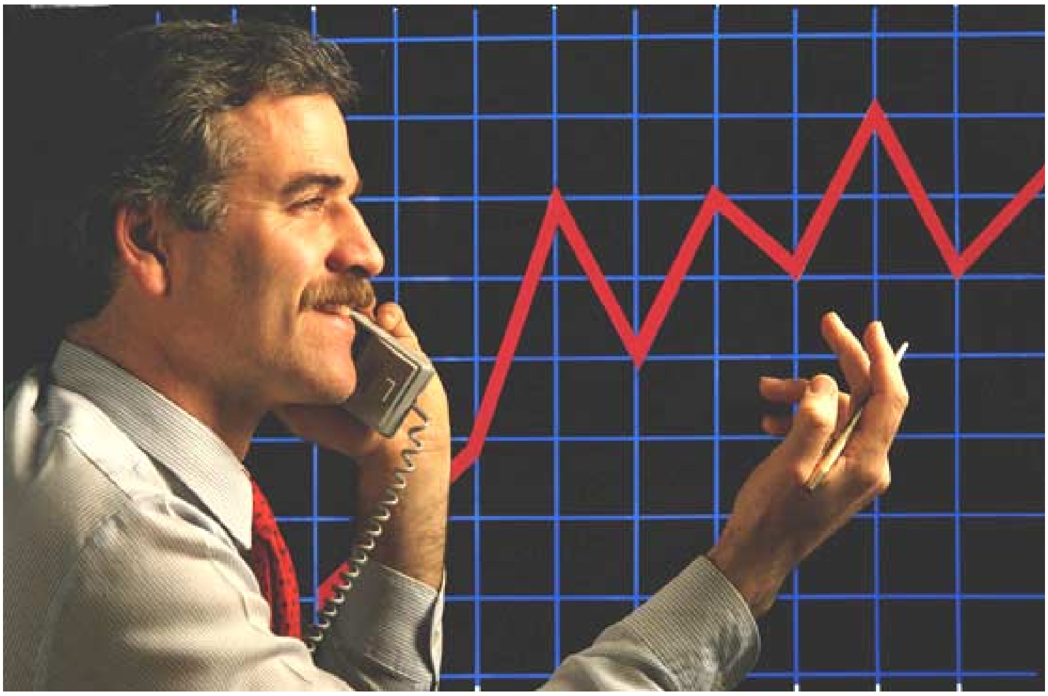
ENTERPRISE DIRECTORATE-GENERAL

# *Employee Stock Options*

The legal and administrative environment for
Employee Stock Options in the EU



EUROPEAN COMMISSION
ENTERPRISE DIRECTORATE-GENERAL

# Employee Stock Options

## The legal and administrative environment for Employee Stock Options in the EU

### Final Report of the Expert Group

June 2003

**Legal Notice**

This project was conducted with experts in the field of employee stock options, nominated by the national authorities under the Multiannual Programme for Entrepreneurship and SMEs.

Although the work has been carried out under the guidance of the Commission officials, the views expressed in this document do not necessarily represent the opinion of the European Commission.



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http://europa.eu.int/comm/enterprise/entrepreneurship/index.htm

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The group met four times under the chairmanship of the Commission. The report is based on the contributions of the experts and was compiled by the Commission.

The members of the group worked together as experts on employee stock options. Their contributions do not necessarily reflect the official position of their governments.

The Members of the group would like to stress that in analysing the current legal and administrative provisions for employee stock options and in putting forward conclusions they do not in any way question the sole right of Member States to decide on changes in their legal systems (especially regarding taxation).

## SUMMARY

Employee stock options can play an important role in fostering entrepreneurship in Europe and can therefore help to reach the goal set by the Heads of State and government in Lisbon, i.e. to make Europe the most competitive and dynamic knowledge-based economy in the world. In order to get a better understanding of this relatively new form of employee remuneration and its potential for helping to create a more entrepreneurial Europe, the present report was compiled by the European Commission's enterprise directorate in consultation with a group of experts. The experts were nominated by Member States of the EU as well as certain EFTA and accession countries under the Multiannual Programme for enterprises and entrepreneurship. The report describes the environment needed for employee stock options to be effective, describes the advantages and risks of employee stock options for investors, companies and employees, and gives a brief account of the use of employee stock options in Europe. The report analyses efficient ways of taxing employee stock options in the national as well as in the international context, looks at the problem of accounting for employee stock options and discusses the most important aspects of labour law in this context.

Employee stock option entitle their owners to buy stock of their company at a fixed price (usually the market price of the stock at the time the option is granted to the employee) within a certain period (e.g. ten years). Often employee stock options are only exercisable after the lapse of a vesting period and/or if certain conditions have been fulfilled (such as a minimum increase of the stock price).

There are numerous forms of employees' financial participation, for example bonuses, profit sharing, the granting of shares or the sale of shares to employees at a discount. Every kind of financial participation aims at aligning the interests of capital owners and managers/employees. Employee stock options give their holders a particularly strong interest in increasing their company's value as represented by the stock price. Employee stock options are not usually tradable. Furthermore an employee who leaves the company before the end of the vesting period often forfeits his right to exercise the options. Stock options thus create a strong financial tie between the company and the employee.

Traditionally, employee stock options were used to remunerate the higher management in larger companies. It was only towards the end of the 1990s that broad-based plans became more common. For many SMEs stock option plans are not suitable since they entail relatively high administration costs and require a share-based capital structure. However, for SMEs with a clear orientation towards growth (which, at least in recent years, could mainly be found in the IT and high technology sectors) employee stock options are an instrument that offers many advantages. Stock options over the shares of high growth companies can become very valuable over time. They are thus an incentive for employees to work for such companies even if the cash salaries are less attractive than those offered by bigger employers. Especially for young companies that often do not have a sufficient cash flow to pay competitive wages, employee stock options are sometimes the only form of remuneration with which they can attract and retain high calibre employees.

In the 1990s employee stock options became a widely used instrument in the USA. In Europe, stock option plans are offered mainly by employers in the United Kingdom, Ireland and France. In other European countries they became more widespread towards the end of the last decade, sometimes as a result of reforms of tax or company law.

However, in most of these countries stock option plans appear to be mainly operated by bigger companies and also still tend to be reserved for the higher levels of management. Employee stock options are also known in Norway and in several accession countries where they are most common in subsidiaries of foreign companies. Unfortunately, no comprehensive and comparable statistics are available. It is therefore not possible to quantify exactly how the downturn of stock markets in 2000 affected the granting of employee stock options. However, as a consequence of the numerous benefits that stock options have, it can be expected that this form of remuneration will become more and more important once stock markets recover.

There is emerging consensus that the benefits from employee stock options are employment income and should, at least in principle, be taxed accordingly. Nevertheless the taxation of employee stock options differs in many important ways between the countries of Europe. Some countries tax employee stock options at grant or vesting, the majority of countries have introduced a system of taxation at exercise. The latter method ensures consistent taxation of the various forms of employee remuneration and has the advantage that the taxable base can be easily valued.

A problem was revealed by the recent downturn in stock markets. In some cases the shares obtained by exercising employee stock options cannot be immediately sold but are subject to a blocking condition in order to prevent employees from exploiting insider information. If the share price drops during that blocking period employees might not receive sufficient funds from the subsequent sale of the shares to cover the taxes and contributions on the former book gains at exercise.

Gains from employee stock options usually accumulate over a period that is longer than the normal income tax period of one year. Since income tax schedules are progressive this could lead to an effective tax rate on stock options that is higher than the rate for a comparable cash wage. Although this adds to the complexity of the system, many, but not all, countries mitigate these effects by special rules for the calculation of the income tax base. However, the mitigation is often not complete. Moreover these rules are applied for income tax purposes but not necessarily for social contributions.

Several countries in Europe offer a more advantageous tax treatment of employee stock options provided that the stock option plan fulfils certain criteria. Generally such plans cover all or almost all members of the staff, they lay down minimum periods for holding the options and the stock after exercise and they limit the tax concession to certain maximum amounts per employee. While the basic features of tax favoured plans are rather similar throughout Europe they still differ in many details. Thus companies that wish to set up employee stock option plans in more than one country and wish also to take advantage of the more favourable tax treatment are obliged to draft a special plan for each of them or adapt the plan used in their home country to fit the requirements of other states.

