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Madrid Employment Report
(Contribution of the
ECO/FIN–Council)*

1. Foreword

The European Summit of Essen in December 1994 has put forward the coordinates of a European strategy for employment. Following the Summit conclusions, the ECO/FIN– and the Social–Affairs–Council, as well as the Commission, have established reports which translated the "five Essen points" into concrete policy guidelines. The recommendations therein have then been summarised in a joint report which was endorsed by the European Council in Madrid. Member States' commitment to tackling unemployment led to the adoption of multiannual employment programmes at the national level. The implementation of the Madrid recommendations and the monitoring of the multiannual programmes will form the backbone of the follow–up in 1996 of the European employment policy.

The ***Report of the ECO/FIN–Council****, which was prepared by the* ***Economic Policy Committee****, provides a thorough analysis of the unemployment problems of the European Union and presents the main elements of the macroeconomic strategy and the structural measures to be implemented in the combat against unemployment in the EU. The Report reviews the national employment policies along the five points of the labour market strategy agreed at Essen. It also comprises the requested specific reports on the impact of the tax/benefit systems on the incentives to create and to take up a job, as well as on the relationship between economic growth and environment. These specific reports are attached in annex I and II, respectively.*

The Report envisages a twin–track strategy in which macroeconomic and structural policies combine to face the double challenge of eradicating unemployment whilst preserving the equity objectives of the European social model and concludes with a number of policy recommendations for further action, to be implemented by each Member State subject to different needs, in accordance with the principle of subsidiarity.

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* This contribution has been transmitted to the Madrid European Council together with the Single Report on Employment elaborated by the Council and the Commission.

MADRID EMPLOYMENT REPORT
(Contribution of the ECO/FIN–Council*)

2. Employment and the General Economic Framework: Macroeconomic context and Role of Structural Policies

2.1 The overall strategy for employment

The most prominent factors behind the insufficient level of employment reflected by high unemployment are

- a lack of sustained high economic growth over several years,
- serious rigidities in goods and services markets due to over–regulation and insufficient competition,
- regulatory barriers to the efficient working of labour markets,
- a mismatch between the skills offered by the labour force and the changing needs in the labour market due to technological developments,
- a disparity between the total labour cost for the low skilled and the value of the products or services they provide to the markets, and
- finally, the relative high tax burden on labour.

There are clear indications that a considerable part of unemployment is becoming structural and persistent at a very high level in most Member States, and that vigorous efforts are necessary both in the areas of macroeconomic and structural policy.

In order to make decisive progress in the employment situation, a period of sustained and strong medium–term growth process will be needed. This will secure that potential production capacity is available for the higher employment to occur, as well as will ease the implementation of the necessary structural reforms. A successful strategy requires a coordinated action including increased investment in productive capacities, further progress towards price stability both largely dependent on an adequate wage development and, above all, the progressive but firm reduction in public deficits in most Member States.

The macroeconomic strategy must be accompanied by further structural reforms in both product and services markets and in the labour markets of each Member State. Both the macroeconomic policy and the structural reforms are part of a global strategy for job creation, and substantial benefits will be reaped from a reinforced mutual coordination between these policy tracks.

2.2 Macroeconomic policies for growth and employment

The successive Broad Economic Guidelines adopted by the Council since December 1993 and the Essen strategy have laid down the policy objectives and the broad thrust of the macroeconomic policies required to achieve the Union's two major objectives. For the Community and the Member States it is now essential to turn the present economic development into a strong, non–inflationary medium–term growth and employment–creating process. The achievement of these objectives will require a stable, investment–enhancing, short– and medium–term macroeconomic framework characterized by:

- a stability–oriented monetary policy whose task should be facilitated by appropriate wage and budgetary developments and which leads to further progress towards price stability and improved price convergence;
- nominal wage developments compatible with achieving and safeguarding a low–inflation environment and positive, but moderate, increases in real wages, which however, for several years, remain below the annual growth of labour productivity, leading to a further increase in capital profitability which is needed for the strong expansion of employment–creating investment;
- a progressive but significant reduction in budget deficits, dropping in the medium term to well below the Maastricht reference value of 3 per cent of GDP, hereby contributing to a crowding–in of productive investment and to a significant increase in national saving which is needed for a sustainable financing of the required increase in the stock of capital.

The macro conditions for a return to a strong employment creating growth process are now the object of a large consensus in the Community and are fully supported by the European Social Partners[1]. This is an important confidence enhancing element.

2.3 The present recovery and the medium–term growth process

Since 1993, the European Community economy has experienced a soundly–based, stronger–than–expected, recovery from the sharp downturn it endured during the early 1990s. Thanks to dynamic extra–EC export markets and the improved competitive position of European firms, exports have acted as the initial driving force. Following increased signs during the second half of last year (1994) that the growth impulses coming from the external sector were spilling over into investment, the latter is set to become the main engine of output growth this year (1995) and next (1996). Private consumption is currently rather subdued but should gradually pick up in line with accelerating household incomes, progressively bolstered by rising employment and positive, albeit moderate, increases in real wages. Having reached a peak of 11.4 per cent in mid–1994, the rate of unemployment has decreased as expected along a slowly downward–sloping trajectory and stands now at 10.7 per cent of the labour force.

The present recovery process leaves Member States well placed to achieve a sustained period of strong medium–term growth. Indeed, the major factors shaping economic activity such as external demand, capital profitability, area–wide inflation, interest rates and investment performance, are still pointing in the right direction.

An explicit macroeconomic condition – supplementary to those already mentioned under 2.2. – for a strong non–inflationary growth process is the continuation of the investment–led growth, with capital spending growing at a rate twice that of GDP, adequately balanced by a moderately growing private consumption. This would progressively raise the Community's current growth potential needed to ensure a high growth path without creating inflationary pressures emerging from production capacity restraints.

As employment creation is very sensitive to output growth, a high level of economic growth is the first and foremost important prerequisite to the necessary substantial increase in the number of jobs in the Community.

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1 "The Social Partners guidelines for turning recovery into a sustained and job–creating growth process", Joint Opinion elaborated by the Macroeconomic Group of the Social Dialogue, 16 May 1995.

In order to improve the effects of employment creation resulting from the output growth performances further contributions from structural policies are needed (see section 2.5).

2.4 Macroeconomic risks to growth and employment

Since the beginning of this year, and basically after the Spring currency turmoil, the economic expansion in the Community appears to be losing some steam. In itself, this is not a reason to fear a premature end to the current upswing. A slowdown after several quarters of recovery is totally in keeping with historical precedents, especially since the first phase of the present cycle has been so strong and since the pause largely reflects a shift in the factors shaping the recovery process (from exports to investment). Furthermore, a temporary moderation in economic growth appears appropriate in view of the rapid absorption of slack in capacity last year.

Nevertheless, in the short–run, some downside risks have gained considerable importance. Firstly, a salient external shock has affected the Union. Since early 1994, the US dollar has experienced a sharp weakening against EU currencies, which in combination with a lack of policy credibility in a number of Member States has triggered pronounced intra–EU exchange rate changes. Such currency misalignments are detrimental to the Union's short–term growth outlook since they produce noticeable, adverse, effects on exports, investment and confidence. In part reflecting the influence of the currency turbulence, most "appreciating" countries have shown a marked slowdown, whereas most "depreciating" countries have experienced a less severe, or even no, correction. However, also in the "depreciating" countries, the currency turbulences can be expected to eventually damage economic growth.

In an number of countries there is a risk of wage increases in excess of rates consistent with the price–stability objective and with the needed further rise in profitability. Early this year (1995), the perception of this risk has contributed to postpone interest rate reductions. However, monetary policies were relaxed later when the monetary expansion and inflation were subsiding. Furthermore, and more importantly, progress towards sounder budgetary positions has clearly been insufficient in several countries. While the short–run benefits of policy slippage are likely to be small and temporary, its medium to long–term costs would be substantial and permanent. Indeed, if because of impatience or dissatisfaction with the present showdown of growth, policies were to move in the direction of a non–convergence scenario, medium–term growth and employment prospects in the EU would be seriously damaged. Developments on foreign exchange markets in late September amply demonstrated that these risks still persist. Growing uncertainties about the ability and resolve of several governments to rigorously implement planned fiscal consolidation efforts instantly prompted renewed turmoil, thereby putting an abrupt end to the orderly reversal of exchange rate movements experienced during the summer.

On the positive side, the major factors shaping economic activity are still pointing in a positive direction: (i) the strength of external demand remains satisfactory and the Community's competitive position continues to improve; (ii) capital profitability remains strong and the expectation is for further significant improvements; (iii) area–wide inflation is markedly lower than in previous episodes, facilitating moderate wage agreements; and is unlikely to pick up much during the expansion given the monetary authorities' strong commitment to price stability and increased global competition and (iv) interest rates have been substantially reduced and (v) latest business surveys on investment intentions point to very strong investment performance. Moreover, strict adherence to planned fiscal consolidation and convergence programmes should eventually lead to a confidence–induced fall in long–term interest rates and to a reduction in the risk of turbulence on foreign exchange markets. Credible fiscal retrenchment efforts, by lowering inflation expectations and short–term interest rates, would also pave the way for making the stability–oriented monetary policy less restrictive in some countries. Reinforced commitments from governments and the social partners would help to strengthen confidence and to allow for lower interest rates and a more investment friendly climate.

2.5 Growth, employment and structural policies

The economic recovery and the full implementation of the macro–economic part of the Broad Economic Policy Guidelines would eliminate cyclical unemployment in the short run and part of the non–cyclical unemployment in the medium term. However, to further reduce the non–cyclical part without tensions on the labour market and start to attack the hard core of structural unemployment, sound macro–economic policies should be supplemented by structural policies aiming at making more efficient and employment–creating both the product and labour markets.

The need for well functioning goods and services markets

As regards policies to enhance competitiveness and innovation, their major aim is to increase the endogenous growth forces of the Union. To this end, a correct functioning of product and service markets – *inter alia* through a rigorous anti–trust and competition policy and action to lift legal and other constraints on the development of services – is also highly relevant. As set out by the White Paper (Chapters 2 to 7), this should be achieved by fully exploiting the potential of the internal market and an open world trading system, by accelerating the realization of the TENs, by investing in new technologies, by carrying through the Action Plan on the Information Society and by better exploiting the growth and employment potential offered by SMEs. Over the last year, notable progress has been made in several of these areas.

These efforts would accelerate the rate of growth of the EU economies via increases in overall productivity. In fact, the growth of productivity is the major source of real income and wealth. As stressed in the White Paper and by the Social Partners, there is no contradiction between initiatives to enhance productivity growth and *net* employment creation provided that the wealth created by the sectors with high–productivity increases is adequately redistributed within the economy, enabling sectors with low productivity growth to create new jobs. Such a process also enables similar wages for similar qualifications in all sectors. One important market mechanism of redistribution of productivity gains is decreasing relative prices in sectors with high productivity growth, increasing the purchasing power for all consumers, and thus demand for products and services in general, and especially in employment–intensive sectors with low productivity growth and increasing relative prices. This process goes along with sectoral changes which must be socially acceptable. Furthermore, the overall growth rate must be sufficiently strong in order to exploit the newly created potential and to ensure a positive balance between job creation and job destruction across sectors.

Contribution of labour market policies to increase the employment content of growth

With respect to **labour market policies**, their design and implementation must contribute to growth and employment, without creating tensions, and to a higher employment–content of growth. The impact of active and more efficient labour market policies operates basically through three main channels:

- *raising the quality of human capital* – Since this corresponds to improving both the flexibility of the labour force (both employed and unemployed) and the competitiveness of the Union, actions in this field will reinforce the growth potential itself. While being an important ingredient of structural adjustment, it should be noted that like the policies for competitiveness, it will generate its full benefit only when the economy is growing strongly and makes available new working posts. If the latter is not the case, such efforts will lead to frustration of the manpower that is better skilled while human capital continues to be destroyed by long–term unemployment;
- *promoting the employability of manpower* – Measures aimed at improving the transparency of labour markets, at enhancing flexibility in the areas of professional and geographical mobility or at retraining target groups hit by exclusion will facilitate the re–absorption of unemployed workers when the demand for labour resumes. While such actions do not in themselves engender new jobs, their economic merit is related to their contribution to avoiding a resumption of wage inflation as unemployment comes down. As such, they should help to curb the NAIRU limit and to attack simultaneously the hard core of structural unemployment. Furthermore, they also have an important social dimension as they contribute to maintaining and reinforcing cohesion and social consensus in the Union;
- and *making growth more employment–creating* – From a macroeconomic point of view, the achievement of a more labour–intensive growth process essentially means that more employment (in number of persons employed) will be generated by any given growth rate of real GDP. In purely statistical terms, it implies a lowering of the growth rate of apparent labour productivity (measured as real GDP growth per occupied person). Obviously, such an outcome should not be reached by destroying productivity at the firm or sector level since this would severely affect the economy's competitive position and the overall wealth creation process.

Macroeconomically, the employment–content of growth may be increased by an evolution of relative factor prices which favours the use of labour with respect to capital. The realization of such an effect through changes in overall relative factor prices is, however, likely to take a considerable amount of time and may be accompanied by unpleasant side effects. Apart from this macroeconomic substitution process, there are basically two other approaches to increasing the employment–content of growth; one dealing with labour costs and another with working time.

As regards *labour costs*, a widening of the wage distribution at the lower end would make low–productivity activities profitable that were formerly either priced out of the official market or "transferred" to foreign low–wage producers and would thus increase the labour content of growth. This downward widening of the wage scale may be obtained either as in the US by allowing market pressures to substantially lower the wages of low–skilled workers, but with serious social consequences (the "working poor" syndrome) or by a set of more pragmatic actions which reform the European social model and which are targeted at the low end of the wage scale. These measures would include special entry wages for new entrants into the labour markets, a review of social benefit systems acting as implicit wage floors and reductions in non–wage costs especially at the low end of the wage scale. The latter measures tend to minimize the impact on net wage incomes but have significant budgetary consequences which call for compensatory measures.

In the field of working time and work organization, the basic issue is to increase the flexibility of working time. A compulsory, across the board and massive reduction in working time would not provide a satisfactory answer in view of its implications for future productive capacities, wage levels and the post–2000 demographic evolution. These adverse effects may, however, be avoided in the case of *flexible measures of working time reduction at the microeconomic level* which are warranted by local conditions and socially accepted by all parties. These measures should, however, be reversible if new economic conditions warrant it. Such measures, as well as those designed to make full use of the potential of *voluntary part–time work*, should be promoted. Finally, the negative consequences of reduced working hours on potential output may be alleviated and even reversed by shift–work arrangements aiming at *de–coupling capital hours from labour hours*. However, this instrument cannot be applied in a general way since, beside its important social dimension, only firms which confront supply constraints and have available an adequate "reserve" of usable manpower would be able to benefit from it.

Finally, the promotion of *local employment initiatives* could augment the labour–content of growth. Although presented as a separate instrument in the Essen strategy, they operate through the same economic mechanisms as described above or through subsidizing some of these activities.

