	678.5	6.3
7. Transport	629.8	6.1	655.1	6.0

			OCDE/GD(92)111	
8. Administration	64.8	0.6	67.9	0.6
9. Health protection, social assistance and physical culture	281.7	2.7	303.9	2.8
10. Science and scientific services	98.3	0.9	133.3	1.2
11. Other branches	130.4	1.3	158.6	1.5

3. Educational Attainment of the Population

3.1. (Data will be available only after the processing of information collected from the 1992.)

3.2. Unemployment by Level of Educational Attainment for Different Age Gr

3.2.a Total

Level of education	Total	< 25 years	25-29 years	30-39 years	40-4 year
Unemployed receiving benefits	323,320	150,170	42,338	64,730	42,5
Level A*	274,255	130,545	34,282	53,480	35,3
Level B+C+D	39,770	17,459	5,528	8,471	5,8
Level E	9,295	2,166	2,528	2,779	1,3

* Level A: Completed less than upper secondary education.

Level B: Completed upper secondary education.

Level C: A qualitative category including, where data permit, vocational and n
overlap A, B and D.

Level D: Completed some post-secondary education, but no university degree.

Level E: Completed at least one university degree.

3.2.b Males

Level of education	Total	< 25 years	25-29 years	30-39 years	40-49 years
Unemployed receiving benefits	133,815	53,962	16,285	27,521	20,6
Level A	116,673	48,760	13,639	23,539	17,4
Level B+C+D	12,776	4,475	1,641	2,613	2,4
Level E	4,366	727	1,005	1,369	86

3.2.c Females

Level of education	Total	< 25 years	25-29 years	30-39 years	40-49 years
Unemployed receiving benefits	189,505	96,208	26,053	37,209	21,8
Level A	157,582	81,785	20,643	29,941	17,9
Level B+C+D	26,994	12,984	3,887	5,858	3,4
Level E	4,929	1,439	1,523	1,410	46

4. Education flows of young people by educational activity

4.1. Distribution of categories of education in percentage points

(Data not available)

4.2. University and higher education graduates by field of study

Field of study	Higher education graduates 1989/1990
University pedagogics	2,259
Artistic	152
Juridical	499
Economics	2,839
Medicine (pharmacy)	2,779
Industry	15,923
Architecture and construction	1,821
Transport and communications	361
Agriculture (veterinary medicine included) and forestry	1,480
Graduates (total)	28,113

5. Demographics: Age composition of the population (1st Ju

	Total	< 15 years	15-24 years	25-34 years	35-44 years	45-54 years
Populati on	23,206,7 20	5,468,67 6	3,853,479	3,102,736	3,157,040	2,638,21
Percenta ge	100%	23.6	16.6	13.3	13.6	11.4