Due to the differences in national tax codes, in particular regarding the timing of taxation, employees who move from one country to another while holding employee stock options might be subject to double taxation or, in some cases, might avoid the taxation of their options completely. These problems could however be largely avoided if countries agreed to the following two principles: 1) Only the benefits that arise between grant and exercise of options are to be treated as employment income. They are taxable by the state of employment while other benefits from stock options are to be taxed by the state of residence. 2) If an employee works in more than one country the taxing rights on employment income arising from stock option are divided between countries on a pro rata basis in relation to the period between grant and irrevocable vesting of the options. The OECD is working with its members to find a solution to this problem by ensuring that the Commentary on the OECD model double taxation convention specifically addresses the treatment of employee stock options.

In contrast to cash wages, employee stock options often do not entail any direct cost to the employing company. If the company issues new shares in order to fulfil its obligation vis-à-vis employees who exercise their options there will be no expense to the company. Accounting principles for employee stock options are therefore not straightforward. While there is no doubt that owners and potential investors must be fully and clearly informed about a company's stock option plan, it is less certain if the costs of such plans really need to be expensed in the profit and loss account.

Where employee stock options are not reserved to the top level of management they are generally a less important source of income for the employees than other forms of remuneration, namely cash wages. Usually stock options are not intended to replace ordinary work income but are an extra benefit that is intended to fulfil special functions. In order to remain useful for companies, employee stock options must be handled flexibly. In particular, the grant of options should not entail obligations of future grants. Moreover, vesting conditions spelled out in the plan need to be respected if the employee leaves the business.

# 1. INTRODUCTION - CONTEXT AND CONTENTS OF THE PRESENT REPORT

At the European Council of Lisbon in March 2000, Member States of the European Union set themselves the goal to make Europe the most competitive and dynamic knowledge-based economy in the world.[1] Promoting entrepreneurship will be a key factor in this ambitious project, as was underlined in the multiannual programme for enterprise and entrepreneurship, and in particular for small and medium sized enterprises (SMEs).[2]

Employee stock options play an important role in fostering entrepreneurship. They can help to align the interests of capital owners, managers and employees, motivate personnel and tie key staff to the company. Moreover, they help to save liquidity.[3] Employee stock options are already common in many big companies but they can also have advantages for SMEs, especially in the high-tech sectors and in particular for start-ups. It appears however that their widespread use is hindered by a number of factors such as the markets being unsuitable, recent caution over investing in the market, a relatively complicated legal environment, differing regulations in the European countries, and insufficient knowledge of their benefits in the business community.

The present report was compiled by the European Commission's Enterprise directorate in consultation with a group of experts from Member States of the EU and some candidate countries. The group was established on the basis of a mandate by the Enterprise Policy Management Committee decided in accordance with Article 4 of the multiannual programme for enterprise and entrepreneurship. The mandate of the group was to analyse and evaluate the European legal and administrative systems for employee stock options (including tax rules), identify best practices (if possible) and formulate conclusions to support Member States' efforts to further develop their systems in a way that is conducive to entrepreneurship.

The work by the expert group was partly based on two studies conducted in 2001 and 2002 on behalf of the European Commission. The first study was drafted by PricewaterhouseCoopers. It described the legal and administrative environment for employee stock options (tax rules, labour law, accounting etc.) in the European Union and, as a benchmark, in the United States of America.[4] The second study was drafted by Pendleton, Blasi, Kruse, Poutsma and Sesil.[5] It concerned the economic analysis of stock options based on a comprehensive literary review. Both studies are available at the website of the European Commission at:

http://www.europa.eu.int/comm/enterprise/entrepreneurship/support_measures/stock_options/study.htm.

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1 Extraordinary European Council (Lisbon, 23 and 24 March 2000), Presidency Conclusions.

2 Council Decision of 20 December 2000 on a multiannual programme for enterprise and entrepreneurship, and in particular for small and medium-sized enterprises (SMEs) (2001-2005), Official Journal of the European Communities, L333, 29.12.2000, pp. 84-91.

3 For a detailed analysis of benefits (and risks) of employee stock options see Chapter 3.

4 PricewaterhouseCoopers (2002), Employee Stock Options in the EU and the USA, London.

5 Pendleton, A.; Blasi, J.; Kruse, D.; Poutsma, E.; Sesil, J. (2002), Theoretical study on stock options in small and medium enterprises, study for the European Commission, Manchester.

Since detailed descriptions of national systems can be found in these studies the present report does not review legal and administrative rules for employee stock options country by country. Instead it addresses the most important decisions that national systems have to provide for the treatment of such options (e.g. at what time they are taxed, how cross-border cases have to be treated, how they have to be accounted for in companies' profit and loss accounts etc.) and discusses the various possibilities for such decisions, their respective advantages and disadvantages. On the basis of this analysis conclusions are drawn in the light of which present systems could be improved.

The report is structured as follows: Chapter 2 presents the basic financial logic of stock options and the most important special features of employee stock options. Chapter 3 identifies the advantages and drawbacks of this instrument for the capital owner, the company and the employee. Chapter 4 gives a brief overview over the current distribution of employee stock options in Europe and the USA. Chapter 5 investigates in detail the basic principles in the taxation of employee stock options from the point of view of the employee and the employer. Chapter 6 presents a comparison of the effective tax burdens in the EU countries and the USA and discusses the differences between ordinary and preferential taxation. Chapter 7 deals with problems of double and non-taxation in cross border cases. Chapter 8 gives a brief overview of accounting issues for stock options. Chapter 9 discusses the most important labour law issues.

On the basis of the analysis in chapters 1 to 9 the report offers, in Chapter 10, several suggestions how the legal environment for employee stock options could be structured. Over recent years many countries have introduced and/or changed their legal and administrative rules for employee stock options. In several important aspects national provisions appear to be approaching the ideas outlined in the conclusions in this report. Nevertheless there are still numerous possibilities for further improvement. Moreover, it could be observed in some cases that recent years' reforms of rules for employee stock options did not follow a clearly chartered course but moved backwards and forwards. The conclusions in this report might therefore also give some reassurance to those countries that are implementing beneficial reforms. Connected to the conclusions are some examples of good practice outlined in Annex I of the report.

There are various ongoing activities within the European Community that relate to employee stock options. These include in particular work on promoting employees' financial participation, the risk capital action plan and work on the tax obstacles in the Single Market. Annex II provides further information on these activities. Annex III contains a list of technical terms for the reader's convenience. Annex IV is a comprehensive bibliography on various aspects of employee stock options.

Several issues regarding stock options could not be discussed due to the limited time and budget available for the project. One example of questions that could not be treated but which would probably have been of interest especially for SMEs is the problem of how employee stock options or similar constructs could be used by unlisted companies. Another question that proved too complex for comprehensive analysis concerned the various ways companies obtain the shares that they need to meet their obligations towards employees who exercise their options.

## 2. THE ECONOMICS OF (EMPLOYEE) STOCK OPTIONS[6]

A stock option is a financial instrument that represents the right to buy (call option) or sell (put option) a certain asset, e.g. stock of a company, at a designated price during a predetermined period regardless of the development of the asset's market price. The owner of the option has the right to decide if he wants to exercise the option or not. If the option is not exercised within the agreed time it becomes void. In the case of American style options the owner of the option may decide to exercise at any time within the predetermined period. In the case of European style options the optionee must wait until the end of the period before he can take his decision whether to exercise or not.

Options to buy stock can be isolated titles ("naked warrants") or they can be combined with other financial titles (e.g. low interest loans). Moreover, they can have standard conditions and be traded on the stock exchange, or the terms can be freely negotiated and the options are traded outside the regular exchange (Over the counter –OTC – options). Apart from a company's stocks the asset underlying the option (underlier) could be foreign currency, raw materials etc.

Employee stock options are (call-) options given by a company to its employees as a remuneration for work. The underlying stock of the options is that of the employing company or a closely related company. Apart from the direct remuneration aspect the options are usually also intended to prepare the employee's participation in the companies capital and results. In the majority of cases the employee does not have to pay anything for the option. In many cases recipients of such stock options will be members of the higher management echelons, but in recent years stock option plans that include the middle management or even the whole staff have become more widespread. In principle it is also possible to grant stock options to persons who are not on a company's payroll, for example to members of the supervisory board or to external providers of services. These cases are however not yet very common and will not be discussed here.[7]

The following example summarises some key terms for employee stock options: An employee is granted an option to buy one share of the employing company for €50 within the next 10 years but not before three years have elapsed. For the sake of the example it is assumed that at the time of grant the market price of the stock is €200 so there is a discount of €150. (The opposite of a discount is a premium.[8]) The option may be used after three years upon grant, i.e. it vests at that time. Yet the holder decides to exercise it only after five years. By then the value of the stock has increased to €500. The total gain (€450 = share price minus exercise price) consists of the discount (€150) plus the increase in the stock price between grant and exercise of option (€300). Four years later the share is sold: in the meantime its market price has risen to €1000. Thus on top of the discount and exercise gain there is an additional capital gain of €500.