There are thus pragmatic ways to achieve a higher labour content of growth via a lowering of wage–costs and a reform of working time, together with the promotion of new fields of activities, without calling into question fundamental social values. However, these actions must not hamper the growth process itself and should thus not be in contradiction with the need to enhance the Union's competitiveness and the required fiscal consolidation.

3. Labour market functioning and employment creation

3.1 Unemployment in the European Union

The rate of unemployment in many Member States has tended to increase over the successive economic cycles recorded since the

TABLE 1 : **Main Features of the Unemployment in the EU, 1994**

	Unemployment rate of total labour force	Share of long–term unemployed[2)] among all unemployed	Share of those with low educational level[3)] among unemployed	Unemployment rate for 'youth'*
EUR12	11,4	48,1	49,9	22,0
B	9,6	58,3	51,8	21,8
DK	8,0	32,1	30,6	10,2
D	8,7	44,3	21,9	9,0
GR	8,9	50,5	40,0	27,7
E	24,3	52,7	67,9	45,1
F	12,7	37,5	46,4	28,8
IRL	14,7	59,1	63,5[1)]	23,0
I	11,3	61,5	58,7	31,6
L	3,5	29,6	62,8	7,9
NL	7,2	49,4	31,7	11,3
A	3,9[1)]	15,6	:	3,5
P	6,7	43,4	78,7	14,5
FIN	18,5	21,4	:	32,5
S	8,1[1)]	9,7	:	18,2[4)]
UK	9,7	45,4	58,0	16,3

* (15–24 yrs).

1) 1993.
2) unemployed for more than 12 months.
3) educational level lower than upper secondary; share calculated for persons aged 15 to 59 years.
4) Sweden uses age group 16–24 years.

Source : EUROSTAT Labour Force Survey 1994 and National Statistical Institutes for A, S, FIN.

mid seventies. Thus, the job creation generated during the expansionary phases has not been able to compensate the employment losses experienced during the recessions, thus increasing structural unemployment. More recently, the downturn of the economic activity of the early nineties has led to a level of unemployment equivalent to the levels of the early eighties in all Member States, thereby offsetting the progress made in employment creation in the second half of the decade. As stated in section 2, the current economic upturn has failed so far to produce a decisive increase in the employment content of growth.

The recent surge in unemployment presents some new features when compared with previous recessions. First, the growth in unemployment has affected all countries, comprising those so far broadly preserved from this problem. Second, for the first time, new layers of the labour force have been hit by the contingency of becoming unemployed, namely the middle management, medium–skilled and technical labour. Finally, and most distinctly, it has become apparent that the incidence of unemployment is particularly high in the case of disadvantaged categories of labour (e.g. females, low skilled, youngsters, older workers, extra–EU immigrants, etc.).

A core of long–term, hard–to–place unemployed is growing in almost all Member States, made up of individuals who, in most cases, have lower–than–average skills or are youngsters (see Table 1). The lack of employability of this labour is a most worrying development since these individuals would hardly benefit even from a period of sustained job creation, as the experience of the expansion of the late eighties in the European Community has shown.

Unemployment and labour cost rigidity

An important aspect of the unemployment problem relates to a discrepancy between productivity and cost for certain categories of labour. By and large, this lower productivity of labour is associated with two categories of individuals, partly overlapping, namely low–qualified workers and new entrants to the labour market.

The incidence of unemployment across labour categories tends to be higher the lower the individual's level of education. This is linked to the fact that low–skilled labour has become relatively expensive when compared to higher skilled labour or higher–technology capital equipment, and that there is a higher demand for skilled labour induced by the accelerated technological change and fiercer overall competition in the markets.

The high rates of unemployment among the first–job seekers points to the fact that changes in the labour market may be raising barriers for new entrants to have access to work, in a context of growing participation rates (e.g. females, youths, extra–EU immigrants) in most Member States.

Besides wages, non–wage and 'screening' costs, any new recruit involves other additional costs related, for instance, to the lack of work experience or the need to adapt to the specific tasks required by the job. The total of these 'entry costs', which can be seen as an short–run investment by the employer, has seemingly increased because of e.g. a bigger skill mismatch between labour supply and demand, an excessively low mobility of labour, or the inefficient functioning of the mechanisms of job matching.

The changes highlighted above explain that the employability of low–skilled labour and new entrants has apparently diminished as their productivity would no longer warrant the total cost of their utilization. This insufficient productivity has not been offset by the evolution of total cost of labour in the European Union, which has shown a marked lack of responsiveness to changes in the economic cycle.

The financing needs of the public sector over the past two decades have resulted in a growing tax wedge between total cost paid by the employer and the net disposable income received by the employee. Within the tax wedge, non–wage costs represent a substantial share of the total cost of labour in most of the Member States, up to some 50 per cent of total cost for an average worker in F, B, I and A in 1992. Since non–wage costs have important fixed components (e.g. paid days not worked, less than proportional social charges, etc.), they weigh relatively more on the lower paid and contribute to introducing a higher rigidity in their total cost.

Furthermore, the presence of 'wage floors' have prevented a downward adjustment of nominal wages in response to the changes in labour productivity. They also help explaining the relatively compressed wage hierarchy in Europe compared with that in other economies (especially, the US). These 'wage floors' may also have acted as a barrier for creating jobs at the lower end of the wage scale (e.g. part–time) and for less productive labour, especially new entrants, to find work.

3.2 Social Benefits and Labour Taxation at the Lower End of the Wage Scale: summary of main findings

The problem of 'implicit' wage floors (other than statutory or collectively–agreed pay minima) appears to be partially linked to the degree of protection provided through benefits of income support by generating an excessively small difference in net disposable incomes in and out of work or by allowing for a long stay on benefit.

Under certain circumstances, the combination of entitlement to benefits and the tax regime on earned income may result in high net income replacement ratios for the recipient's household, in particular at the lower end of the wage scale. Where such high net replacement ratios coincide with a long maximum duration on benefit, there is a presumption that the benefit recipient's incentive to accept a job offer may be weakened, and he/she may thus stay unduly long on benefit. This long spell out of work may eventually lead the unemployed to lose contact with the labour market and become a long–term unemployed, whose re–integration to work is increasingly difficult and costly to achieve (*'unemployment trap'*).

An option to break up wage floors involves enhancing the unemployed's willingness to take up a job offer, even if low paid, by providing in–work benefits which supplement the household income attaining a certain socially–agreed minimum level. However, in these cases, both the withdrawal rate of benefits and the 'phasing' into the tax regime implicitly create a high effective marginal tax rate applied on additional earnings earned at work. In consequence, recipients have little or no possibility to upgrade in the earnings scale and enhance his/her own skills and productivity. Economic, technological and regulatory barriers also contribute to 'lock up' these persons in low–paid, low–productive jobs with limited alternative opportunities (*'poverty trap'*).

The review of the current unemployment protection systems reveals, among other conclusions, that:

- under certain circumstances, the gap between disposable income at work and that received on unemployment benefit may be too narrow, thereby supporting the presumption that an '*unemployment trap*' may occur. Such 'traps' would affect in particular the low–income households, specially if children and day–care allowances are taken into account, and the maximum duration of benefits is relatively long
- in those cases where the unemployed qualify for unemployment assistance (UA) benefits, which most often provide a lower replacement rate, complementary benefits (e.g. housing benefits, children and day–care allowances) may also generate high net replacement ratios and increase the risk for *'unemployment traps'* to occur.

- where providing in–work benefits is the alternative chosen, reforms have been necessary to soften the very high effective marginal tax rates created by the combination of the benefit withdrawal rate and the 'phasing' into standard tax regime for individuals at or close to the threshold for benefit entitlement. These reforms, whilst reducing the risk of 'poverty traps', have however led to the spreading of the in–work benefits to larger numbers in the occupied population, thus entailing a heavy cost in terms of public resources and tax expenditure.
- since social benefits are means–tested, conditional and often earmarked, there is an incentive for the unemployed to be transferred onto neighbouring protection schemes, with relatively generous benefits and/or looser eligibility criteria (e.g. sickness, temporary or permanent invalidity, early retirement).
- the multiplicity of social protection schemes and/or a loose administration of them may allow for employers and, in some cases, employees to collude and provoke the occurrence of repeated unemployment spells. This problem matters in particular sectors subject to a highly seasonal demand (e.g. tourism, transport, building and civil engineering[2] or undergoing state–monitored restructuring policies.

To summarize, the actual functioning of the welfare systems in many European countries may, under certain circumstances, give disincentives for low–income individuals to take up a job offer. The alternative option to get them to a low–paid job while supporting their income level appears to commit considerable public resources and risks 'locking up' individuals at the low end of the earnings scale. In each option there is always some leeway to introduce further improvements, in order to maintain both efficiency and equity and contribute to a more flexible functioning of the labour market, a higher level of employment and a reduction in structural unemployment.

4. National actions to promote employment: a global assessment

National Actions and the Essen Strategy for Employment

All Member States see the current economic recovery as the opportunity to be seized in order to make progress in the combat against unemployment, and have renewed and enhanced their employment policies after the wide–ranging reforms introduced in the eighties. The numerous measures taken by the Member States are broadly in line with the employment strategy defined at Essen and Cannes. This strategy seeks to introduce a more active role of employment policies in facilitating the better functioning of the labour market, to allow the social partners have a greater role in rendering the labour markets more flexible, and to preserve the equity and social standards typical to the European Social model.

These measures are surveyed in the annexed summary table, broken down according to the five objectives agreed by the European Council in Essen in December 1994.

The wide range of national measures recently taken can be grouped as follows:

- **upgrading the skills of low–productive labour**

Some Member States have reviewed the functioning of the education, training and retraining systems, to reduce the number of individuals (mainly, youths and females) entering the labour market with low or none qualification. These reforms aim at providing an easier access to market–oriented training which combines the theoretical formation with experience at work, as well as to ensure a smooth transition from school to work. In the short run, specific measures have been introduced to enhance the employability of the long–term unemployed by targeting public–provided training to upgrade low–skilled labour, and to guarantee a minimum professional qualification to new entrants (esp. youths, females).

- **reducing the total cost of labour**

The functioning of the welfare schemes has been reassessed in many Member States in order to promote a more active search for work by benefit recipients, allow their progressive upgrading along the wage scale, and ensuring the budgetary sustainability of current welfare systems. The unemployment benefit schemes have been reformed to narrow down the eligibility criteria, shorten their duration, introduce or reinforce the means–testing, ensure a stricter enforcement of entitlement rules and a closer link between the duration of benefit entitlement and work availability tests, as well as a better coordination with other administrative bodies in the labour market establishing a more effective link between income support and the participation in active employment measures. In some cases, the reforms have aimed to break up 'implicit' wage floors generated by the interaction between the tax and benefit systems, which would be acting as a barrier for low–skilled unemployed to have access to a job. Temporary waivers ('entry wages') from standard wage and working conditions have been introduced when hiring new entrants to the labour market (e.g. apprenticeships, etc.).

Numerous Member countries have also sought to render their labour market more responsive to the changes in the economic cycle and labour productivity through reforms which largely decentralize the determination of the conditions at work by giving bigger scope for collective bargaining among the social partners, especially in the determination of wage and working time arrangements.

In response to the shift in labour demand against less skilled labour, many Member countries have introduced or reconvened tax–funded budget–neutral schemes to reduce social contributions levied on labour. Most of the schemes allow for selective temporary cuts in employer's social contributions, addressed to promote the creation of less–productive jobs (especially, in the new fields of social and local domains) or additional recruits made by enterprises or self–employed, as well as to facilitate the hiring of disadvantaged categories of labour (namely new entrants, females, long–term unemployed, aged workers or handicapped). Some countries put emphasis on general reductions in non–wage labour costs.

- **facilitating a higher mobility of labour**

In many Member States, the public employment systems have undergone reforms and their funding enhanced in order to improve their performance of job matching, especially for those unemployed particularly hard to place. Measures have also sought to ensure a closer coordination with those administrative bodies responsible for social protection and the provision of occupational training. Seeking to introduce higher efficiency, the public–provided job matching has been opened to competition from the private initiative. Further improvement is intended by the improved coordination among job placement bodies, even across national borders, as a means to allow for the exchange of information on vacancies and employment issues. In some countries, new measures are being introduced to allow for more flexible regulations concerning labour mobility, as well as to provide technical and financial assistance for transferring workers between sectors or geographical areas.

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[2] This explains that these sectors often have a specific unemployment protection regime, financed through experience–rated contributions based on the enterprises' employment records.

A global assessment of the structural policies in the labour markets

The renewed initiatives in national employment policies have just recently come into force and the short time elapsed does not allow for a proper assessment of their effectiveness. However, several Member States have already been able to identify some of them as being particularly successful in terms of the goals aimed at. Significant progress has been made in fields such as higher wage flexibility, improved provision of market–oriented vocational and other types of training, more efficient public job matching, more flexible arrangements concerning working time.

Broadly speaking, the reforms introduced in the labour markets since the last decade have contributed to:

i) **promote wage moderation and introduce a closer link between wage claims and the situation in the markets, thereby contributing to higher price stability:** the wide range of measures implemented by the Member States since the early eighties with the aim to create a more decentralized and flexible wage bargaining, remove most of the index–linked pay rules, reform the mechanisms of job protection, and reinforce the re–employability of the unemployed have all contributed to the current stability of prices, in comparison with previous expansionary periods, and will help dampening potential wage pressures induced by the recovery. Moreover, by reinforcing the link between wages and labour productivity, they will contribute to reduce cost pressure on tradable goods and help the EU to preserve its cost competitiveness.

ii) **adapt labour supply to the changing needs of the aggregate demand:** the provision of technical training as well as a number of measures intended to facilitate geographical and occupational mobility of labour appear to have reduced somewhat sectoral and occupational bottlenecks, which are growing in a context of intense reallocation of labour and other inputs in the economy. This is particularly important in a context where investment in productive capital is expected to take the leading role from exports as the motor for growth in the Community.

iii) **redistribute productivity gains across sectors and thereby increase the employment content of growth:** reforms aiming at a more flexible wage bargaining and more ample scope for collectively–agreed working time arrangements have facilitated the change in the relative prices of products which entail a transfer of productivity gains from high to low productivity sectors. In certain cases, parallel reforms to introduce fiercer competition in the goods and services markets have been necessary to secure that the prices in the high productivity sectors fall relative to those in less productive activities. This transfer of gains in productivity across the whole economy, through the change in relative prices, is essential to allow economic activities in less productive sectors, or close to external trade competition, to develop more easily and thereby make room for new sources of jobs to appear in the social and local domains.

5. Environment and Growth

The definition and implementation of the European strategy for growth and employment must take into account the preservation of a healthy environment.

It is by now increasingly recognized that there is no simple linear relationship between economic growth and pressure on the environment. Although an increase in the production of goods and services would *a priori* lead to an increase in resource use and pollution, countervailing forces – like technical progress, structural change and increasing preferences for a clean environment – frequently tend to compensate for this increase. One can therefore say that, provided an appropriate policy framework is put in place, there is no inherent conflict between economic development and the environment. In fact, in the long run, economic prosperity is likely to depend on a healthy environment.