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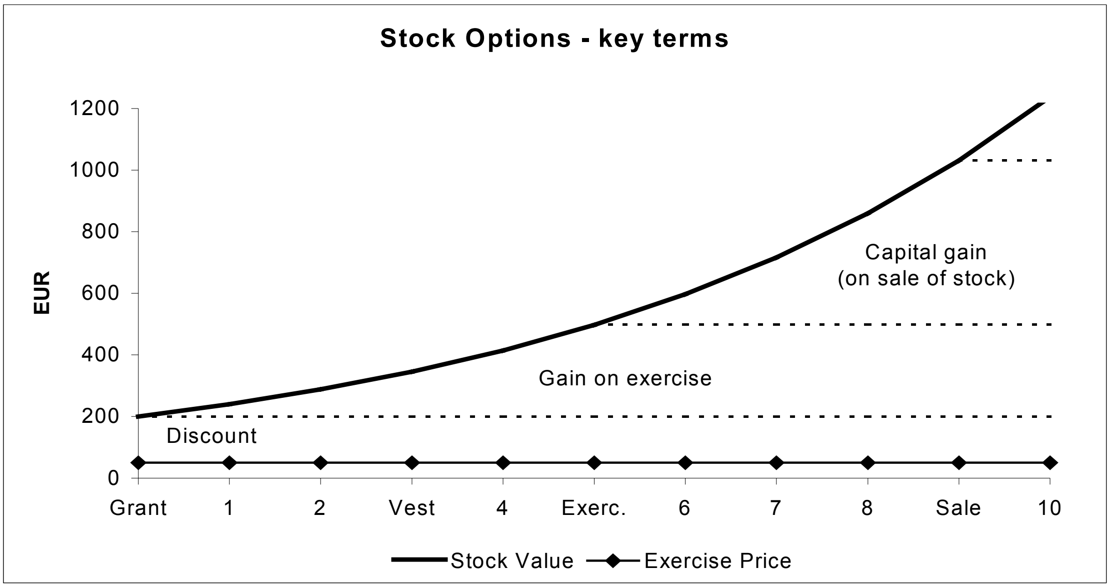
6 For explanations of the technical terms see also the glossary in the annex.

7 There is anecdotal evidence that the phenomenon has been growing, at least until the end of the 1990s. The reasons for such operations are generally the need to save liquidity and the wish to increase the loyalty of customer/supplier/service provider (head hunters, advisers etc).

8 The example is constructed in a way that allows to explain most of the relevant technical terms but it is not necessarily realistic. In the majority of real cases there is e.g. no discount or premium.




While the basic financial logic of employee stock options is the same as that of ordinary stock options, there are several things that make them special. A central difference is that publicly traded stock options are usually standardised financial instruments. Employee stock options on the other hand are governed by rules that can be adjusted to the special needs of the company in the so-called stock options plan (SOP).

An important point to be decided in an employee stock option plan is the exercise price. In the majority of cases the exercise price will be close to the price of the underlying stock at grant, i.e. the options will be granted "at the money".[9] Usually the strike price is a fixed amount, however in some cases it also varies with the company's performance or other indicators in order to adjust the employee's gain (difference between stock price at exercise and strike price) to the company's or the employee's performance.

Employee stock options are usually not tradable and cannot be disposed of in any other way. Only in special cases (e.g. death of the option holders) do employee stock option plans allow the possibility of a transfer. Apart from the restricted transfer possibilities the holder of the options is usually also not allowed to undertake transactions to reduce or minimise the financial risk of the option (e.g. by selling corresponding put-options). The reason is that companies want to use the options as a work incentive and the incentive effect would be reduced if the employees could hedge the risks of the options. For the valuation of an employee stock option the lack of transferability has the effect that the option holder can never realise the time value of an option (which represents the expectation of future increases in the price of the underlier) but only the intrinsic value (the difference between strike price and price of the underlier). A very important consequence from this is that the standard valuation models that were developed for marketable options have to be modified if they are to be used for the valuation of employee stock options.[10]

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[9] The actual rules vary. The strike price might e.g. be the average stock price in the month before the grant or the price at the first trading day after the decision of the general assembly of shareholders etc.

[10] Even then their application can be questioned. See chapter on grant taxation.

The term or the period for which an employee stock option is valid is usually much longer than the term for normal options. Moreover, employee stock options will, as a rule, not be vested at grant, i.e. the employee cannot immediately exercise them but has to wait, in many cases, several years. Often employee stock options vest partially (e.g. only a certain percentage of the options vest each year[11]). These rules are mainly intended to strengthen the bond between company and employee. The "golden handcuff" effect of employee stock options is also strengthened by provisions which foresee that an employee who leaves the company against his employers' wish might no longer be able to exercise his options or only for a limited time and/or only to a limited extent.

The right to exercise the options is often conditional on the company's performance. Such a conditional vesting is of great importance in the case of CEOs. A rather common condition is a minimum increase in the value of the company's stock. Given that employee stock options are often valid for a rather long period (e.g. ten years) the minimum increase in the stock price that is necessary for the options to vest should not be to low. Otherwise the condition will be met more or less automatically as a result of general stock price increases over the long term. In order to avoid such windfall-profits it is often regarded as preferable to define relative performance indicators (e.g. performance of the stock relative to the total market, the main competitors etc.) Alongside the market value of the stock, good performance indicators will also take dividend payments into account. There are also cases where specific personal success indicators (sales, production figures, new customers etc.) are used as well as the overall performance of the company.

While performance indicators for top personnel should be relatively ambitious, this is often not so advisable in the case of options that are granted on a broader basis since a majority of the staff will have no direct means to influence the stock prices. In such cases a split system for CEOs and other employees or different option plans might be used.

Stock options will usually be combined with other remuneration and incentive instruments such as fixed salaries, bonuses, premiums etc.[12] Especially for CEOs a well-designed remuneration plan will not usually provide for stock options to be paid on top of a fixed (cash-)salary (i.e. as a perk) but that they form an important and integral part of the remuneration. Although this might still be necessary in cases where an option plan is being introduced for the first time, companies are usually well advised to gradually reduce the share (not necessarily the amount) of normal pay and increase the performance-related pay such as options. Otherwise the motivational aspect of options might seem doubtful.

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11 In some special cases the exercise price is not decided at the moment of grant but is adjusted at each moment of vesting.

12 See next chapter for a brief overview of other forms of financial employee participation.

Employee stock options tend to be "American style", i.e. they can, in principle, be exercised at any time after vesting. However, in order to ensure that employees holding options have no possibility to artificially influence the stock price just before exercise or to profit from insider information, there are sometimes special lock-up or blocking periods. So the exercise of options is sometimes only possible during relatively short time windows which usually occur shortly after the presentation of the annual balance or the general meeting of shareholders. There might also be provisions preventing the employee from selling the stock directly after exercise and obliging him to keep the stock for a certain minimum period.

Employee stock options may benefit from special tax treatment. Usually the fiscal code specifies certain conditions (e.g. who may receive the options, when they may be exercised etc.). If these conditions are met the options are "qualified", "acknowledged" or bear some similar name ("incentive stock options").

# 3. THE USE OF EMPLOYEE STOCK OPTIONS

## 3.1. A comparison of employee stock options with other forms of financial participation

There exist numerous forms of financial participation schemes, e.g. cash-based profit sharing, deferred profit sharing, employee savings plans, employee share schemes, stock options etc.[13] Several studies indicate that financial participation is potentially beneficial for most companies. Which scheme or combination of schemes should be chosen depends on the individual circumstances. Before the advantages of employee stock options are discussed it is useful to have a short look at some other forms of participation and how they differ from stock options.

In the case of **direct profit sharing** a part of the company's profit is distributed among employees (e.g. on an equal basis or taking into account position, seniority or performance). Similar to this are **bonuses** which are granted on the basis of individual or company performance. Bonuses are part of the staff cost, i.e. they are deducted from the profit. In both cases a major drawback for the firm is that these types of remuneration subtract from the company's liquidity.

Employees can be **granted shares** in the company or be offered the chance to **buy shares at a discount**. For existing owners this means that their own shares are immediately diluted. The advantage is that the magnitude of this dilution is exactly known whereas in the case of stock options it will depend on the development of the stock price. Moreover, if employees have to pay for the shares (even if they get a discount) they will have a real stake in the business, especially if in the future the company's stock should go down. In a crisis, shareholding employees might be more loyal to the business than holders of stock options. A disadvantage of shares from the point of view of the employee is that the free grant of shares or their purchase at a discount is usually immediately taxable as employment income. Moreover, not all employees will be able to afford to buy shares. Finally, buying stock of one's employer is an investment decision that will closely connect the employment risk with the capital risk.