One of the main conditions for a harmonious development of economic activity and the environment is that, in line with the polluter pays principle, market participants receive the right price signals. Only if market prices reflect not only private, but also environmental costs, will it be possible to reach a path of environmentally sustainable economic growth. However, in order to precisely assess and monitor the impact economic growth has on the environment, and vice versa, statistical tools have to be made available, in particular by better integrating national economic accounts and environmental statistics.

In this context, there is a lively public debate on the potential contribution that environmental policies can make to employment creation. Although it has to be stressed that environmental policies should be pursued in their own right, it is nevertheless appropriate to assess the likely employment effects of environmental policy initiatives. Overall, a well devised policy mix including environmental policies could have positive effects on employment. Such a policy mix could involve the use of revenues levied from taxes, which are introduced for environmental purposes, to help to compensate for the cuts in social charges paid on labour in order to secure the consolidation of public accounts underway. Therefore, there is indeed evidence to suggest that the European Union's future environmental objectives can be reached at a lower cost to consumers, producers and society as a whole (and therefore free resources for productive purposes), if the largely regulatory approach of the past is replaced by a strategy relying to a greater extent than at present on a close integration of economic, fiscal and environmental policies.

6. Policy Recommendations

The reforms taking place must be pushed forward if the current economic recovery is to deliver a decisive improvement in the employment situation in the European Union. The favourable climate created by the economic expansion offers a unique opportunity for further progress to be made, with the view to realize the employment targets of the White Paper.

Policy actions need to be pursued or strengthened in the following domains:

Supporting the achievement of sound and durable growth

- the achievement of a strong and sustainable medium–term growth is a prerequisite for the ultimate success of a reduction in unemployment. Since employment is very sensitive to variations in the growth trend, it is necessary to implement with continuity and determination the Broad Economic Policy Guidelines, first presented in December 1993 and reconfirmed in July 1994 and 1995. In particular, the growth of nominal wages must remain moderate and the policy towards sounder budgetary positions be consistently pursued.

Securing a better functioning in the goods and services markets and the preservation of a healthy environment

- although the Essen strategy focuses essentially on labour market issues, it must be stressed that the **well functioning of goods and services markets** is important to ensure high job creation in the medium run. Relying on non–competitive market structures is self–defeating in the longer run, also from the point of view of employment. The competitive pressure brought about by the completion of the internal market needs to be supported by a vigorous competition policy. Furthermore, a number of structural constraints need to be lifted in order to exploit fully the potential for enterprise and employment creation of the service sector.

- **environmental policies** should, to a greater extent than at present, rely on market–based policy instruments for reaching environmental policy objectives. Such instruments provide individual economic agents with the flexibility to look for the best way to reduce the pressure they exert on the environment and thereby allow least–cost solutions to environmental problems to be found. In addition, public authorities have a significant role to play, for example by eliminating environmentally harmful subsidies and by ensuring that the tax system rewards environmentally friendly behaviour. Some Member States felt that attention should, where necessary, be paid to modifying tax structures in ways which are likely to favour employment and benefit the environment, as stated in the broad guidelines of the economic policies.

Reforming the labour markets

- **better targeting of training provision:** priority must be given to enhance the employability of less qualified or obsolete labour by providing market–oriented training to the labour force. A too 'generalist' approach should be avoided as it delivers poor results from a cost–benefit viewpoint while committing a substantial amount of public funds. A well–tailored design and effective targeting to the less–skilled unemployed is a key to enhance the effectiveness of these policies to promote employment. Measures to reinforce labour's commitment to increase productivity and promote a more stable work force in the enterprise are necessary in order to enhance the efficiency of this training provision.

- **reviewing the tax burden at the lower end of the earnings scale:** the tax regime on lower income levels should be reviewed in order to remove undue barriers to work resulting from regressive tax schedules in both income tax and social security contributions (e.g. ceilings/floors for contributions vs. tax credits). Although evidence suggests that the overall effects on aggregate labour supply appear to be inconclusive and contradictory, low–productive jobs and part–time work would most likely be particularly responsive to changes in the marginal tax rate on earnings. This is important since part–time jobs have recently been an important source of employment creation in many Member States.

- **making total labour cost more flexible for the lower skilled:** Beside general reductions in non–wage labour costs targeted cuts in employer's social contributions could be reinforced to promote the creation of less–productive jobs (especially, in the new fields of social and local domains) or encourage additional recruits by enterprises or self–employed. The actual costs involved in hiring disadvantaged labour categories (e.g. new entrants, females, long–term unemployed, aged workers or handicapped) must be assessed and their access to work be facilitated. For instance, 'entry wages' could be extended providing temporary waivers from regulatory or conventional pay minima. It is however essential to carefully design these measures in order to avoid an eventual 'lock up' of these workers in low–paid jobs.

- **ensuring both efficiency and equity in the functioning of the social protection systems:** reforms should be addressed to remove undue disincentives for the benefit recipient to take up a job, enforcing a closer control on his willingness/availability for work (e.g. what is considered to be an 'acceptable job'), and providing technical and financial assistance in their active search for work. To tackle 'hidden' transfers of unemployed to different welfare schemes, which strain the financing of the welfare state, it is important to review the eligibility criteria and ensure a more efficient administration and enforcement of those welfare schemes neighbouring the unemployment protection function.

- **facilitating a higher labour mobility:** measures should be taken to remove structural and regulatory barriers to geographical mobility (e.g. ensuring an adequate degree of portability of pension and complementary benefits) and sectoral mobility (e.g. allowing for an easier and cheap mutual recognition of professional categories for comparative tasks across sectors). A closer look should be paid to the current occupational demarcations within the firm, established by regulations and collective agreements. In these areas, it is convenient to give a larger scope for collective bargaining to determine the content of the reforms, so as to ensure a better acceptance of the changes and secure that the latter meet the needs in the labour market.

- **securing a better job matching in the labour market:** public employment systems should need to give priority to providing more efficient job matching in particular for those labour categories particularly hard to place. Opening the job matching to private initiative may help introducing higher efficiency through competition, although it must be avoided that private employment services 'cream off' the unemployed by assisting only easier–to–place individuals. Furthermore, the exchange of information on job offers between the different job placement bodies within and between Member countries should be promoted further. There is ample scope for sharing national best practices in these areas.

- **reforming employment security provisions:** excessive regulation of dismissals and employment contracts can hinder necessary structural change and deter employers from hiring labour. Workers must be protected against unfair dismissal, discrimination and health and safety risks, but the benefits of regulation need to be better balanced against the costs.

With a view to further analyzing the employment evolution and to provide guidance for further lines for national policy action, it might be helpful to examine in more depth the following issues:

- to pursue the analysis on the tax/benefit systems and the functioning of the labour market,
- the link between well functioning goods and services markets and employment,
- the problems related to the financing of the social protection systems, and
- the flexibility of wages both at macroeconomic and microeconomic levels.

ACTION TAKEN IN NATIONAL LABOUR MARKET POLICIES
(SUMMARY TABLE)

Policy Areas/Problems (Essen Mandate) / Labour Market Institutions (EPC Reports)	*Country Panorama*
	Vocational Training
* vocational/continuing on–the–job training * transition to work from school/ vocational training	All Member States have undertaken short– and medium–term action to reduce the scale of the skills mismatch between labour supply and demand. Thus, a number of initiatives are underway to overhaul the whole vocational training system and the way public funds are spent on training. Overall, the emphasis has been on the provision of more market–oriented public–funded vocational training, in particular addressed to low– or unqualified youngsters (especially, through apprenticeship schemes). Furthermore and based on the assessment of previous experiences, many of the short–run reforms aim at ensuring an efficient targeting of the bulk of the public outlays, in particular by narrowing the policy approach to introduce new training measures intended to enhance the currently unemployed's working skills. In some Member countries, schemes have been introduced for funding on–the–job traineeship for unemployed youngsters combined with a temporary experience at a paid work with the same employer.
	Employment–Growth Intensity
* labour contracts (e.g. part–time, temporary and other non–standard contracts)	Most countries have eased regulatory constraints on temporary and part–time contracts, in order to provide flexibility in hiring labour. The regulatory and tax regimes on employees have been reviewed in many countries with regard to the non–standard labour forms (esp. part–time), with the view to removing undue obstacles to the spread of these types of working relationship.
* working time regulations/ arrangements (e.g. annualisation, overtime, leave schemes)	Some Member States have pursued policies to create a more flexible distribution of working time by reforming the regulations in force, so as to allow social partners to generalize more flexible patterns in the framework of the collective bargaining process. Most countries have de–regulated or legalized the recourse to interim and temporary work. Given the successful take–up since their appearance in some countries, public–funded schemes allowing for temporary leaves and career breaks by individuals have become permanent in most cases, except for the sabbatical leave of which the conditions have been tightened.
* wage flexibility and wage minima	Some public guidelines for wage moderation have been followed in most countries, in particular by giving an example of greater wage moderation and pay flexibility within the sphere of the public sector. In some countries, a nationally–wide policy of wage moderation has been considered to have greatly contributed to a relatively successful record in employment creation.
* social protection schemes (entitlement and level of benefit, enforcement and administration)	Welfare schemes (in particular, those closely related to unemployment) have been or are extensively reviewed in all Member countries. Many reforms have aimed at tightening the eligibility rules in order to e.g. take account of non–standard employment records (that is, seasonal or recurrent short unemployment spells). Closer co–ordination with the Public Employment Service has been aimed at, so as to enable a better control for the recipient's willingness or availability for work; furthermore, the recipient's discretion to judge a job offer as 'acceptable' has been narrowed in many Member States. Finally, the amount or duration of some unemployment and social benefits are being reduced or indexed in such a way that the gap between income at and out of work is widened, thereby acting as an incentive for the unemployed to actively search for work.
	Non–Wage Labour Costs
* indirect labour costs (esp. SS contributions) * labour turnover costs	Numerous general tax–funded schemes intended to reduce employer–paid social security contributions have been established or reconvened in most of Member States, providing either across–the–board hiring, or targeted reductions for new recruits at the lower end of the wage scale. Such targeted reductions in social charges are often combined with other measures intended to provide easier access to work for targeted categories of unemployed.
	Active Labour Market Measures
* labour mobility	In a number of Member States, different measures have been introduced to support geographical labour mobility. In particular, these address to easing barriers to mobility originated in the (rental) housing market, as well as selective financial support to afford re–accommodation costs.
* employment subsidies	Wage and hiring subsidies are often used in combination with other measures intended to encourage hiring of labour, often targeted to particular labour categories. In some cases, access to these schemes is conditional on a net creation of jobs. Schemes for providing financial and technical assistance for small business start–ups have been reassessed and enhanced.

	Active Labour Market Measures *(continued)*
* job search assistance and other employment services	In many countries, the Public Employment Services are being reformed by easing their overburden with administrative tasks and thereby free more resources for improving the quality and success of their job matching (often at a more decentralized level), in particular by focusing on the difficult–to–place job seekers. These reforms also intend to achieve a better co–ordination with the authorities responsible for the administration of welfare benefits. In some countries, the job matching has been opened to private employment agencies as well. The introduction of specific allowances to finance the individual's job search becomes generalized in many Member States.
	Groups Particularly hit by Unemployment
* specific job–creation programmes	Numerous measures have been taken to encourage hiring among the (very) long–term unemployed (LTU), the benefit–recipients, the low–qualified youngsters or other specific categories of disadvantaged labour (e.g. females, immigrants, aged workers, handicapped). Most of these programmes combine an employment subsidy, or temporary reduction in employer–paid social charges, with more flexible forms of labour contract.
* targeted job–search assistance	Special programmes for assistance and guidance in job search for these categories have introduced a more active role by the Public Employment Agencies, most often combined with the unemployed's participation in training programmes addressed to his/her working skills.
* specific wage arrangements (e.g. entry wages) * specific types of flexible contracts	Most countries have eased regulations on temporary and part–time contracts, in order to provide flexibility in hiring and to facilitate access to work for particular categories of the unemployed (LTU and first job seekers). Special contracts provide an (often) indefinite duration, a lump–sum or temporary wage subsidy, and/or reduced social charges. In some cases, the new recruits are temporarily exempted from coverage of regulatory/conventional wage minima and general working standards are not applicable (e.g. job protection, health insurance, pension rights, etc.).
* specific social protection arrangements (entitlement and level of benefit, control and administration)	Recently, some countries have allowed unemployment benefit recipients to temporarily continue receiving the benefit if accepting a job offer involves a substantial loss of earnings compared to the previous level of earnings.

ANNEX I : SOCIAL BENEFITS, TAXATION AND THE LABOUR MARKET

1. Introduction

In this annex to its Report on Employment, the ECO/FIN–Council presents the first results on its examination of the "effects of tax and support systems on the readiness both to create and to take up jobs".[3] This report concentrates in particular on the relation between taxation and the unemployment protection system. A summary of Member States' responses to a questionnaire on the national tax/benefit systems is attached at Annex Ic.

2. Background

Although this Report responds to the policy priority given to assessing the effects of tax/benefit systems on the incentives of economic agents to take up or create jobs, it must be noted that this relates only to part of the unemployment problem. Much of the negative employment performance in the Community and the corresponding dangers for budgetary sustainability of social protection systems across Member countries is related mainly to macroeconomic and other structural variables.

Since the early eighties, public expenditure on unemployment protection has risen substantially in all Member States in response to the overall high level of unemployment, which increased both the size of target groups to be protected and the extent of social protection itself. Measured in 1985 prices, for the Community as a whole, public expenditure on unemployment compensation increased by 60 per cent, in 1980–92. In countries such as GR, F, IRL and P, it grew at twice the average increase, as compared with the much smaller increases recorded in B and I. In terms of the share of GDP in 1992, unemployment compensation outlays ranged between 3 per cent or more (e.g. E, DK, NL and IRL) to less than 1 per cent in L, P, D, GR and I.[4]

Systems of social protection have three basic functions in relation to the event of being unemployed:

i) to insure employees against the possibility of loss of earnings should they become unemployed (*an unemployment insurance function*),

ii) to encourage a reasonably speedy return to work whilst allowing the unemployed to find a vacancy suited to their working skills (*an efficient job matching function*), and

iii) to supplement a household's income up to some minimum living standard when the bread–winner or any other member becomes unemployed (*a social protection function*).

The functioning of social protection systems may, however, give rise to problems in a number of ways.

Concerning the supply side of the labour market, the following efficiency problems arise:

- for those who are out of work, social benefits may result in high net replacement ratios which, when combined with long durations on benefit, may weaken the incentive to engage in active job search, thus producing longer spells in receipt of benefit. This increases the risk of creating a hard–core of long–term unemployed.
- for those who take up a low paid job supplemented with in–work benefits, additional gross earnings can lead to high implicit effective marginal tax rates, via the onset of income taxes, employee social security charges and benefit withdrawal. This creates 'poverty traps' in the sense that those taking up low paid jobs have little or no incentive to seek increased skills and productivity in order to obtain higher paid

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3 European Council Meeting, 9th and 10th December 1994 in Essen, Presidency Conclusions, Economic Issues, point 5.