**Phantom stock plans** are of interest for companies that are not quoted. After a valuation of the company these plans allocate virtual stock options to employees. If the company's value increases and an employee decides to exercise his virtual right the company will pay him an amount that equals the profit he would have made under a real stock option plan. The major drawback of this scheme is the same as that of bonuses and profit sharing, i.e. the loss of liquidity.

## 3.2. Stock options - pros and cons

In this chapter the arguments for and against the use of stock options will be discussed from the points of the most important stakeholders, i.e. investors, the company and the employee. Employee stock options are mainly used in bigger companies, a fact that is

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13 For a description of the various forms of financial employee participation see: Uvalic, M. (1991), The Pepper Report, Promotion of Employee Participation in Profits and Enterprise Results in the Member States of the European Community, in: Social Europe, Supplement 3/91, Florence.

reflected in the literature from which most of the arguments in the following paragraphs are taken. There are several reasons why employee stock options are more often found in large companies: The majority of SMEs are too small to establish such schemes and the overheads and administrative costs associated with such a scheme will usually be too high for smaller companies. Moreover, SMEs are often closely held companies and the owners might shy away from the formal control and reporting mechanisms that stock option plans imply. Even for bigger SMEs employee stock options are often not viable since they might not be share-based.

Nevertheless there are some cases where employee stock options can be useful even for SMEs. Such SMEs for which employee stock option plans have been successfully introduced in the past are usually of medium size and have a clear orientation towards future growth. These firms can often be found in sectors in which human capital plays an important role and where the operation of the management is difficult to control externally since management decision problems are particularly unstructured and complex. In the next paragraphs these cases will be specially mentioned.

While over 99% of all companies in the EU fall under the definition of small and medium sized enterprises[14] it is estimated that only between 2% and 4% of SMEs use employee stock options. While these figures seem rather low it must not be forgotten that the companies in question may play a role that can be more important than their size indicates. Some of these companies have the potential for enormous growth and may become important in the medium and long term. Moreover, such growth companies in high-technology sectors often provide important inputs for the technological change of the economy as a whole.

#### *3.2.1. Shareholders and investors*

The central argument in favour of employee stock options is that they offer a possibility to mitigate the so-called “principal/agent problem” of corporate governance. Unless shareholders (principals) have a significant share in the company’s capital they cannot efficiently monitor the work of the CEOs and board members (agents) who manage their investment. A link between the principals’ interest and the agents’ reward[15] e.g. as provided by stock options might partly solve the problem for the capital owners.

Employee stock options result in costs for the shareholders. When an employee exercises his options, either shares will have to be bought, deducting from the company´s profit, or new shares will be created thus diluting the value of the existing shares. The profits will have to be divided among a larger group of shareowners and the relative influence of the former shareholders e.g. in the annual general meeting will be reduced as well.

Shareholders only pay their managers in the way described if the value of their stock increases (otherwise employees would not exercise their options). Critics of stock options hold that shareowners pay too much. They think that stock options are not a

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[14] SMEs are defined as companies with fewer than 250 employees and an annual turnover not exceeding EUR 40 m. or a balance sheet total not exceeding EUR 27 m. See Commission Recommendation 96/280/EC of 3rd April 1996, Official Journal L 107, 30/04/1996, pp. 4-9.

[15] The value of the stock is a rather comprehensive indicator of a company’s success and also less likely than e.g. turnover, profits or dividends to be manipulated by the persons whose success it is to measure.

solution to the problem of corporate governance but a part of it since managers use their power to extract, via the options, a greater reward than they would be able to gain via other forms of remuneration.[16]

It is clear that a stock option plan has to be well designed in order to solve or mitigate the principal/agent problem. To the extent that a corporate governance problem exists it can result in inappropriate option plans that help self-interested agents to extract rents from the capital owners. The risk that managers receive undeserved and excessive salaries in the form of stock options can often be mitigated by well-drafted vesting conditions that take into account the relative performance of a company compared to the market in general and/or compared to its main competitors. However, if such vesting conditions are not used this is not a problem of stock options as such.

Only to the extent that the special features of employee stock options aggravate the corporate governance problem does this form of remuneration deserve special criticism. There are several arguments to be considered here. One is that employee stock options are not properly taken into account in companies' profit and loss calculations due to their special characteristics. But this problem can be solved by the obligation to provide precise and comprehensive information in companies' annual reports (see chapter on accounting). Moreover, the problem can probably be reduced if shareholders, on the occasion of deciding on the introduction of a stock option plan, are comprehensively informed of the possible value that the options will assume under different scenarios regarding the future stock price of their company.

Another argument against employee stock options is that they provoke risky decisions by managers since CEOs do not (usually) pay for the options and thus only participate in upwards trends of the stock price. This argument is doubtful however. Once granted, a stock option represents a valuable asset and there is no reason why a (risk averse) manager should want to lose this asset by irresponsible decisions. More realistic is the argument that stock options favour a rather short-sighted behaviour, i.e. incite managers to maximise primarily short term financial success. In this case however, long vesting periods for the options should be able to alleviate the problem.

Maybe the most important criticism is that employee stock options are too costly, i.e. from the point of view of the shareholders (who can diversify their portfolio) their value is greater than from the point of view of the risk-averse employees. The question here is if there are better instruments to use. It must not be forgotten that cash bonuses etc. for which this argument does not hold have the disadvantage of an immediate drain on liquidity.

The above cited criticism from the literature was mainly formulated with regards to bigger companies and also mainly companies in the USA. In Europe the ownership structure of capital companies is somewhat different. The main owners are often institutional investors which means that the control problems and the need for stock options might be less important in general. Nevertheless there will be a role for stock options and similar incentive systems where control of managerial behaviour is difficult

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16 The criticism of stock option schemes in particular and managers' remuneration in general is partly due to the astonishing levels that the salaries of numerous CEOs reached during the booming share market of the 1990s. Likewise in more recent debates managers' compensation were seen to be "unearned" in the light of declining stock prices.

due to the particular nature of the business, i.e. new businesses with high level of intellectual capital, numerous investment possibilities and high growth.[17]

Despite the better possibilities of control in smaller companies, stock options can in some cases be useful for such businesses too. A typical scenario is one of a management buy out (MBO) financed by venture capitalists.[18] In such cases investor control is tighter than in big listed companies so that governance problems and abuse of options by managers are largely ruled out. Moreover, MBOs often result in initial public offerings or takeovers, i.e. an event that will allow the options to be liquidated. In this they differ from the majority of SMEs.

### *3.2.2. The company*

There are numerous, often very specific, reasons that result in a company granting employees financial participation. In the case of employee stock options it seems convenient to group these reasons under three main headings: a) motivation and productivity, b) personnel recruitment and retention, c) capital and liquidity-related reasons.

#### 3.2.2.1. Motivation of employees

Employee stock options (and similar schemes) create a stronger sense of involvement on the side of the employees, make them more interested in the value and wellbeing of the company, and will induce them to work harder, improve the flow of information and help to develop an entrepreneurial spirit. There is empirical evidence that companies that have introduced some kind of financial participation scheme are on average more successful than others[19] There is also some evidence that companies with broad based option schemes have higher productivity and higher growth rates.

Standard economic theory predicts that employees who participate in the success of their company will be better motivated than employees who receive a fixed salary. The question, however, is how big this incentive effect is. After all, the staff can only partly influence the financial success (e.g. the stock price) of their company since the latter depends to a large degree on unpredictable and uncontrollable circumstances such as the general economic climate, the discovery of new technologies etc.

Apart from the general problem of windfall profits or losses that might be alleviated by relative performance indicators there is also the problem that the individual employee has only a very limited influence on the company's performance and thus has an incentive to shirk (free rider problem). This argument might however be answered by pointing out that financial participation tends to increase (informal) horizontal control. In general, the introduction of stock options also aims at a change of culture inside the company, it can influence the way employees perceive themselves in their job and lead to more teamwork, a more entrepreneurial attitude and less unionisation.

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17 See Pendleton, A.; Blasi, J.; Kruse, D.; Poutsma, E.; Sesil, J. (2002), pp. 57-59.

18 See Pendleton, A.; Blasi, J.; Kruse, D.; Poutsma, E.; Sesil, J. (2002), p. 169.

19 For the EU see e.g. Uvalic (1991), The PEPPER report.

Because of these arguments large companies will often restrict stock options to the higher levels of their management. Broad-based schemes are more likely where the company is also aiming at a cultural change in its organisation or where stock options are seen as a low-risk portal for employee ownership. In smaller companies, however, the role and the influence of the individual employee will be greater and thus also the motivational effects of options.