4 EUROSTAT, *Social Protection in the European Union*, Rapid Reports on Population and Social Conditions, 5, 1994.

jobs. Economic, technological and regulatory barriers often lock such individual in low productivity jobs with limited alternative opportunities. Poverty traps reduce incentives and labour mobility and have adverse effects on structural unemployment.

- the structure of personal income taxation may affect the individual's willingness to increase the number of hours worked or perhaps, to take up a job in the official economy; this is likely to affect in particular, part–time employees. More generally, high effective marginal rates of taxation affect not only the size of registered labour supply but also the effectiveness of this labour supply, as they can contribute to high rates of structural unemployment.

- the administration and enforcement of eligibility and entitlement conditions depend upon the size of the population receiving social protection and the agents' perception of the overall economic situation. Moreover, problems in the design and policing of rules become more transparent when some of the unemployed have the opportunity to move on to other social protection schemes such as sickness, invalidity and early retirement programmes, where the benefits may be more generous, thus creating strains elsewhere in the system.

Turning to the demand side of the labour market, problems relate to:

- an employer's willingness to hire people responds to the evolution of total labour costs; indirect or non–wage costs may constrain the employer's willingness to create jobs, to the extent that such costs are (a) not perceived by the economic agents as being a part of labour's total remuneration and (b) because they are intrinsically less variable and responsive to the economic cycle, at least in the short run.
  Both analysis and empirical evidence suggest that lower skilled labour is particularly affected by a relatively higher rigidity in total labour costs, given that many non–wage costs components are not proportional to wages.
  In order to avoid creating a class of "working poor" through widening the wage scale, the Commission's White Paper has recommended that lower indirect labour costs be realised through targeted reductions in employer's social security contributions as a policy priority; a recommendation which has been re–iterated at the Essen Summit.

In addition, some analysis suggest that benefits which are too generous may generate a wage floor which compresses the wage distribution and locks out the lower skilled from employment. Further, an excessive burden of taxation on labour may affect negatively the overall level of employment, induce too much capital deepening and also harm price competitiveness in international markets. Also, there are stronger incentives to engage in fraud and to increase the size of the "black economy".

The disincentive or labour market efficiency problems mentioned above, need to be assessed against the social protection function of the benefit system itself. The income support mechanism has had a place of considerable importance in the way the so–called European social model has developed from the early sixties. Comparisons are often drawn with the United States in which its smaller welfare state may help in explaining its superior job creation record. However, this feature of US economy has been accompanied by important equity problems due to downwards pressure on real earnings for the lower skill groups, a widening earnings distribution and the creation of a class of people who are in work but nevertheless, have very low incomes. Indeed recent reforms in the US have extended the social protection system somewhat in order to tackle the emergence of these social imbalances.

Reforms of European labour markets should aim at increasing adjustment flexibility and at introducing greater wage differentiation with respect to qualifications of workers on the one hand, and with respect to sectoral and regional productivity divergences on the other. Experience indicates that in many cases, an individual worker prefers a low paid job rather than being unemployed. Nevertheless, the policy challenge is one of maintaining a satisfactory level of social protection overall, whilst improving the operational efficiency of labour markets and securing the sustainability of the costs of social protection systems compatible with the agreed macroeconomic fiscal policy of budgetary consolidation.

A simple summary of the main characteristics of Tax and Benefit systems in the Community and how they relate to the supply and demand sides of the labour market are set out in Annex 1a and 1c, attached to this Report.

3. Assessment of problems in the Member States

3.1 Major approaches to social protection

The diversity across the Union in the coverage and structure of social protection systems responds to the different needs in each country as well as to historical circumstances under which these structures have developed (see annex Ia and Ic).

Although there is no single, specific European approach or system, an overall view of the different national systems suggests that there are two broad approaches to social protection in case of unemployment.

A first approach which is seen in the social protection systems of many Member States is to provide high coverage, both in terms of replacement income and benefit duration especially for low incomes. Traditionally, both elements appear to have been particularly generous in the Nordic countries, where high net replacement ratios for lower incomes have been maintained over a long period of duration of benefits. However, the receipt of benefit is fairly closely linked to participation in a wide range of active labour market policies, in particular, professional training and job guarantee programmes so as to enhance the unemployed's working skills.

As unemployment has risen and has remained high in most of the Member countries, the budgetary burden of financing these systems has become very costly. Attention has turned to tightening of enforcement and control procedures as well as to reassessing eligibility conditions.

As a variant to this first type of unemployment protection system, a number of Member States (F, FIN, D, E) provide fairly generous benefits at the beginning of an unemployment spell, but the level of protection is gradually reduced fairly quickly over time, so as to create a progressively higher income loss and thereby increasing the incentive to fill existing job vacancies.

A second approach is that followed in the UK and to some extent IRL, where unemployment protection systems provide less coverage in both replacement income and benefit duration, so as to increase the gap between in work and out of work incomes. These systems are intended to encourage the unemployed to fill existing vacancies and then supplement earnings up to a minimum social income level. These in–work benefits may represent a substantial share in public expenditure, depending on the target population covered. Further, policy priority is given to labour market policies to address efficient job search and placement for the unemployed.

3.2 Assessment of the problems

In highly simplified terms, a number of trade–offs emerge, both within and between the above broad classes of systems.

Within the first type, the additional cost of enforcement, re–definitions of eligibility and active policing have to be balanced against the perceived need to maintain the levels of protection offered. In the second type, the costs of in–work benefits and active policies are balanced against the objective of getting people into work and the additional output which they produce.

Between the two systems, there is a further trade–off between the size of the '*unemployment trap*' which is induced by high out of work benefits and the scale of the '*poverty trap*' faced by those in work and which is created under the second approach.

Looking at the problems and the policy reactions in Member States in more detail, we observe the following:

- in those cases where net replacement incomes for the lowest income levels are very high, there may be the presumption that benefit recipients will be caught in an '*unemployment trap*', with few incentives to take up a job. In most cases, such 'traps' may be expected to occur in low–income households, especially those with children, in DK, IRL, NL and FIN. Further, this possible disincentive effect applies in particular, to low skilled workers who are at greatest risk in becoming unemployed. However, this potential problem must be balanced against the need to prevent a household's income from falling below a socially acceptable level.
- the presumption of a potential 'unemployment trap' becomes stronger in those cases where benefit duration is relatively long (e.g. B, DK, FIN, S, NL). While long administrative duration *per se* does not necessarily create disincentives to work, evidence suggests that such durations on benefit may induce lower skilled individuals to lose contact with the labour market thereby deteriorating their human capital. Early action through active labour market measures is needed to prevent this.[5]
- a problem of *moral hazard* relates to the fact that the multiplicity of social protection schemes and/or a looser administration may offer the possibility for employers and in some cases, employees to collude, so as to influence the occurrence of unemployment spells. This problem appears to affect in particular, those sectors subject to highly seasonal demand (e.g. tourism in Austria, transport[6] or those subject to restructuring).
- the transition from unemployment insurance to assistance benefits often implies a lower income replacement ratio. Hence, there is an incentive for the unemployed to move or to be transferred to other social schemes where the benefits provided may be more generous or eligibility criteria are more loosely applied. This is, or until recently, has been, a problem in DK, I, NL and the UK. It is therefore important to review current enforcement of eligibility criteria with more efficient administration of these protection schemes. This will help to avoid unnecessary budgetary strains.
- most often, the presence of children or family dependents entitles the household to receive additional social benefits, which are often flat–rate and may represent a significant complement for the household income, particularly at lower levels of earnings. In cases where receiving those benefits is incompatible with any paid work, a clear disincentive problem arises for the members of the household to take up a job, in particular in single–parent households.
- almost all countries have introduced measures to improve eligibility criteria and job availability tests and enforcement. Most measures aim to provide a more effective link between benefit receipt and active job search, better assistance from public employment services and tighter control on eligibility for unemployment and other related social protection schemes.
- the role of active labour market policies is important, particularly to provide better targeted assistance, to encourage the unemployed to return to work through training programmes with regular screening for job availability. Nordic countries have long experience with such policies and almost all Member States are now moving in this direction. However, active policies in the labour market are often expensive in budgetary terms and the design and effective targeting of such policies is a key to their effectiveness.
- whilst the effects of marginal rates of high income tax on the labour supply is probably small in the aggregate, evidence points strongly to part–time–employees, particularly females, as being relatively responsive to such tax changes. It is to be noted that part–time jobs have recently been a particularly important source of employment creation in many Member States. The tax regime applied to the lower income levels should be reviewed, in order to remove undue barriers to work by introducing less regressive tax schedules in both income taxes and employees contributions to social security schemes. For example, the effect of the different ceilings/floors in contributions should be assessed together with the relevance of tax credits for the lower incomes.
- as indicated in the strategy agreed in the Commission's White Paper, and re–iterated at the Essen Summit, a reduction in the level of indirect labour costs for the low paid has become a policy priority. Most Member States are introducing a wide range of different schemes providing a general or selective exemption of (mostly employer's) social security contributions, on either a temporary or permanent basis. However, those schemes targeted towards the low paid should avoid creating excessive marginal increases for labour with earnings close to, or at the eligibility threshold for contribution cuts.

4. Conclusions

Historically, the social protection and taxation systems have developed in response to many different policy demands and pressures. The possible unintended disincentives which distort the functioning of the labour market are only one dimension of this process. The currently difficult situation in overall employment and the public finances have highlighted the potential incentive problems derived from the existence of a reduced gap between in work and out of work incomes, possibly long durations on benefit, the possibility of high implicit effective marginal tax rates, relatively high non–wage costs for the low skilled and the equity costs of an uneven structure of marginal tax rates.

Within the Union, Member States are addressing these problems in a variety of ways. To stimulate willingness to take up jobs, a broad consensus is beginning to emerge regarding the better

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5 For instance, the Danish government has just proposed a combination of earlier activation and shorter benefit duration.

6 This explains, for example, that the housing and civil engineering sectors have a specific unemployment protection regime with special contributory rules, in particular based on more experience–rating for the enterprises' contributions.

targeting of benefits, tighter enforcement and control and a closer linkage to active labour market policies.

An alternative approach, currently limited to the UK and, to a certain extent, IRL is to give a more active role to wages as a means of introducing more flexibility in the functioning of the labour market, combined with in–work benefits addressed to encourage taking up a job whilst ensuring that low incomes earners attain a social minimum level.

From the standpoint of the willingness to create jobs, across–the–board or selective cuts in employer's social contributions have become the policy means to ease the burden of non–wage costs upon labour, in particular for the low skilled jobs.

The broad systems in the Community suggest the question of policy trade–offs between an unemployment trap which reduces incentives to work and a poverty trap reducing incentives to seek higher skills and better paid jobs. Some acceptable balance between the two has to be found. At this stage, the Committee can offer no clear answer to the question as to which strategy offers the best solution to higher employment and prosperity.

Thus it is not suggested that any one approach to social protection and labour taxation is in some sense "best". A number of different trade–offs suggest that policy choices exist in each Member State. What is clear, is that each system or 'approach' allows for some leeway to introduce further improvements in both efficiency and equity whilst making the functioning of the labour market more flexible, thereby generating a higher level of employment and securing a reduction in structural unemployment.

Annex I a : Main Characteristics of Tax/Benefit Systems Relevant to the Unemployed

There is a very large amount of diversity in social benefits and tax systems across the Union. Whilst comparisons are difficult, some typical characteristics relate to the following:

Benefits out of Work:

Gross/Net Replacement Ratios

Measured at average earnings, replacement ratios from unemployment *insurance* benefits tend to be fairly high in many Member countries, falling in the range of 55–85 per cent of the average production worker's income; the UK being lower with some 20–50 per cent. The figures for lower income earners are higher both in gross and net terms, amounting to 75–95 per cent in many Member States. Unemployment *assistance* and other *social benefits* alone produce markedly lower net replacement ratios, although the addition of earmarked tax–free benefits, in particular, child and housing allowances can lead to very high net replacement ratios for some low income households in countries such as Denmark, Netherlands, Finland and Sweden.

Duration and Time Profile of Unemployment Benefits[7]

High net replacement ratios from unemployment benefits may give rise to the presumption of an incentive problem if combined with relatively long duration on benefit. The longest entitlement periods for unemployment insurance benefit are in Belgium and Sweden (sometimes unlimited) and Finland (12 years), followed by Denmark, France and Netherlands (5 to 7 years).

As to the time profile of benefits, different approaches can be identified. Whereas some countries (UK and IRL) maintain a roughly constant flat–rate benefit at a relatively lower level, others (e.g. DK, S) maintain a fairly high level over time combined with a range of active labour market policies (mainly, vocational training and temporary job guarantee programmes). Other Member countries can be grouped closer to the latter approach, although with lower levels of protection.

It is worth recalling however that the benefit rate typically declines over time in many countries (e.g. FIN, E, D) and that long durations apply to few individuals with a long, standard work history and often include mandatory breaks for job training or temporary work. Further, any cross–country comparisons must take account of the fact that some countries tend to place unemployed groups, transferred from unemployment protection systems to other social schemes with longer or unlimited durations, particularly various kinds of early retirement and disability schemes.

Administration and Enforcement

The existence of long maximum permitted benefit duration, places greater responsibility on the benefit enforcement procedures to ensure that the system is not placed under strain. The increasing complexity of social benefit programmes and their interaction, together with continuing high unemployment, has led to a majority of Member States experiencing difficulties in applying and enforcing rules as required by legislated eligibility criteria.

The majority of Member countries have progressively introduced a number of reforms in the unemployment protection systems; tightening the definition and enforcement of the eligibility criteria, providing closer control and assistance for an active job search, and improving exchange of information between the administrative bodies in charge of benefit administration and job placement services.

Benefits in Work:

Implicit Marginal Tax Rates

In some countries, the combination of a low–paid job with the receipt of in–work social benefits can result in some individuals/households facing high implicit effective marginal tax rates. However, the very highest implicit marginal rates are concentrated in some low income groups and in principle, the numbers of individuals affected are likely to be very few.

The UK has introduced reforms which lower these implicit marginal tax rates, such that the latter cannot exceed 100 per cent, on a net income basis. However, these reforms have generated a further problem, the UK being the example, that the group affected by implicit marginal tax rates of 70–80 per cent amounts to some 5 per cent of the working population.

Taxes on Labour Income

In most countries of the Union, over the past decade, personal income tax structures have been streamlined and simplified. In particular, top marginal tax rates have been reduced. However, these reductions have often made those with incomes above the average relatively better off, whilst the income tax burden for those at lower income levels has increased. These reforms have also tended to reduce the gap between incomes in and out of work. For those in work, a risk is that higher average tax rates can increase pressure for wage demands.

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7 It should be noted that the maximum duration periods indicated here are the maximum entitlement for benefit for an insured employed with a long, standard work history. Only data from administrative sources can provide information on how long benefit recipients actually stay on benefit. It is difficult to make meaningful comparisons across countries from data on gross labour turnover flows from the Labour Force Surveys.

To calculate the effective tax burden levied on individual's income is a complicated exercise. When employee's social security contributions are included, marginal tax rates at average earnings fall in the range of 45–57 per cent in many Member States, with B, DK and I being the highest and with S and the UK the lowest, with a marginal rate of 35 per cent.[8]

Further, the net 'take–home' pay received by a worker differs substantially from the gross earnings paid by the employer and to a different extent across Member countries. In this respect, the disposable income for a single average–wage employee in the manufacturing sector can range from some 60 per cent of gross earnings (B, D, IRL) to 73 per cent in F, I and the UK and, at the highest, 82 per cent in P.[9]

Taxation on Labour Demand:

Indirect Labour Costs

The issues here are well known, given that the need to lower these costs is an important component of both the White Paper strategy and the Essen action points. Indirect or non–wage costs comprise mainly statutory and conventional social security contributions, other smaller costs being e.g. expenditure on vocational training.

The share of non–wage or indirect costs in total labour cost varies considerably across Member countries, ranging from less than 4 per cent in DK to 31 per cent in S in 1992.[10] Employer's social security contributions are by far the biggest indirect cost in all Member States. As a percentage of total labour costs, statutory employer's social security contributions range from 25–30 per cent (S, F, I, E, and B) to 1–15 per cent (DK, IRL, L and the UK). The different institutional framework helps to explain the marked disparity across Member countries.

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8 See OECD, *Taxation, Benefit and Employment*, 1994.

9 Indirect taxes and social welfare benefits are not taken into account in the calculation. See EUROSTAT, Net Earnings of Employees in Manufacturing industry in the European Union, 1994.

10 Provisional figures from the EC Labour Cost Survey 1992.

Annex I b : Social Benefits, Taxation and The Labour Market Summary of National Responses to the Questionnaires

	Replacement Ratios	Marginal Tax Rates	Non–Wage Costs	Benefit Duration/ Administration
B	Significant disincentive for low earners (single parents particularly) to enter labour market. But very few affected. RR at av. earnings 40–60% (gross); 52–75% (net). For minimex recipients no incentive to take any job below 80% of full time.		High costs to discourage overtime.	Indefinite benefit duration is possible – in practice, there are work availability tests. More restricted eligibility rules and stronger enforcement resulting from more recent measures.
DK	In 1992, 30% of families receiving substantial replacement benefits had NRR's>90%. By 1993, 24% of UB recipients had GRR's>90% with 54% having rates <80%. Very high (95%) for those on 1/2 average earnings long duration – up to 7 years on UB – but dependent on number of factors. Must be available for work.	Concentration of MTR's in range 45–60%. Very small number could have high rates (>70%)	Low costs in DK – 2–3% (due to alternative financing method, tax funded). Importance increases in 1994 – will rise to 8.6% by 1998 on employees and 1.6% on employers.	Very long UI–duration (7 years) possible, but subject to work availability tests. Tighter enforcement introduced, combining sanctions and possible loss of benefits.
D	UB on average represents 60% of the most recent net earnings, whereas UA is about 50%. For some, is 12 week delay before receipt of benefit. Significant gaps between net income and social assistance, depending on family type. Biggest work incentives for single people.		Reform of social protection systems with a view to reducing non–wage labour costs and increasing incentives to work in preparation and expected to come into effect in 1996.	Link UB to active job search, conditional on being offered a suitable job at least within the first year. Afterwards, benefit recipient must be willing to take up a job requiring lower qualifications; close linkage also with ALM Policies
GR	UB is about 50% of minimum wage, subject to entitlement conditions.	Income tax rate of 0 % of the first income bracket extended for an additional 300,000 GDr into the second income bracket for salaried employees. Employee social security contributions are proportional. The total amount, however, does not increase after a certain level of salary (no disincentive for skilled personnel).	Employment subsidisation programme targeted towards the most vulnerable. Is untaxed and not subject to employer's contributions.	Duration on benefit related to days worked – runs up to 12 months on UB – encourages participation..
E	For UI, RR's in range 60–70%. For UA is 75–125% but of the minimum wage.	Big problems for low skilled have been corrected by (a) benefits being taxable (b) reductions in RR's.	Social security contributions cut by one percentage point.	UB–duration linked to contribution record. Rights to UB related to job offers or training/re–training. Some problems of control at local level.
F	For UB recipients on low earnings RR's 75% gross and 90% net. For those on RMI, RR's at the SMIC 50–90% according to family circumstances.	For those at the RMI, recent reforms have smoothed implicit tax rates to encourage job take–up.	Reductions targeted at the low wages as a way to encourage new hirings.	UB related to previous work experience. Controls exercised e.g. involve work tests, acceptance of Training/apprenticeships – active job search

	Replacement Ratios	Marginal Tax Rates	Non–Wage Costs	Benefit Duration/ Administration
IRL	Prior to 1992, some RR's exceeded 100%. In 1995/96, general level has fallen – at bottom, could be 80–88%. 9.5% of the unemployed could face RR's >80%, 44.8% face RR's >60% – based on actual take–up of benefits.	High EMTR can exist through interaction of Family Benefit withdrawal and tax system. Maximum rate could be 100% – but estimated that very small numbers could be affected. Withdrawal rates of children allowances likely to create disincentives for households with children; reform underway to link allowances for dependent children to income level criteria, away from employment status or universal payments. Tax reforms taken to reduce marginal tax wedges for lower incomes (IR£ 9,000–12,000).	Main employer's contribution rate is 12.2%. Since 1994/95, cut to 9% for the lower paid to raise demand for jobs.	UB for 15 months – then move to long–term assistance (means tested). Benefits linked to work availability criteria. Refusal can lead to loss of benefit.
I	Earnings Guarantee Fund system implies an administrative RR of 80%, –extended UB (Mobilità) also. Ordinary UB coverage much lower, and with a RR of 30% of previous earnings.	Income taxes on average not thought to produce major disincentives to labour supply.	Highest level of employer's contributions in the Union. NWLCs appear to be shifted on to labour in lower wages. Reduction in social contribution rates for the young unskilled of 25%, with 50% in the South.	Both ESF and Mobilità can run for 12 months – but extended for older workers and in "crisis" regions (Mezzogiorno).
L	Tough controls on unemployed's availability for job explain suggest that the UB system does not generate disincentives to take up a job. Almost 50% of unemployed return to work after 1 to 3 months' unemployment spell.	Income taxes remain very low for UB recipeints. They do not negatively influence thelabour supply.	Social security contributions at a 10% flat rate. They do not actually appear as a disincentive to create jobs.	Unemployment benefits are provided for a period of 24 months. They amount to 80% of previous wages, up to a maximum of 250% of the social minimum wage (42.677 Flux in 1995).
NL	For families on minimum income level, RR is 100% (net). For single people (both at minimum and average income levels) and for the APW, 70% gross and 80% net. Wage related benefit is 70% of previous wage. Basic and longer term UB are both 70% of the minimum wage.	Over the whole income range, the marginal tax rate is 60%. Combination of benefit withdrawal (including Housing subsidies) plus tax and social contributions can produce EMTR's close to 100% for small numbers at the bottom.	At minimum wage, can be high at 19% of total labour costs (regressive social contributions, which are 22% at average earnings but fall at higher levels).	Benefit durations are long; UB up to 6 years, older employees can receive UB up to 7.5 years. UA has infinite duration up to pension age. Benefit administration agencies are not involved with the re–entry of unemployed into the labour market.
A	UI (base amount: 60%) plus other benefits may produce a net–replacement rate of up to 80%. No floor for UB benefits; social assistance addressed to top up minimum income level. Recently introduced a negative tax option up to 10% of social contributions paid by the employee, with the view to reducing the tax wedge and favouring job take–up.	No serious problems with implicit EMTRs – but benefit eligibility for part–time workers can lead to 'free–rider' effects by which part–timers substitute for full–time workers.	Levied at flat rate starting at lowest levels but with upper limit. At low incomes, only small disincentives because of steep wage profile. Council payroll tax has been increased both in the rate and the taxable basis (lower rates for SMEs).	Duration linked to contribution, record and age. Checks on eligibility and are work tests with sanctions.
P	For those at or close to the minimum wage, high replacement ratios – 88%. UB duration vary with age in the range 10–30 months. Special benefit for those no longer on UB – can be up to 100% of minimum wage depending on family circumstances.		Total rate is similar across wage scale (about 26% of total costs, with 21.6% paid by the employer).	Duration of UB related to age – runs from 10 months at 25 years to 30 months at 55 years. Regular checks on claimants involving Social Security agencies
FIN	For UB alone, net RR's at or below average earnings often falls in range 85–95%. For some other benefits at bottom of earnings scale, can be up 107%. Considerable variation according to type of benefit.	For most family types, is concentration of MTR's at 40–60%. Small numbers of unemployed with rates >70–80%, when other social benefits included. Disincentive problem related to children home care support.	Overall constant proportion across earnings range of 28.5%. Allocation criteria for wage subsidies have been tightened up.	UB–duration up to almost 2 years – is a 26 week previous work condition. Recent legislation has tightened rules and criteria.
S	Net RR 80–95% up to average earnings for UB. But can be very low (20–30%) if not in receipt of UI benefit biggest disincentives are for families with children. Disincentives removed through tighter job–search requirements.	Very small number of MTR's >80% (estimated for 1995). Significant numbers could fall in the range 30–60%. Single parents and families with two children plus are particularly vulnerable, and further reforms are envisaged.	Small differences by income level e.g. Employers contributions at – average earnings – 24%; at average earnings – 27%. Temporary wage subsidies exist for some parts of labour market programmes.	UI max. duration is 60 weeks, but can be extended if training is undertaken. Benefit levels not related to duration. Enhanced work tests and training requirements. Tighter controls in qualifying for sickness benefits.
UK	5% of working population have RR's >70%; very small numbers >100%. Incidence of very high RR's have been reduced by adopting net earnings as reference and by easier access to Family Credit. Experiments underway to improve incentives for childless couples and single people. Faster administration of in–work benefits.	Benefits assessed on a net income basis; hence are no MTR's >100% – but are larger numbers in range 65–80%, due to the in–work benefit. This is softened by reassessing eligibility only at six monthly intervals. Disincentives because child–care, mortgage relieves, and test of cohabitant's earnings	Progressive scale of employer contributions from 3% for 25% average earnings, up to 10.2% at 75% of gross pay. Recent reduction of rates, esp. for lower paid. Still problem of jumps in the marginal rates.	UB runs for 12 months – work tests and training requirements with benefit sanctions (up to 26 weeks). New Job seeker's Allowance, with tighter job availability. Faster administration of in–work benefits. Bonus applied to shifts from part–time to full–time jobs.

Annex I a : Unemployment Protection in the EU: Description of the Insurance (UI) and Assistance (UA) Schemes (May 1995)

(general schemes of unemployment protection, except those for early retirement or partial unemployment).

s: MISSOC (1994); EPC (1994); OECD Jobs Study (1994); OECD Employment Outlook (1991).

	B	DK	D	GR	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Principle:															
1. UI	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes	1. yes
2. UA			2. yes		2. yes	2. yes	2. yes	2. yes (b)		2. yes	2. yes	2. yes	2. yes	2. yes	
Max. Duration:															
1. UI	ilim.	48 m (a)	1. 156–832 d	1. 5–12 m	1. 4–24 m	1. 4–60 m	1. 390 d	1. 6–48 m	12–24 m	1. 6–60 m	1. 20–52 w	1. 10–30 m	1. 500 d	1. 150–450d	12 m
2. UA			2. ilim.	2. 18 m	2. 3–21 m	2. ilim.	2. ilim.	2. 12–48m		2. 6–24 m	2. ilim.	2. 5–30 m	2. ilim. (a)	2. ilim. (a)	
Earnings of Reference:															
1. UI	a.g.e.	a.g.e.	1. a.n.e.	m. w.	1. b. SSc.	1. a.g.e.	1. a.g.e.	a.g.e.	a.g.e.	1a. a.g.e. 1b. m.w.	1. a.n.e.	1. a.g.e.	a.g.e.	a. g. e.	a.n.e.
2. UA			2. a.n.e.		2. m. w.	2. a.g.e.	2. a.g.e.				2. u.i.	2. m.w.			
Nominal Rates: (% of ref. earn.)															
1a. UI full rate	1a. 55–60	90	1a. 67–60	1a. 56	1a. 70	1a.40.4% + FF55.3 or 57.4% (1)	1a. IR£ 61.0	1. 30–80	1a. 80	1a. 70	1. 57	1a. 65	1a. UA benefit + 20–42% wage–related	1. 80	flat amount (£45.50 –£75.50)
1b. UI reduced rate	1b. 35–60			1b. 50	1b. 60	1b. decr.			1b. (2)	1b. 70					
2. UA rate			2. 57–53		2. 75–125	2.flat amount	2. IR£ 58.9 –61.0	2. 80–60	2. 70–40	2.flat amount	2. 90–95	2. 70–100	2. 118 FIM/d		
Rate Decreasing over time	yes	no	no	yes	yes	yes	no	yes	no	yes	no	no	no	no	no
Benefit Ceiling and/or Floor	both	ceil.	ceil.	both	both	both	ceil.	ceil.	ceil.	yes	yes	yes	no	ceil.	ceil.
Benefit Modulated to Family Circumstances (children/income–earningspouse)	yes	no	yes	yes	1. no 2. (yes)	no	yes	no	yes	yes	yes	1. no 2. yes	yes	no	(yes)
Tax Liability	part.	full	part.	part.	full	part.	part.	part.	full	full	no	no	full	full	part.

Key: **Max. Duration:** d. = days, m. = months, ilim. = no limit. Benefit duration is often longer for older unemployed (D, F, I, L, NL...) or particular regions (I).

Earnings of Reference: *a.g.e.* = gross earnings averaged over a time period, *a.n.e.* = net earnings averaged over a period of time, *lst.e.* = gross earnings when becoming unemployed, *b. SSc.* = averaged SS contribution assessment basis, *m. w.* = statutory minimum wages, *u.i.* = amount of UI benefit previously received.

Note: In some cases (D, GR and E) the reference earnings typically represent **less** than 100 per cent of total earnings because of the specific structure of workers' earnings.

Benefit Rates: (1) *Allocation Unique Degressive*: higher replacement ratios for monthly wages below 9700 FF, since the benefit combines a component related to the reference wage (40.4%) with a flat–rate payment. The rate decreases every 4 months. *flat* = flat–rate amount.

(2) In L, the nominal replacement rate remains at 80 per cent after 182 days on benefit, although the ceiling for the benefit is progressively reduced over time (from 250 per cent to 150 per cent of social minimum wage). First–job seekers holding one or no professional degree are also entitled to assistance benefits (70 per cent and 40 per cent of the social minimum wage, respectively).

Note: In some countries the benefit rate increases progressively with the age of the beneficiary (F, D, A), the family status or is adjusted to cohabitant's income (B, D, L, FIN, S, UK, P and A).