#### 3.2.2.2. Attract and retain personnel

Probably more important than their role as a general incentive for employees is the role that stock options have for attracting and retaining (key) personnel. There are several reasons why smaller businesses can appear less attractive to employees than big companies: the latter often have a better reputation than their smaller competitors, they usually offer more opportunities for a career and more attractive remuneration packages. Last but not least, the security of the job is often believed to be higher in larger companies. Over the last years shortage of skilled employees has been perceived as an extremely critical, if not the most important, constraint on company growth by SMEs.[20] Employee stock options in a small but growing company might be the crucial difference that attracts important staff to work for the smaller company and not for the big one.

Employee stock options have the effect of retaining staff for the company since they usually vest only after several years and they often become void if an employee leaves the firm against the company's wish. If the stock price has an upward trend the certain loss of the potential profits will be a strong deterrent for "bad leavers". Even if the stock options do not become void on leaving the company but can be exercised only shortly after the departure they can have a "golden handcuff-effect" if there is a recurrent (e.g. annual) grant of options.

Of particular importance is the tie-in function of stock options for small start-ups. The organisation and culture of such companies will often depend on the individual members and the composition of the whole staff. Especially where creativity is important the success of the whole enterprise might depend on everybody staying on board. In such a situation stock options can be useful to make sure that the team does not break up easily.

Stock options will not only be granted to retain special skills that are difficult to replace. They will also be used in order to protect investment into human capital. Moreover, they will be offered to potential employees whom the company wants to attract especially highly qualified and (internationally) mobile personnel. Today highly demanded specialists or top managers will often expect to receive employee stock options as a part of their variable salary and companies that do not offer them will find themselves at a disadvantage in competing for such staff.

Tying staff to the company with stock options depends on a positive long-term development of the stock. Even if the options "go underwater" they do not fully lose their power since options are long-term financial assets and temporary falls in the stock price do not erase their value. Only if there is little hope that the stock price will ever recover do options lose their binding effect. In such a case options can be repriced (i.e. their strike price is lowered). While this measure can be helpful to tie personnel to the

[20] This is indicated regularly by the Observatory of European SME but also e.g. by the Grant Thornton European Business Survey and similar sources.

company, any expectation that options which go underwater will be repriced undermines the incentive effect of stock options.

The repricing of options is often cited by critics as evidence for their rent extraction function. In principle, however, the problem is more basic and shared by all incentives. Unless managers are simply replaced it has to be decided if one wants to hang on to a goal (stock price) that is no longer attainable or if the targets needs to be lowered. But even for the lower targets it will still be necessary to offer incentives. It is evident that the problem is not the repricing but getting the repricing right. It must take into account the new situation, i.e. the lower stock price and the lower possibilities for future increases. On the other hand it must not be so strong that the manager is rewarded regardless of any achievements.

#### 3.2.2.3. Capital and liquidity related reasons

Employee stock options are a possibility for the company to remunerate employees without an immediate drain on liquid assets. This is in particular true if the stock given to the employee on exercising his option is provided by an increase in the company's capital. However, even if the company has to buy its own stock on the market, the loss of liquidity is at least deferred compared to e.g. a cash salary. Moreover, the company has the possibility to use ups and downs of the price of its stock to purchase the stock when it is relatively low.

Liquidity considerations are of greatest importance in the case of business start-ups. These companies might depend on the know-how of certain specialists without being able to immediately pay them competitive wages. Indeed, employee stock options are an ideal instrument for young companies who are forced to compete for highly qualified mobile staff.

When exercised, stock options lead to an inflow of capital. But this inflow is less than would have been realised by selling the shares on an open market. So the gain realised by the employee is mirrored by an opportunity cost of the company. This cost does not, however, result in a outflow of cash. Depending on the accounting rules, the opportunity cost will be deductible from the taxable profit and could thus reduce the company's tax burden.[21]

In particular situations liquidity reasons can also play an important role where companies are facing the risk of bankruptcy and for companies under a reorganisation /restructuring plan. In such situations dismissing employees appears to be the most frequent solution, especially in many of the high-technological fast growing companies of the 1990s. But a policy that at least partly substitutes cash salaries by shares or stock options might help to avoid or reduce job losses.[22] Such a policy would protect investments in human capital and thus prepare the position for a new start.

Stock options also have an important signalling function to potential providers of capital. Other factors being equal, providers of capital will be more inclined to invest in a company whose staff is, to a relatively large extent, paid in employee stock options since

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[21] See also chapter on accounting.

[22] For an example see Financial Times, 22 Jan. 2003, p.8.

this indicates quite unambiguously that the staff believe in the company's success. Employee stock options might thus be psychologically more convincing than business plans and similar documents.

### 3.2.3. *The employee*

Employee stock options are offered to the employee as a reward for his work and are thus similar to wages. However accepting stock options means that the employee at the same times makes a decision to save a certain amount of his income (since he cannot consume the option value immediately) and that he also makes a particular investment decision. In general accepting options (or most other forms of participation) has the disadvantage that the employment risk and the risk of the savings portfolio become positively correlated. In order to justify the acceptance of options the employee has to decide whether stock options are merely a perk on his normal salary or if they constitute a substantial part of it.

If the options are just an extra on top of the normal wage (as a perk) the investment is essentially risk-free. There are neither direct costs since, as a rule, the employee will not have to pay for the options and there is no opportunity cost since the employee cannot hope to receive a cash wage if he declines the option.[23] This situation is typical for employees in companies that are introducing participation schemes for the first time. Here options will often be not only remuneration but also a way into share investment in general, especially for employees with lower incomes and wealth who would usually have less sophisticated portfolios. In addition to the lack of risk, the income from options might also be attractive because they enjoy special tax favours or the options might have preferential conditions which are only available for employees.

If the options constitute a more substantial part of the salary (as in the case of CEOs), or if the employee is employed in certain sectors and branches, other arguments for accepting stock options will be prevalent. Despite the risk-concentration the investment decision as such might be sound since the employee-investor might expect a return that is higher than that from other possible investments open to him. While such a belief might not be rational for many employees in big companies[24] it could be better founded for personnel in small and medium enterprises that are aiming for high growth. Moreover, the staff in companies that are not so big are more likely to feel that their personal input can make a difference to the company's success.

Just as a company might wish to retain key personnel, so might an employee in a small firm wish to secure the co-operation of other employees. For example, a researcher might wish to make sure he is able to work together with certain specialists whose expertise he needs for his own work. Thus an employee might accept stock options because they tie everybody to the common project.

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[23] Occasionally the facts that the employee does not pay for the options leads to the wrong conclusion that he does not value them. The opportunity cost or shadow price of accepting an option can be zero (at least the employee might believe this to be the case). But once an employee has accepted the options they are an asset in which he will take an economic interest.

[24] Nevertheless many employee investors display a strong "home bias", i.e. their financial portfolio consists only or at least to a large extent of shares and options in their own company. The psychological reason for this is that these investors are relatively inexperienced and feel more secure with assets that they know.

## 4. DISTRIBUTION OF EMPLOYEE STOCK OPTIONS IN EUROPE AND IN THE USA

Unfortunately, it is not possible to give a complete and comparable statistical overview of the use and distribution of employee stock options in Europe. Due to a lack of data it is also not possible to compare with any great precision the use of stock options in the EU and in the USA. It is clear, however, that employee stock options are still much less used in Europe than in the USA, even in the UK, in France and in Ireland where they are relatively common.

At present it is also difficult to forecast the future development of employee stock options. Before the downturn in share markets in the late 1990s stock options appeared to be a dynamically growing phenomenon even if the size of the base from which it was developing could not be ascertained with much precision. There are sound economic reasons for companies to set up employee stock option plans and for employees to accept such options as remuneration for work (see above). But it is clear that the attractiveness of employee stock options also depends to a considerable degree on the general economic climate. The heavy drop in share prices, especially in the new market where employee stock options were widely used, has certainly undermined the interest in this form of remuneration. This is especially true for broad-based schemes. On the other hand, it has to be remembered that employee stock options usually have a very long duration (around 10 years). Moreover, stock options are usually granted at the money. Thus the currently low stock prices and the fact that the employee has to pay no cash to obtain the options could also make them an attractive investment for some employees.

Most employee stock options are granted to higher levels of management in bigger companies. Even in countries where stock options are fairly common they are found only rarely in smaller and medium seized enterprises. In the US a 1999 survey found that only 2.1.% of companies with 100 employees or less had a stock option plan, in the UK in 1998 only 1% of such companies had a share ownership scheme (let alone a stock option scheme). The situation is however different for SMEs in the new economy sector.[25] For the knowledge-intensive businesses in this sector which often have great needs for investment capital, employee stock options that tie important members of the staff to the firm and save liquidity are of great importance.