Tax Liability: *part.* = unemployment benefit is considered to be *partially* liable to the income tax when special tax reliefs or special exemptions for unemployed exist (esp. for the lower–income earners).

Notes: (a) Job–Guarantee programmes (e.g. in Scandinavian countries) often allow long–term unemployed to qualify for further UB entitlement, thereby prolonging the duration of the benefits almost indefinitely.

(b) Although originally designed as a short–time work scheme, the effective functioning of the Special Earnings Fund (Cassa Integrazione Guadagni ordinaria/straordinaria) makes it similar to an insurance–based scheme (esp. concerning CIG beneficiaries working very few or no hours), in addition to the low–coverage formal ordinary UI benefit (Sussidio Ordinario di Dissoccupazione). Similarly, the Mobility allowance (Sussidio di Mobilità) would appear to effectively operate like an UA scheme. To participate in both schemes, employers must contribute on an experience–rated basis.

ANNEX II : ECONOMIC GROWTH AND THE ENVIRONMENT: THE MAIN ISSUES

1. Introduction

In this annex to its report on employment the ECO/FIN–Council presents its main findings on the issue of "Economic Growth and the Environment" referring in particular to

- the relationship between economic growth and environment (part 2)
- the choice of the most suitable environmental policy instrument (part 3)
- the potential environmental and employment gains from a tax reform (part 4).

2. The relationship between economic growth and the environment

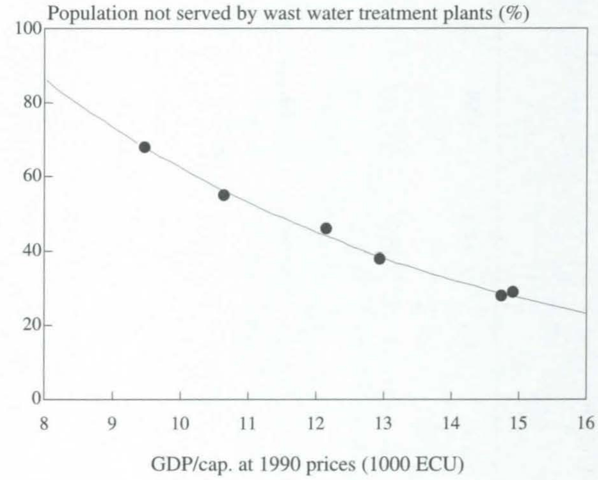
As set out in the Commission's Communication ("Economic Growth and the Environment: Some Implications for Economic Policy Making" (COM(94)465)), there is no linear relationship between economic growth and its impact on the environment. This is mainly due to the fact that technologies tend to become more efficient over time, that the composition of economic activity changes towards less pollution– and resource–intensive sectors and that the demand for environmental quality increases with economic prosperity. As a result, there are many types of environmental problems that either have continuously decreased in line with economic growth (see the example of lack of safe drinking water in graph 1a) or that have first increased and then decreased (inverted U–shaped, SO_2 in graph 1b). On the other hand, there are also a number of environmental pressures where a clear positive relationship with economic growth can be detected (e.g. CO_2 emissions, graph 1c, or reduction in biodiversity). It is worth noting, in this context, that a number of these growing pressures seem to be related to private transport. This is borne out, for instance, by graph 2, showing the past and expected trends in sectoral CO_2 emissions.

What is important to stress, however, is that in most cases where environmental problems have been reduced in parallel with economic growth, this has been, at least partly, due to policy interventions. This is true for local environmental problems like lead emissions from transport (see graph 3), as well as for global issues like chlorofluorcarbons (CFCs) the phasing–out of which has been agreed under the Montreal Protocol concerning substances destroying the ozone layer.

The above examples clearly illustrate that there is no unambiguous linear relationship between economic growth and pressure on the environment. In order to assess whether the present economic growth trend in the EU is altogether environmentally sustainable or not, the trends of the different environmental pressures therefore have to be aggregated so as to provide an overall picture. Unfortunately, there are no adequate statistical tools, yet, to allow such an overall assessment. While there are already well established economic accounts, allowing a comparatively precise measurement of economic activity, no such generally accepted aggregate indicator exists yet for changes to the environment. For this reason, the Commission has recently proposed a work programme for the EU concerning the development of integrated economic and environmental accounts, focusing on the development of Environmental Indicators and "Greening" of National Accounts (COM(94)670).

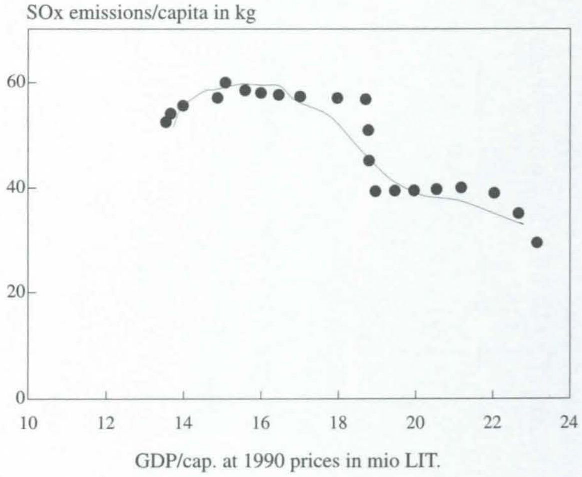
GRAPH 1 : **Illustrative examples for the relationship between per capita GDP and environmental pressure**

GRAPH 1a : **Lack of wast water treatment facilities in EUR–15**
(1970 to early 1990s)



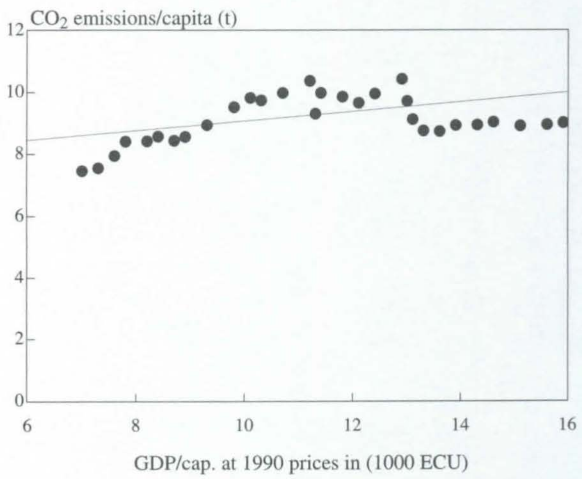
Source : OECD.

GRAPH 1b : **SOx emissions and economic growth in Italy**
(1970–1990)



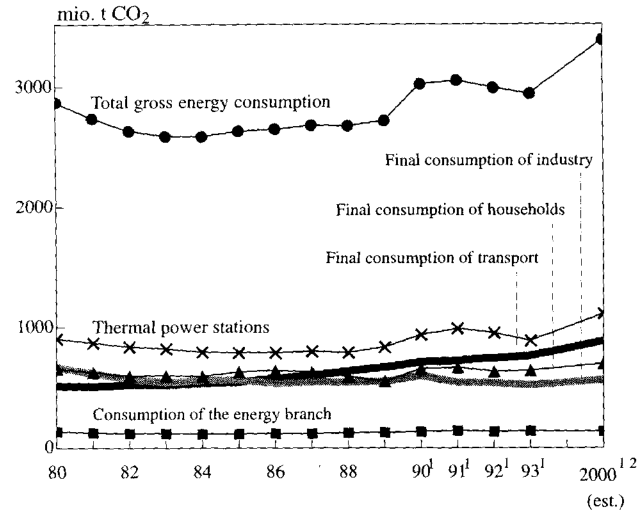
Source : OECD, Commission services.

GRAPH 1c : **CO_2 emissions and economic growth in EUR–9**
(1960–1990)



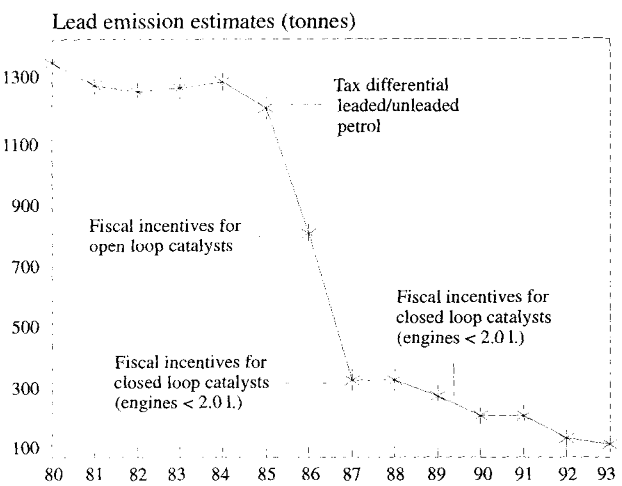
Source : Eurostat.

GRAPH 2. : **Sectoral CO_2 emissions in EUR–12** (1980–2000)



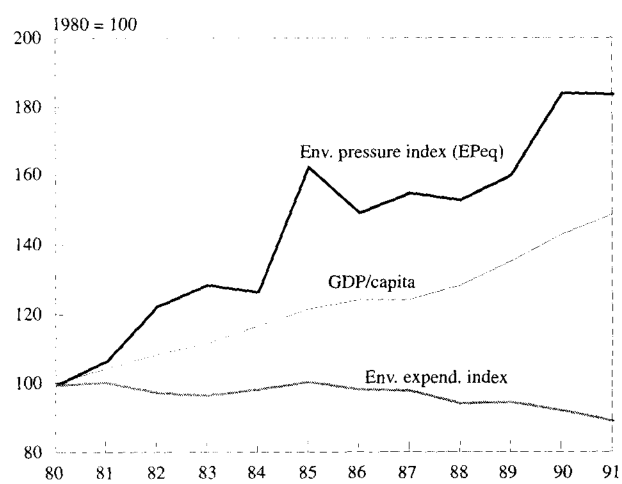
(1) Including former GDR.
(2) Reference scenario of the 1992 MIDAS simulations.
Source : Eurostat, Commission services.

GRAPH 3. : **Lead emissions from road transport and related policy measures** – The Netherlands 1980–1993



Source : Eurostat, Commission services.

GRAPH 4. : **Environmental pressures, environmental expenditures and GDP** – The Netherlands 1980–1991



Source : Adriaanse (1993), Commission services, Ereco.

At the national level, some Member States have already relatively well developed integrated economic and environmental accounting systems, allowing useful input into the policy evaluation. The Netherlands, for example, has developed a system of environmental pressure indices, allowing progress of environmental policies to be closely monitored. Although the amount of progress made in the past decade varies between environmental areas, it appears that, on the whole, the Netherlands has been able to decouple economic growth from pressure on the environment (see graph 4). Denmark has also established a system of environmental pressure indices and is presently implementing a strategic environmental planning process, ranging from objective setting to continuous monitoring and progress assessment routines. It is presently impossible to say, however, whether other Member States have made similar progress. The lack of comparable information systems in other Member States underlines the desirability of the above–mentioned coordinated work programme.

3. The choice of the most suitable environmental policy instrument

Even though traditional regulation will still have an important role to play in the future, there is by now a broad agreement in Europe on the desirability of a more widespread use of market–based instruments in environmental policy. This paradigm shift has been highlighted by the 5th Environmental Action Programme and the Commission's Communication on Economic Growth and the Environment. By improving the cost–effectiveness of environmental policies (see Box 1), a greater use of market–based policy instruments will ensure that any possible negative effects of environmental policies on economic growth are minimised. In addition, there should of course, wherever possible, be an appropriate comparison of the potential costs and benefits to the environment and the various economic variables affected, of action or lack of action, not only in the area of the environmental policy, and not only at the Community level.

As to the appropriate choice of policy instruments, such a decision should always be undertaken in view of the environmental characteristics of the specific environmental problem at hand. Nevertheless, a few general observations can be made:

- Traditional regulation is generally best suited in cases where direct health hazards are involved (e.g. toxic chemicals) or where, for different reasons, the market mechanism is unlikely to work (e.g. lack of information or awareness). It can also be well suited in cases of particularly sensitive ecosystems and when biodiversity is threatened. It will therefore continue to be a cornerstone of environmental policies.
- Environmental taxes and charges are potentially an attractive solution when the environmental problem is (closely) related to the purchase or use of a product (e.g. the combustion of fossil fuels in the case of CO_2 emissions) and where a large number of economic subjects are involved. Although the main purpose of such fiscal instruments is to change behaviour and not to raise revenues, most environmental taxes will have the side–effect of raising revenues as long as the costs of pollution avoidance are not close to zero. If this results in an undesirable increase in the overall tax burden, appropriate ways have to be found for reducing the tax burden elsewhere in the economy.
- Tradable permits or certificates could be an attractive option when the aim is to reach a specific quantitative (emission) target and when the number of participants is neither too small (problems of market power and thin market), nor too large (problem of high transaction costs). Potential applications could include, for example, SO_2 emissions from large combustion plants. One of the main issues, when setting up a tradable

permit scheme, is the initial allocation of permits or emission rights. In practice, most schemes issue permits to participants on the basis of their present (or past) pollution. Although this type of allocation helps overcoming resistance to the introduction of tradable permit schemes, it has the disadvantage of implicitly rewarding those who have undertaken little abatement effort in the past. An alternative allocation mechanism would consist of auctioning the permits, thereby raising revenues similarly to those associated to the introduction of environmental taxes. To date, very little practical experience with tradable permit schemes exists in Europe and it is unlikely that such a type of instrument will play a major role in the near future. However, in the USA the system has been applied in several cases

- Voluntary or negotiated agreements are usually best suited for cases where only a limited number of companies are involved (low transaction costs), where these companies are well organised at branch level, where the costs of the agreed environmental measure are small (in order to reduce free rider incentives) and where there is a credible threat of sanction in the case of non–compliance. On the other hand, such agreements have the disadvantage that there is little transparency about the costs of an environmental measure, that they are unlikely to be dynamically efficient (no economic incentives to improve agreed standards) and, moreover, that there is the risk of collusion (anti–competitive behaviour). It is worth mentioning that some Member States, in particular the Netherlands, have had a positive experience with such agreements. In the Community context, negotiated agreements could in principle either be used at the national level, for example in order to implement Community law, or directly at the Community level. While in the former case the implications for competition and state aid policy have to be assessed, issues of representativeness and enforceability would have to be dealt with in the latter case.
- Finally, there are a number of other instruments, like civil liability schemes, deposit refund systems or financial incentives, that can play a useful role in environmental policy. Here as well, it has to be carefully analysed which degree of co–ordination or harmonisation within the EU is required in order to cope with environmental problems as well as to preserve the smooth functioning of the Internal Market.

In practice, it might often be attractive to combine two (or even more) policy instruments. Voluntary/negotiated agreements, for example, could in specific circumstances be used in cases where certain branches are exempt from environmental taxes, while trading schemes could complement traditional regulation. In any event, it is important that such instruments are introduced **gradually and predictably** in order to avoid unnecessary adjustment costs. One further important condition for the successful application of market–based instruments should be mentioned in this context. By definition, such instruments can only fulfil their role if it is possible to organise properly functioning markets, close to the environmental externality of concern. Moreover, such instruments should not simply be superimposed on existing structures (e.g. tax systems), but should ideally be part of a comprehensive effort to improve the functioning of markets and to reduce the distortions introduced by taxation.

A look at the present use of different types of policy instruments in the European Union reveals a predominance of traditional regulation at the national level, and even more so at the Community level. To some extent, this might also be due to the fact that the costs imposed by regulation are usually hidden while they are only too visible for market–based policy instruments like environmental taxes. As a result it is often politically more difficult to use "economic instruments" instead of "command–and–control" types of legislation. In some Member States, however, considerable use is being made of fiscal instruments (see table 1). Such environmental taxes and charges most frequently refer to emissions to air (CO_2, SO_2, NO_x), to water (effluent charges) or to waste (packaging or landfill charges). On the other hand, there are only very few cases of tradable permit schemes, in particular when compared to the United States.

TABLE 1 : **Economic instruments per country on 1.1.1992**

	Charges on emissions*	Charges on products**	Deposit refunds	Tradable permits	Enforcement incentives
Denmark	3 (2)	10 (2)	2		
Germany	5 (2)	3 (3)	2	1	
Netherlands	5 (2)	4 (2)	2		
Belgium	7 (2)	2 (2)	1		
Portugal	4 (1)	3 (1)	3		
France	5 (2)	2 (1)			
Italy	3 (2)	2 (0)			
Ireland	2 (2)	1 (1)			
Greece		2 (1)	1		
Spain	3 (2)				
UK		1(1)	1(1)		
Sweden	3(2)	11(2)	4		2
Finland	3(2)	10(2)	2		
Norway	4(2)	8(2)	3		
Austria	3(1)	4(2)	3		
USA	5(2)	6(1)	4	4	2
Japan	3(1)	1(1)			
Switzerland	3(2)	2(2)	1		
Australia	5(2)	1(0)	3	1	2
Canada	3(2)	7(3)	1	2	1

* of which user charges.
** of which tax differentiations.

Source: OECD, Integrating Environment and Economics: the Role of Economic Instruments, May 1993.

With respect to **the role of the European Union**, several aspects are worth mentioning.

- Firstly, attention should be given to potential institutional barriers to a more widespread use of the market mechanism in environmental policies. There is indeed the risk that the existing Council voting rules could introduce an instrument selection bias to the detriment of market–based policy instruments like environmental taxes and charges. While, for example, technical emission standards are likely to merely require a qualified majority (in the Environment Council), economically more efficient emission charges would necessitate unanimity (in the ECOFIN Council).
- Secondly, diverging local conditions, preferences and traditions imply that each environmental problem should be dealt with the most appropriate hierarchical level (local, regional, national, Community–wide, international). Thus, in line with the subsidiarity principle, Community–wide environmental issues are preferable whenever the dimension of a specific environmental problem is Community–wide, or even global. Clearly, the more international environmental problems will be addressed by action only taken by individual Member States or sub–groups of Member States, the more not only will the cost–

TABLE 2 : **Sectoral (direct) production cost increases due to a US$ 3/b and a US$ 10/b CO_2/energy tax, Belgium**

	NACE	Energy cost share	Fuel price increase due to 10 $/b tax	Fuel price increase due to 3 $/b tax	Direct production cost increase due to 10 $ tax	Direct production cost increase due to 3 $ tax
		(%)	(%)	(%)	(%)	(%)
Sensitive sectors						
Hard coal extraction	111	14.39	51.5	15.5	7.4	2.2
Gener. and distr. of power	161	20.08	51.5	15.5	10.3	3.1
Gener. and distr. of steam	163	49.06	51.5	15.5	25.3	7.6
Iron and steel	221	15.11	51.3	15.4	7.8	2.3
Extract. of other minerals	239	12.42	44.7	13.4	5.6	1.7
Clay products	241	13.15	44.3	13.3	5.8	1.7
Cement	242	16.96	44.3	13.3	7.5	2.3
Glass	247	5.86	44.3	13.3	2.6	0.8
Moderately sensitive sectors						
Coke ovens	120	7.27	58.0	17.4	4.2	1.3
Water supply	170	4.38	44.7	13.4	2.0	0.6
Extract. of build. materials	231	7.32	44.7	13.4	3.3	1.0
Stone, non–met. minerals	245	11.56	44.3	13.3	5.1	1.5
Ceramics	248	5.46	44.3	13.3	2.4	0.7
Basic chemicals	251	4.98	39.3	11.8	2.0	0.6
Man–made fibres	260	5.19	39.3	11.8	2.0	0.6
Foundries	311	6.1	38.1	11.4	2.3	0.7
Starch products	418	5.97	40.0	12.0	2.4	0.7
Textile finishing	437	5.32	39.9	12.0	2.1	0.6
Semi–finished wood prod.	462	3.7	40.2	12.1	1.5	0.4
Pulp, paper and board	471	5.98	40.1	12.0	2.4	0.7

Source: INS/NSI, Eurostat, Commission services.

effectiveness of such policies deteriorate, but the effects on intra–EU competitiveness will also increase. As individual Member States are likely to be tempted to shield exposed sectors from such negative effects, the Community's competition and state aid policy will have to ensure that explicit or hidden subsidies do not impair the functioning of the Internal Market. Thus, there are significant benefits to be reaped from coordinating policies within the EU. However, often national policies to curb international environmental problems are needed at an initial stage in order to promote a process that can eventually result in action at the EU level.

- Thirdly, even in cases where the environmental problem is not of a Community–wide nature, there may be advantages from having a coordinated Community response. This could be the case, for example, when there are significant economies of scale or when the national set of policy instruments is severely restricted by Community law (e.g. product standards in the context of the Internal Market). In some of these cases the use of market–based policy instruments could be facilitated at the national level by preparing guidelines setting out the constraints imposed by Community legislation (e.g. in the area of state aid and competition policy).

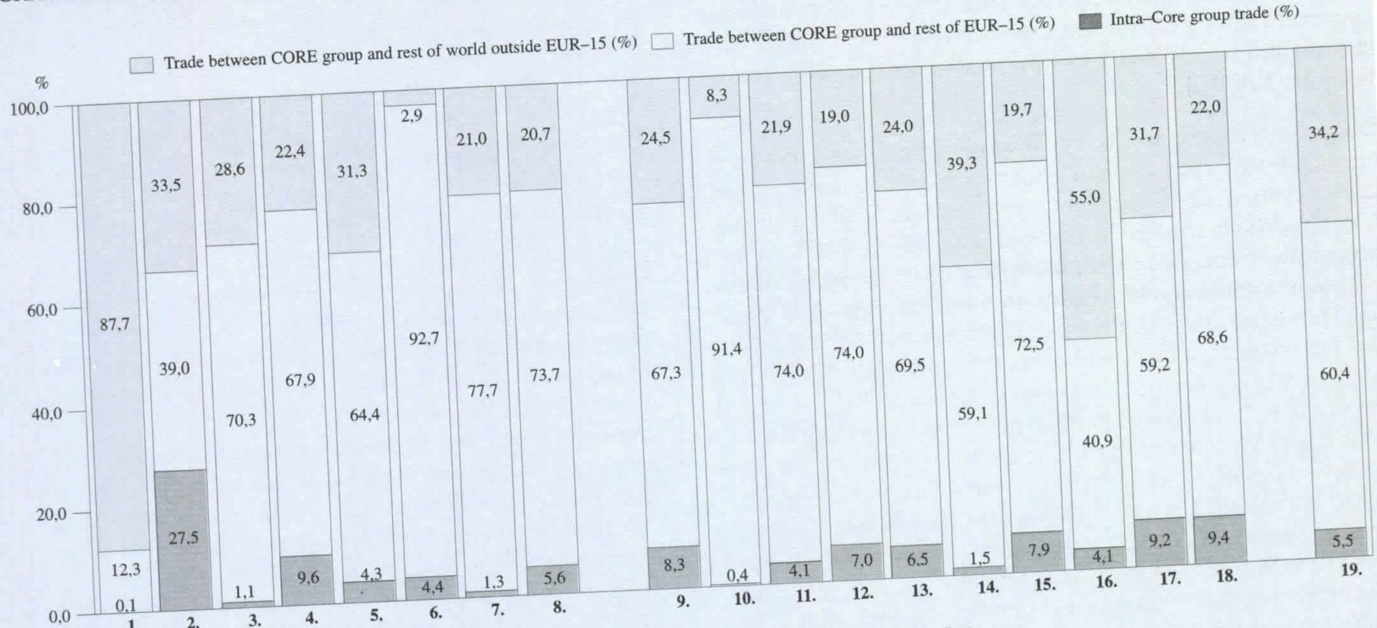
The above–mentioned potential intra–EU competitiveness issues that can arise by addressing global externalities with national measures can be illustrated by the case of uncoordinated, national CO_2/energy taxes. Preliminary analysis undertaken by the Commission services (see graphs 5 and 6) points towards the conclusion that national CO_2/energy taxes introduced unilaterally or in a small group of Member States at significant rates could have some negative competitiveness impacts for a small number of energy intensive sectors. However, from a macroeconomic perspective, these impacts would not be of significant importance, if a number of conditions are fulfilled (the tax is gradually phased in, flexible markets allow enterprises to adapt to changes in input prices, and the tax is implemented in such a manner that it does not deteriorate the macroeconomic conditions under which firms operate (e.g. by insisting on revenue neutrality of the tax)). Nevertheless, both the sectoral and the regional impacts of the introduction of CO_2/energy taxes deserve further analysis. The sectoral competitiveness effects could probably be reduced, if a larger subgroup including economically important EU Member States were to introduce the tax. Of course, the long–term political objective has to be policy action at the broader international level.

4. The potential environmental and employment gains from a tax reform

Economists generally tend to be sceptical as to the possibility of having "a free lunch". Standard textbook economic theory assumes rational behaviour, full information and optimal policies, therefore leaving little room for Pareto–improving reforms. Moreover, economic theory suggests that the number of policy instruments has to be at least as large as the number of policy objectives in order to reach optimality. Environmental policies should therefore not be (ab)used as a means of employment policies and vice versa. In particular, environmental taxes should be introduced for internalising the environmental costs of production and consumption, and not for raising revenues. However, in practice there can be little doubt that there is room for reforms that would simultaneously entail economic and environmental benefits. The removal of subsidies to environmentally harmful economic activities is a good example at hand. Moreover, few would argue that existing tax systems are economically optimal either from the employment or from the environmental point of view.

In this context, it is also often advocated to reform existing tax and charge systems so as to simultaneously improve employment and environmental protection (the so–called "double dividend" hypothesis). Such a operation could consist, for example, of the introduction of carbon taxes in order to reduce CO_2 emissions

GRAPH 5. : **Geographical structure of CORE group (DK, NL, S, FIN) trade in selected sectors 1992**



Total trade :

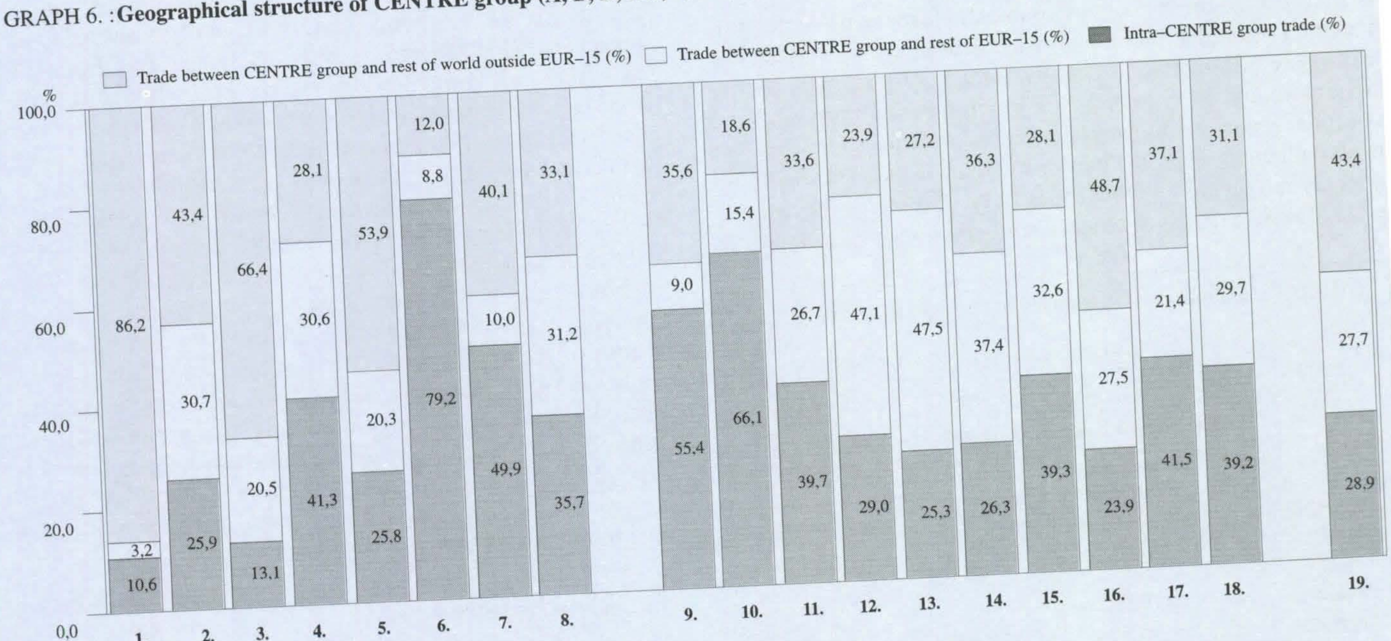
Sensitive Sectors — 000 ECUs

- –Hard coal extraction (111) — 1 033 692
- –Gener. and distr. of power (161) — 563 022
- –Gener. and distr. of steam (163) — 5 980
- –Iron and steel (221) — 7 793 275
- –Extr. of other minerals (239) — 484 816
- –Clay products (241) — 179 144
- –Cement (242) — 434 925
- –Glass (247) — 2 010 488

Moderately Sensitive Sectors — 000 ECUs

- –Coke ovens (120) — 1 282 430
- –Water supply (170) — 5 833
- –Extr. of building mats (231) — 828 525
- –Stone, non–met. minerals (245) — 633 836
- –Ceramics (248) — 1 951 663
- –Man–made fibres (260) — 930 346
- –Foundries (311) — 1 830 466
- –Starch products (418) — 2 806 975
- –Semi–finished wood products (462) — 1 293 592
- –Pulp, paper and board (471) — 12 711 489
- **–Total**

GRAPH 6. : **Geographical structure of CENTRE group (A, B, D, DK, F, NL, S, FIN) trade in selected sectors 1992**



Total trade :