In the **USA** employee stock options have become a regular and widely used instrument for the compensation of employees, in particular the higher management. Over 80% of the 500 biggest quoted companies have introduced employee stock option plans. According to the National Centre for Employee Ownership (NCEO) there are around 3,000 broad-based stock option plans in the USA. In the late 1990s between seven and ten million employees in the USA annually received stock options, several times more than in the early 1990s when the number of recipients of options was estimated at around a million. That the use of employee stock options has significantly increased in the USA is also confirmed by a survey by Watson Wyatt Worldwide. They found that in the USA, 86% of employers offer stock options to employees and that in 2000, 19% of all employees were eligible for stock options compared to only 12% in 1998.[26] Moreover, stock options constitute a much more important share in managers' pay packages than in

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[25] Pendleton, A.; Blasi, J.; Kruse, D.; Poutsma, E.; Sesil, J. (2002).

[26] See: http://www.growthplus-com.ae.psiweb.com/EntrepreneurshipNews_winter2000.html.

other countries. In 1998 the value of stock options accounted for 40% of total pay for S&P 500 CEOs compared to 25% in 1992.[27]

In **Belgium** stock options became more attractive when their taxation was explicitly regulated in 1999. Since then between 70,000 and 75,000 employees have received stock options. Today almost all of the 20 largest Belgian companies (BEL20) operate stock option plans. Over 40% of companies with 50 or more employees run such plans.[28] In **Denmark** around 20% of the 500 largest companies had introduced employee stock options plans by 1999 and in 2000 one third of the companies quoted at the Copenhagen stock exchange were operating such plans.[29] With more favourable taxation of employee stock options to be introduced in 2003 it is to be expected that such plans will become more common in the future. In **Germany,** the greater flexibility in the design of option plans introduced with the law regarding control and transparency in the company sector ("KonTraG", 1 May 1998) resulted in a significant increase in employee stock options. In 1997 ten employee stock option programmes were introduced in German companies, in 1998 already 27 new plans were created. [30] Today over two-thirds of companies included in the German stock index (DAX) run such plans. The group of employees benefiting from such programmes is still mainly restricted to top employees and is relatively small compared to the total number of companies. One reason for this is probably the relatively low share of quoted companies in Germany.

Despite the introduction of a rather favourable tax treatment for stock option plans concerning newly issued shares, only a limited number of companies in **Greece** appear to be operating stock option plans at present.[31] In **Spain** about 40 companies have introduced an employee stock option plan of which one half is included in the IBEX 35 (the official index of Spanish stock markets, representing the 35 biggest companies).[32] In **France** approximately 50% of all quoted companies and 95% of the quoted companies with at total balance of more than FF 10 bn have introduced stock option plans. 28% of all limited companies use this instrument, 82% of the plans concern the upper management, 57% also the middle management. All in all around 30,000 employees receive stock options.[33] Although financial participation of employees is widespread in France, many schemes are profit-related. Stock options are still mainly granted to senior executives in big companies. Yet, as in the UK and in contrast to most other European countries France has a relatively long history of employee stock options. The first plans were introduced in 1970 but only in listed companies. In 1987 a new law was enacted that broadened the scope of option plans to unlisted companies and foreign plans.

In **Ireland** several special plans exist, e.g. the "Save as you earn" of which over 80 are in place today or the "Approved share option schemes" of which 15 had been introduced by mid-2002. Over the last decade stock options have become far more widespread than

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27 Hall, B.; Murphy, K.J. (2000), Stock Options for the undiversified executives, p.1.

28 PricewaterhouseCoopers (2002).

29 PricewaterhouseCoopers (2002).

30 Deutschmann, K. (2000), p. 54.

31 PricewaterhouseCoopers (2002).

32 PricewaterhouseCoopers (2002).

33 PricewaterhouseCoopers (2002); Wulff, J. (2000), p. 219.

before, probably because of the favourable company tax regime that has attracted sizeable investment from Multinationals in other European countries and the USA. In **Italy** stock option plans have not been implemented on a large scale. However, due to new and more favourable legislation an increase can be expected over the next years. In **Luxembourg** stock option plans were introduced by foreign companies. It is estimated that around 25% of all companies – mainly in the financial sector – have an option plan.

In **the Netherlands** employee stock options have become a rather common feature of remuneration packages. Today almost all of the larger companies listed at the Amsterdam Stock Exchange and more than 80% of all listed companies have a stock option plan. Especially in the ICT sector stock option schemes seem to be comparatively widespread. It is also interesting to note that, unlike in some other countries, stock options are more often used than other instruments to achieve a broad based participation of employees.[34] In **Austria** the instrument was not greatly used in the past due to the fact that there were not many publicly quoted companies and that many limited companies were still owned or partly owned by the state. In recent years, however, and partly as a result of changes in the taxation of stock options, the number of employees holding stock options from their employing companies has increased. For **Portugal** statistical data are only available if an ESOP is deemed to be a public offer (which means that securities are offered to a group of at least 200 employees) or when the issuers' shares are admitted to trading on a regulated market. From a total of 60 companies listed at the Euronext Lisbon Stock Exchange, about 22% have implemented ESOP.

In **Finland**, 84% of the companies listed at the Helsinki Stock Exchange have implemented share option plans. And among the companies listed on the new market, as many as 94% have introduced such plans.[35] In **Sweden** employee stock options have become more and more common since the late 1980s. Unfortunately precise quantitative data is not available. In the **United Kingdom**, tax law provides for several special plans to promote employee ownership. Some of them are based on the distribution of shares (such as the Share Incentive Plan) and some promote stock options, in particular the Enterprise Management Incentive (EMI), the Company Share Option Plan (CSOP) and the Save as you earn plans (SAYE). The EMI is targeted at the key employees of smaller companies. Since its introduction in 2000, over 3,000 companies have granted options to employees under to an EMI scheme. At the moment there are around 3,500 CSOP plans and about 1,400 SAYE plans.[36] Employee share plans which do not benefit from favourable tax treatment are also widely used in the UK.

In 2000 around 4000 employees in **Norway** held stock options of their employer or connected companies. In 1995 the point of taxation of employee stock options was changed from exercise to grant, and the number of employees with stock options fell sharply (from 19 600 in 1995 to only 1000 in 1998). Taxation at exercise was re-introduced in 1999 and the number has since been increasing again.

In the **Czech Republic** stock options are a rather new but growing instrument of employee remuneration. Stock option plans have been introduced mainly in companies of

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34 Pendleton, A.; Blasi, J.; Kruse, D.; Poutsma, E.; Sesil, J. (2002).

35 OECD (2002), Policy Benchmarks for fostering firm creation and entrepreneurship, DSTI/IND(2002)13, p.16.

36 Pendleton, A.; Blasi, J.; Kruse, D.; Poutsma, E.; Sesil, J. (2002).

foreign investors. **Hungary** has been generally successful in using employee share ownership schemes in the process of privatisation. It appears however that the special instrument of employee stock options has not yet been widely used. In **Latvia** employee stock options schemes are practically non-existent, nor are there any special provisions for their tax treatment. In **Turkey,** employee stock options are not used by SMEs. However a small number of plans have been set up by foreign multinationals in accordance with the rules in their home countries. In this context there have been about ten applications to the Capital Markets Board of Turkey by companies wishing to implement stock option plans for employees working in their subsidiary companies in Turkey. Some of these plans were option plans; others were oriented towards share ownership by employees.

# 5. TAXATION OF EMPLOYEE STOCK OPTIONS – NATIONAL ASPECTS

## 5.1. Tax consequences for the employee

For the employee, two aspects of the taxation of stock options are of major interest. First, there is the basic questions which kind of taxes he will have to pay (see 5.1.1.) and second it is important when these taxes will be due (see 5.1.2.).

### *5.1.1. Employee stock options - employment income or capital gains?*

Which taxes are to be levied on employee stock options depends on whether the benefits are considered employment income or whether they constitute capital gains. Employment income is subject to personal income tax and, in principle, to social contributions (occasionally some other employment taxes might also apply). These taxes are often higher than taxes on capital gains. It is also important that these taxes have to be paid regardless of whether the income has generated any cash (e.g. employment income tax is also due on "fringe benefits").[37]

Usually income from employment is defined as income that is given to somebody as a remuneration for his work under an employment contract. Whether the income is given in cash or in kind (e.g. in the form of a financial asset) is not important in this context. Since employee stock options are granted under an employment contract and since the grant can be linked to certain employment-related conditions (e.g. a special work performance or achievement of certain goals) employee stock options fall under the definition of employment income.