Sensitive Sectors — 000 ECUs

1. Hard coal extraction (111) — 3 663 931
2. Gener. and distr. of power (161) — 3 555 111
3. Gener. and distr. of steam (163) — 61 028
4. Iron and steel (221) — 28 513 720
5. Extr. of other minerals (239) — 1 850 339
6. Clay products (241) — 469 160
7. Cement (242) — 1 100 319
8. Glass (247) — 8 606 497

Moderately Sensitive Sectors — 000 ECUs

9. Coke ovens (120) — 752 016
10. Water supply (170) — 28 493
11. Extr. of building mats (231) — 2 021 384
12. Stone, non–met. minerals (245) — 2 632 450
13. Ceramics (248) — 9 275 943
14. Man–made fibres (260) — 4 678 531
15. Foundries (311) — 8 671 755
16. Starch products (418) — 5 371 093
17. Semi–finished wood products (462) — 3 576 792
18. Pulp, paper and board (471) — 23 237 605
19. **Total** — **1 312 051 540**

(first instrument), combined with a reduction in the burden of taxes and charges on employment (second instrument). Although the idea is intuitively appealing, there seems to be broad agreement among economists that such **a double benefit is uncertain and is only likely to emerge if certain specific conditions are fulfilled.**

On the labour market side, the main condition for employment creation is that a reduction in labour taxes actually reduces total labour costs and, consecutively, increases demand for labour. **Clearly, which change in taxes or charges is the most appropriate for increasing employment strongly depends on the economic situation and institutional setting of each individual Member State.** Although, theoretically, a change in labour taxes or charges could be fully compensated by changes in real wages, for example when such charges are perceived as deferred income (e.g. future public pension payments), therefore leaving total labour costs unchanged, the empirical evidence for most European countries seems to suggest that this is not what happened in the past. Even though there are significant differences between countries, OECD calculations indicate (see Table 3 taken from the OECD Jobs Study), for example, that, in the past, approximately half of an increase in taxes has been shifted forward into higher labour costs. A broad consensus between governments, employers and trade unions concerning the desirability of a reduction in non–wage labour costs could help ensure that this condition for a "double dividend" is fulfilled. Moreover, there is reason to believe that the environmental benefits related to such an operation can help in reaching such a consensus. A recent European–wide opinion poll (Eurobarometer) indeed showed significant public support for the idea of shifting the tax burden from income or social security contributions to environmentally harmful products and activities (more than 70% of people interviewed agreed strongly or somewhat with the idea), indicating that there is scope for a broad consensus.

With respect to the role of environmental taxes as a source of financing for a reduction in non–wage labour costs, a number of factors are of importance. Firstly, such environmental taxes or charges should be introduced for environmental purposes (and not for revenue raising purposes) and should not act as indirect taxes on labour. Thus, the burden of environmental taxes should not only fall on those in the labour force. Secondly, the revenue yield of such taxes has to be sufficiently high and stable in time to be suitable as a source of financing a reduction in labour taxes and charges. Both of these conditions could be fulfilled in the case of broad–based taxes like, for example, carbon/energy taxes. To begin with, part of the energy tax burden is carried by capital and transfer income earners as well as foreigners (almost all EU countries are net importers of carbon fuels). In addition, as mentioned above, CO_2 emissions tend to increase with economic growth, and on the other hand real energy prices have now declined for several years. The Community's CO_2 emission limitation objectives are, in fact, such that the expected revenues from carbon/energy taxes would amount to several billion ECUs per year for the foreseeable future. According to OECD calculations (see Table 4) the carbon tax revenues in the EU resulting from a policy aiming at the mere stabilisation of CO_2 emissions at their 1990 level should rise from approx. 60 billion USD in the year 2000 to more than twice that amount by the year 2050.

TABLE 3 : **Labour cost responses to changes in tax rates** (1)

	Elasticity of labour costs with respect to		
	Employers' social security contributions	Value–added taxes and excises	Income taxes and employees' social security contributions
Germany	1.0	1.0	1.0
Canada	0.8	0.8	0.8
Japan	0.5	0.5	0.5
Finland	0.5	0.5	0.5
Australia	0.5	0.5	0.5
France	0.4	0.4	0.4
Italy	0.4	0.4	0.4
Sweden	0.0	1.0	0.0
United States	0.0	0.0	1.0
United Kingdom	0.25	0.25	0.25

(1) Since in some countries the effect of income tax systems contains impacts of both average and marginal tax rates, the elasticities in this table have been calculated on the assumption that these two rates move conjointly.

Source: The OECD Jobs Study.

TABLE 4 : **Carbon tax revenues in a scenario stabilising OECD CO_2 emissions at the 1990 level** (billion 1985 dollars)

	1995	**2000**	**2005**	**2030**	**2050**
USA	55.2	102.8	117.9	139.4	190.4
Japan	17.1	35.9	47.4	60.7	97.4
EUR 12	34.7	64.9	74.9	90.9	130.6
other OECD	12.6	23.8	27.5	35.3	51.1

Source: OECD (1994).

It is therefore not surprising to see that several Member States have expressed interest in this idea or have even already begun moving into this direction. Belgium, for example, is considering the introduction of a CO_2 tax, the revenues of which would be used for a targeted reduction in non–wage labour costs (social security contributions). In a similar vein, Denmark has recently adopted a comprehensive package of "green taxes" on energy use, part of the revenues of which should be used for reducing taxes on labour income. It is calculated that Danish CO_2 emissions will be reduced by 4–5 per cent without negative effects on employment. In the Netherlands, an energy tax on small energy users will be introduced in 1996, the revenues of which will be used entirely to lower other taxes, mainly those on labour. In the United Kingdom, the Chancellor of the Exchequer has announced his intention to use the revenues from the introduction of a landfill tax to reduce national insurance contributions. Administrations in other Member States are presently evaluating their options. It is worth mentioning in this context that most evaluations of the employment effects of such tax reforms arrive at only modest employment gains if the measures are not targeted to low–wage earners. These potential employment gains will not be sufficient to make significant inroads into the European unemployment problems and **should**, therefore, **not deflect attention from macroeconomic and structural measures addressing the main causes of unemployment.**

5. Conclusions

There is broad agreement that, provided appropriate policies are put in place, there is no inherent conflict between economic growth and environmental protection. In order to ensure progress towards environmentally sustainable economic growth in the European Union, the environmental costs of economic activity have to be better reflected in market prices than today. Environmental policies should therefore carefully evaluate the relative merits of alternative policy instruments to reach environmental policy targets and give, wherever possible, preference to those that rely on the market mechanism. In addition, there are benefits to be reaped from reviewing existing tax and incentive schemes in order to eliminate undesirable economic incentives to pollution. In cases of significant economies of scale, environmental problems of a Community–wide dimension or when national policies are severely constrained by the rules of the Internal Market, environmental policies should best be decided upon at the Community level. In other cases, the Community could, in line with the subsidiarity principle, facilitate individual or groups of Member States to move in the direction of greater reliance on market–based policy instruments, for example by preparing guidelines concerning the use of such instruments.

Box 1 : The advantages of using market–based policy instruments in order to tap different channels for reducing pressures on the environment

By internalising environmental costs into market prices, market–based policy instruments have a number of advantages over traditional "command–and–control" policies. One of their main benefits consists of the fact that, in addition to giving a permanent economic incentive to reducing the environmental pressure, they simultaneously exploit several channels for reducing a given environmental problem. This can best be illustrated with the help of a simple example.

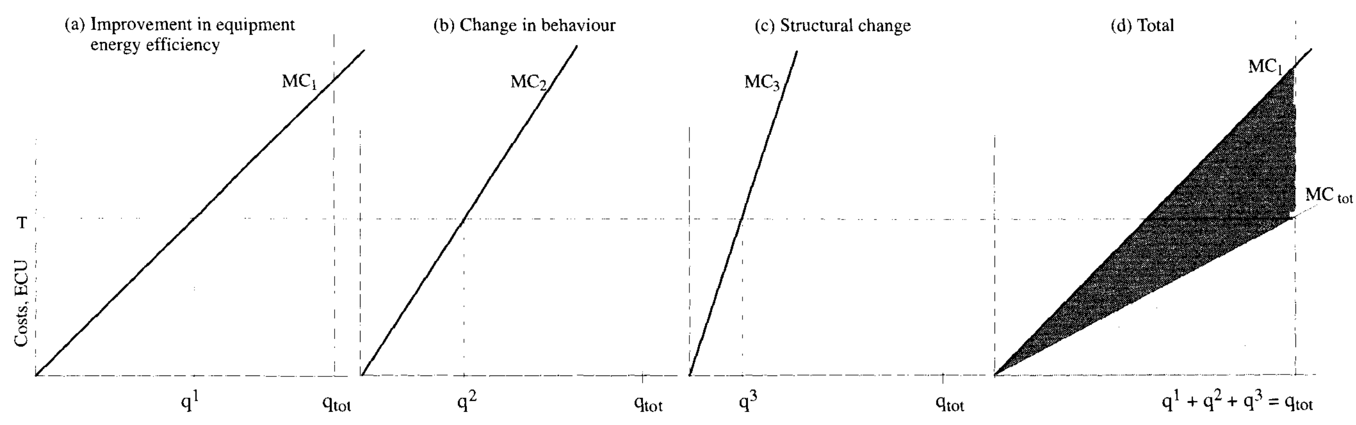
Although this example refers to carbon dioxide (CO_2) emissions (see Graph I), similar arguments could equally be applied to many other types of environmental problems. Every time a unit of fossil fuel (coal, oil or natural gas) is burnt, CO_2 is emitted. Being a global externality, the environmental damage created by the emission of one ton of CO_2 is the same whatever the origin or location if the emission. As there are, at present, no (commercially viable) technologies for exhaust pipe CO_2 recovery, putting a uniform tax on the carbon content of fossil fuels goes a long way towards an ideal internalisation strategy.

The main effects of the introduction of such a tax are depicted in the graph. By making CO_2 emissions more expensive, the tax will in fact encourage producers as well as consumers to look for ways to reduce emissions at least cost. This can be done by purchasing a more fuel efficient equipment, by changing the behaviour (e.g. driving less kilometres with the private car) or by shifting to less CO_2 intensive economic activities. The important point is that each of these mechanisms is only exploited up to the point where the marginal costs of reducing one more tonne of emission equal the tax rate (T). The potential cost savings from adopting such a comprehensive approach become clear when looking at the last panel of the graph. This panel illustrates that the costs of reaching a given emission reduction target (q_{tot}) is significantly lower when all available levers are used (light grey area) compared to a policy relying only on one lever, say equipment energy efficiency (light grey and dark grey area together).

It could be argued that traditional command–and–control policies could also be designed such that several levers are being used (e.g. equipment energy efficiency standards plus information campaigns to change household behaviour). However, there are at least two reasons why such an alternative strategy is unlikely to be cost–effective in practice. Firstly, only if the government/regulator knew the cost curves (MC_1, MC_2 and MC_3), could it determine the economically optimal level of control (q_1, q_2 and q_3) for each individual lever. In the case of market–based policy instruments, this detailed knowledge is not needed, as individual economic agents know best their own respective costs and the market mechanism will ensure that these individual preferences are aggregated to the social cost minimum. Secondly, the example also makes clear that, in all likelihood, the government would not even have the policy instruments for reaching a specific target for all available levers (e.g. how should structural change or a change in behaviour be mandated?). Market–based policy approaches are therefore likely to offer significant cost savings compared to policies that do not rely on the internalisation approach. **This advantage of market–based policy instruments holds true not only for limiting carbon dioxide emissions, but equally applies to many other environmental problems like waste generation, eutrophication, conventional air pollution etc.**

Without going into the details here, it should also be mentioned that a similar type of argument that was made in this box concerning the advantages of exploiting different emission reduction channels can also be made for the desirability of exploiting cost differences between different economic sectors or between individual economic agents. As a result, market–based policy instruments have the potential of equalising marginal abatement costs across uses, sectors and economic agents, thereby allowing a given environmental objective to be reached at least cost to society.

GRAPH I : **Reduction in carbon dioxide emissions (tonnes)**
Market response to a carbon dioxide levy (T) in a perfect market (illustrative example)



MC = marginal costs of reducing carbon dioxide emissions.

Principal economic policy measures – January 1996

Community (EUR–15)

None.

Belgium (B)

10.1 The central bank reduces its central rate from 3.75% to 3.70%.

17.1 The central bank reduces its central rate from 3.70% to 3.65%.

24.1 The central bank reduces its central rate from 3.65% to 3.55%.

31.1 The central bank reduces its central rate from 3.55% to 3.40%.

Denmark (DK)

11.1 The Nationalbank lowers its repo rate by 10 basis points to 4.50%.

24.1 The Nationalbank lowers the discount rate by 25 basis points to 4.00%. The repo rate is lowered by 15 basis points to 4.35%.

Germany (D)

30.1 The federal government presents a 50–point programme with the aim of halving unemployment by the year 2000. This target is to be reached through a wide array of measures to stimulate competitiveness, increase the availability of risk capital, set up a more business–friendly environment (especially for founders of new firms), strengthen research and development, and reduce costs created by regulations or by the social security and fiscal systems. The Federal Minister of Finance announces that the government plans to reduce the Solidarity surcharge on income tax from 7.5% to 5.5% starting 1 July 1997.

Greece (GR)

None.

Spain (E)

12.1 The Bank of Spain cuts its key money rate by a quarter point to 8.75% from 9.0% at the regular nine–day repurchase tender for central bank certificates.

France (F)

18.1 The Bank of France cuts its intervention rate to 4.20% from 4.45% and its five–to–ten day rate to 5.60% from 5.85%.

24.1 The government approves two decrees implementing the first set of measures for the reform of the welfare system.

30.1 The Finance and Economics minister announces new measures aimed at boosting consumption and investment. The main measure is the reduction in the tax–free interest rate offered on the "Livret A" savings bank account, by 1 percentage point to 3.5%.

Ireland (IRL)

23.1 The Minister for Finance presents the 1996 Budget to the Dáil (Parliament). Against a background of projected GDP growth of 5¾% and inflation of 2¼%, the principal features of the Budget include modest concessions on income tax, PRSI (social security contributions) and corporation tax, partly offset by increases in indirect taxation, mainly on tobacco and fuel. Social welfare payments rise by 3% effective from mid–year and new measures have been announced to deal with structural long–term unemployment, including a weekly recruitment subsidy payable to employers taking on persons out of work for at least three years. The target for the general government deficit is 2.6% of GDP, compared to 2.1% in 1995.

Italy (I)

None.

Luxembourg (L)

None.

Austria (A)

None.

Netherlands (NL)

18.1 The central bank lowers its special advance rate from 3.40% to 3.30%.

Portugal (P)

None.

Finland (FIN)

26.1 The government decides to grant a maximum 9% subsidy to shipyards' new orders, not totalling more than FMK 180 million. Shipyards can apply for the subsidy until the OECD agreement scrapping shipbuilding subsidies enters into force, or at the latest until September 1996.

Sweden (S)

None.

United Kingdom (UK)

18.1 The Chancellor of the Exchequer cuts the minimum lending rate by ¼% to 6¼% after the regular meeting with the governor of the Bank of England.

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