Employee stock options are however of a special nature since the acceptance of the options instead of a cash salary also is an investment decision on the part of the employee. In principle, the gains from the options could therefore also be considered capital gains.

Notwithstanding the somewhat unclear nature of employee stock options, in most tax systems they are considered employment income. They are usually only considered capital gains (and taxed as such) if special conditions (e.g. broad-based plan, minimum vesting periods etc.) apply. One could argue that in such cases the classification of benefits from employee stock options as capital gains simply constitutes a tax favour that is granted to companies to encourage them to design their stock option plans in a way desired by the State. One could also hold that fulfilling these special conditions strengthens the capital gains aspects of stock options.

The taxation of a stock option or the gains from such an option must be distinguished from the taxation of the gains from the stock acquired by exercising the option. If the stock acquired by exercising an option can be sold, keeping it (after it has been taxed as earnings from employment) is an investment decision on the part of the employee similar to buying stock with a cash wage. In this case any further gain from an increase in the value of the stock will be a capital gain and thus subject to capital gains taxation. The tax base will usually be the difference between the value realised on selling the stock and the

[37] The distinction between employment income and capital gains is also of great importance in the context of cross border cases which will be discussed in a special chapter.

value of the stock at exercise (not the exercise price since this would lead to double taxation of some parts of the income).

The question as to what kind of income stock options belong is important for another reason. Some forms of income accrue over several years. If the tax code is progressive (as for taxes on employment income) this would lead to a relatively high tax burden. For some incomes, however, the tax codes might set out special calculations to diminish the progressivity effects (see below).

#### *5.1.2. Time of taxation*

Usually employment income is taxed according to the cash principle, i.e. it is taxed at the moment the employee receives, collects or realises the income. While for cash income and many fringe benefits the moment of receiving the remuneration can easily be identified, there are at least five[38] moments in the life cycle of an option/share when an obligation to pay taxes could arise: Grant, vesting or exercise of the option, vesting of shares, sale of shares.

##### 5.1.2.1. Grant[39] of the option

Many countries will tax a tradable option that can be valued without too many problems at grant. This guarantees the coherence and fairness of the tax system since other financial instruments that might be given to an employee as a remuneration for work (e.g. shares in the company) are, as a rule, also taxed at grant. There are differences, however, regarding the criteria that are used to decide whether or not an option is tradable and can be valued. The case is clear if there is an established market for the options. Uncertainties arise if the employee is in principle allowed to sell the option but if there is no market for it (e.g. in the case of small start-ups).

Generally, however, employee stock options may not be traded and in this case taxation at grant is confronted with several problems that will be discussed later. It should be noted that the discussion of grant taxation in this chapter assumes that this is the standard form in which employee stock options are taxed. In a later chapter an optional systems will be discussed where employers and/or employees can choose between taxation at grant and taxation at exercise.

In case of non-tradable options a market does not, by definition, exist and the value of the option is therefore difficult to ascertain. There are general statistical models for valuing tradable options (e.g. the Black-Scholes-formula or the binominal model) that can be modified to value employee stock options. But there is no general agreement on the methods for such adjustments and it is still unclear if the results of modified valuation formulas can be considered as correct representations of the value of non-tradable options. For practical reasons it might therefore be preferable to use simpler methods for

38 The present chapter only deals with the national perspective. In an international context there is also a sixth possibility of taxing stock options, i.e. when an employee leaves the country.

39 The definition of what constitutes a grant is not unambiguous. In principle this could be the offer of an option, its acceptance, its non-rejection within a certain time after the offer (as in Belgium) or the moment when the employee actually receives the option, i.e. when the option is somehow registered in his name.

solving the valuation problem of grant taxation. A simple and straightforward way is to set the value of the option as a percentage of the value of the underlier at grant.[40]

If one is prepared to accept a certain degree of arbitrariness one can always find a pragmatic solution to the problem of valuation and in some cases no other solution exists.[41] For stock options, however, it has also to be considered that non-tradability has important implication for the nature of the option. While other non-tradable forms of remuneration (e.g. fringe benefits such as using a company car) have a direct use for the employee, a non-tradable employee stock option[42] is very similar to a promise by the employer of some future gain provided that the stock price develops well. This argument is of great importance for tax-systematic reasons. There exist forms of financial employee participation that are very similar to option plans in that the size of e.g. a bonus depends on the development of the company's stock. But bonuses are only taxed when they are paid. Taxing non-tradable stock options at grant (or vesting, see below) introduces a tax-difference between two forms of remuneration that, from the point of view of the employee, are almost identical.

Taxation at grant also introduces an additional element of risk for the employee. If the options go underwater the tax paid on them at grant will generally not be refunded. This risk might not seem extreme in the case of well-established companies since employee stock options are usually valid for a rather long period. It can be expected that at some point in time they will be exercisable with a profit. For start-ups or young growth companies with a considerable risk of failure this is different. For risk-averse employees at least, taxation at grant can change the perception of employee stock options in a rather fundamental way.

Because of the additional risk in the case of grant taxation and since most employees can be assumed to be risk-averse, employee stock options will probably only become more widespread in a country that taxes at grant (or vesting) if the effective tax rate is fairly low. Low effective tax rates could for example be achieved by generous valuation rules, by low nominal rates, if there are no social insurance contributions and if capital gains from the stock acquired via the options are tax-free. Especially in times of booming stock market this could, however, create political concerns about distributive justice and thus might not be politically acceptable.

Taxation at grant involves some risk but also the possibility of considerable net gains. It could consequently be argued that this form of taxation can be suitable to creating a culture of "intrapreneurship". Moreover the link between the company and the employee who has already paid taxes on his options could be stronger than in cases where the employee has not yet paid anything and where no obligation to make a payment might ever arise.

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40 This is e.g. the case in Belgium (the only country in the EU that taxes employee stock option generally at grant). Apart from the value of the underlier the Belgian system also takes into account the option term when establishing the value of the option.

41 As an example consider the inheritance of a unique piece of art and the problem of evaluation for purpose of inheritance tax. There is no possibility to postpone the taxation until the inheritance is sold since the heir might have no intention of selling it at all.

42 Here non-tradability also implies that there is no similar economic use for the option such as pledging it as a collateral etc.

Taxation at grant also strengthens the signalling function of stock options scheme. On the one hand employees that accept stock options – although they have to pay taxes on them immediately – send a strong message of trust in their own company to other potential investors. For the same reasons, however, taxation at grant could be harmful for companies. If a company offers stock options to its employees and they decline because of the up-front tax obligation this could give a negative signal to the financial markets if it is believed that the opinion of employees regarding their own company is better than the average knowledge.

Taxation at grant of the options also implies a liquidity problem since the options cannot usually be sold and the cash for the tax payment has to come from somewhere else. But the tax load will often be not so high if taxation occurs at grant or vesting, and thus the liquidity problem will be relatively minor compared to the valuation problem. The liquidity problem can have more impact in the case of taxation at exercise, which will be discussed later.

#### 5.1.2.2.Vesting of the option

Employee stock options are usually not vested on grant. Often options vest gradually, i.e. 20% of the options granted in year 1 can be exercised in year 2, another 20% in year 3 etc. Apart from a mere lapse of time the right to exercise can be subject to conditions such as meeting certain success indicators, a continuous employment relationship and others. In this text the term "vested" means that the employee can use the options to acquire shares if he wants to do so and the employer has no legal or contractual right to prevent this.[43] Note that vested options can still be subject to the condition that they may only be exercised if the holder is still employed by the company that granted the option. Nevertheless, for the purpose of taxation the fact that he could exercise the option and liquidate it is enough to say that the option is vested.

Unlike a non-tradable and non-vested option that merely represents a chance of future gains, a vested option constitutes a concrete economic advantage. It can be exercised, and if the shares can be sold immediately the vested option can quickly be converted into cash. For this reason no tax-systematic arguments speak against taxation at vesting. However, with regard to the question of valuation, taxation at vesting is plagued by problems similar to those facing taxation at grant. Moreover, taxation at vesting can create administrative problems for companies that have reporting and withholding obligations since they will have to install a "tracking system" for all the options that are granted.

Apart from the practical difficulties that speak against taxation at vesting there is also the question of its relevance. As a matter of fact many employees will exercise their options upon vesting, sacrificing potential further gains for greater security. Thus the unsatisfactory situation could arise that upon vesting, options are taxed according to either a complicated formula (such as Black-Scholes) or according to a simplified but somewhat arbitrary rule (as e.g. in the Netherlands that for a long time taxed options only

[43] There is also the possibility that an option might be used in a transaction but not be used to acquire shares, e.g. an option could be used as a collateral. Such a case could arise if e.g. the employee takes out a credit with his employer and is allowed to use his unvested options as a security. In such a case the unvested options becomes more than just a chance of future gains and in principle such a conversion could trigger taxation.

at vesting) despite the fact that the same options are exercised almost immediately afterwards.[44]

#### 5.1.2.3. Exercise of the option

In most countries employee stock options are taxed when the option is exercised, i.e. when the exercise price is paid and the stock is acquired. Usually there is no valuation problem, at least for quoted stock. The amount taxed equals the difference between the higher market value of the stock obtained and the cost for obtaining them, i.e. the exercise price paid (spread or intrinsic value) plus any amount that the employee might have paid to obtain the options.

For the employee the main advantage of taxation at exercise is that employee stock options remain a risk free investment. Taxes are only due if the options turn out to be profitable.[45] Although the effective tax rate could be higher than in the case of up-front taxation many employees appear to prefer the former.

The exercise of an option will often occur several years after the option was granted. Thus it might appear as if (besides the avoidance of risk) the employee enjoyed an advantage of a late tax payment that is not granted to those who receive a cash income. This argument, however, does not hold. Provided the discount rate for today's taxation of future gains is the same rate for which the revenue board would grant a tax credit postponing the taxation of an option the value of which is uncertain at grant until exercise is the same as taxing an asset with a known and secure return at grant.

It could be argued that by deferring taxation the revenue board runs the same economic risk as the employee: the options might go underwater in which case no taxable gain would accrue. But on the other hand it is usually also true that if the stock develops well, taxation at exercise will generate higher tax revenues than taxation at grant. So, on average, the revenue board receives a compensation for accepting the risk. Moreover, the effect of progressive tax schedules has to be taken into account. Unless special relief mechanisms apply (see below) the higher base in case of exercise taxation will also result in a higher average tax rate due to progressive income tax tariffs. Thus postponing taxation until the moment of exercise does not offer an unfair advantage to holders of options compared to holders of other financial assets.

Taxing the gain at exercise as employment income often triggers a withholding tax and the need to pay social contributions. At this time, however, the employee still has no cash earnings. (Often the company will be responsible for paying the tax to the State but it will probably pass the liquidity problem on to the employee by demanding that on top of the exercise price he pays an amount equal to the withholding tax.) This tax-induced liquidity problem has to be distinguished from the liquidity problem due to the payment of the exercise price. The latter will usually be bigger but especially in young, fast-growing companies the tax-induced liquidity problem could be substantial. Moreover,

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[44] It would not be a solution to introduce exercise taxation in such cases as an exception to the general rule of taxation at vesting since this could provoke early exercise.

[45] i.e. profitable at exercise. If the employee does not or cannot sell the acquired shares it could happen that at the ultimate sale of the share the overall profit does not cover the tax. See chapter on vesting of shares.

given the high employment taxes in several European countries the obligation to pay tax will in any case aggravate the liquidity problem due to the payment of the strike price.

Usually the liquidity problem is solved by an immediate sale of the stock or some of it (cashless exercise). Occasionally, the tax-induced liquidity problem is blamed for the fact that employees do not keep the stock of their company after exercise. But this is probably not true. It can be argued that the employee would not have exercised the options had he not wanted to sell the shares. If the holder of the option decides to exercise because he is afraid that the underlier will lose value in the future, he will of course try to sell the shares quickly before their value drops. If on the other hand he expects the underlier to increase in value he will not exercise the option, since buying the shares would not increase the expected gross gain but would use funds that might be invested elsewhere.

Thus in general the opportunity costs speak against an early exercise of the options. Nevertheless, such an early exercise might be profitable if capital gains taxation is significantly lower than employment taxation. In that case an employee might wish to exercise his options while the spread between the value of the stock at exercise and the strike price which will be taxed as employment income is not yet too big. If he keeps the stock, subsequent gains will only be subject to the (lower) capital gains taxation. Though he will incur opportunity costs they may be outbalanced by the lower capital gains tax. Thus it is possible that in order to minimise the tax load an employee exercises options early and then keeps the shares. But such a scenario is only rational for the employee/investor if he expects a better-than-average performance from his company's stock. In most cases he will wish to diversify his portfolio. After all, his employment and wage risk is already tied up in his company and he might think it wise to invest his monetary capital elsewhere.

#### 5.1.2.4. Vesting of the shares

Some option plans provide for a lock-up period for the shares that an employee acquires by exercising his options. This means that the stock cannot be sold for a certain period (often around six months). Such clauses are used to protect investors from manipulations of the stock price by the management. They are also important for small companies that go public. In such cases the stock price sometimes rises substantially within a very short period. However, if the employees cash in their profits immediately this can endanger the development of the price.

If shares are not vested at exercise, taxation at that moment could pose serious liquidity problems since the employee cannot sell any shares to cover the tax. In such cases postponing the taxation until the moment that the shares vest seems appropriate.

When the shares vest two ways of calculating the taxable gain are possible. First the taxable gain could be equal to the difference between the exercise price and the price of the stock at exercise. If, however, the stock price falls between exercise and vesting of the shares, the gains might, in the worst case, not be sufficient to cover the tax. Secondly, the taxable gain could be equal to the difference between the exercise price and the stock price at vesting of the shares. It could be argued that such a form of taxation would imply the taxation of private capital gains and would thus not be feasible in countries that do, in principle, not tax such gains.[46] However, it is not certain that the increase in the value of the stock between exercise of the options and vesting of the shares does indeed constitute a capital gain. If the non-tradable option is not considered a financial asset (see above) the same should hold true for the blocked shares.

#### 5.1.2.5. Sale of the shares

If not earlier, a duty to pay taxes will arise when the stock acquired with an option is sold for cash. Even if there is only one payment it is still possible to distinguish between employment income (the gain between grant and exercise) and a capital gain (the gain between the exercise of the option and the sale of shares). Thus there are at least two ways of calculation the tax obligation. First there could be taxation of the employment earnings that is simply postponed until the capital gain is realised too. And secondly, the whole gain could be taxed according to the rules for capital gains taxation.

The first of these two methods seems to have the advantage that the employment taxation is deferred. However, there is a risk that the stock price drops between the exercise of the option and the sale of the shares. In such a case the employee might not realise a cash profit big enough to pay the taxes on the former (book-)gains. Recent experience in the USA has shown the dangers of such a delayed taxation. The US tax code recognises "incentive" stock options for which the tax payment is deferred until the shares are sold and the gains are only taxed at the lower capital gains rates. Hoping to profit from the tax advantages many people held their shares for the necessary period. When the market went down the gains at the sale of the shares were rather low. However, in some cases the so-called Alternative Minimum Tax (AMT) was triggered. This tax is due on the spread, i.e. the former high book profits at exercise. In many cases the gains realised by selling the devalued shares was insufficient to pay the AMT.[47]

Deferring taxes on the spread until the selling of the shares can give the investor a certain advantage but can also lead him to risky behaviour. Inexperienced employee-investors in particular cannot be expected to opt for the safe strategy of anticipating the tax, selling part of the stock and investing it temporarily in a safe asset.

If the whole gain from the option (between grant and sale of stock) is taxed as one this would imply that there was no employment tax at all on the stock options although they constitute a valuable consideration and although they are given as a remuneration for work. In countries where private capital gains are usually taxed this is clearly a very advantageous form of taxation. The situation is different for countries where there is no capital gains tax on private holding gains. Taxing at the moment the stock is sold and using the difference between the price obtained for the stock and the exercise price of the option would imply the indirect introduction of a capital gains tax. Thus taxation at the sale of the stock is only a feasible alternative for those countries that already tax holding gains.

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[46] Note that there is no provision in some tax systems for the taxation of private capital gains, at least not generally. Sometimes these systems provide for taxation of short term holding gains.

[47] See e.g. Townsend, K. (2000).

### 5.1.3. *Optional taxation at grant or exercise*

Given that all forms of taxation have some advantages and some drawbacks, one might think of giving the employee the right to choose the moment of taxation or, alternatively, the tax law could offer the possibility to draft option plans in ways that trigger different moments of taxation. Regarding the choice between taxation at exercise and taxation at the final sale of shares, such systems are already in place. In several countries taxation will be postponed provided the stock option plan fulfils certain criteria (see chapter 6). In the Netherlands, taxation takes place when the shares irrevocably vest or, if employer and employee opt for it, at exercise. Although they have occasionally been discussed,[48] no systems that offer a choice between grant and exercise exist.[49]

The main advantage of a system that offers a choice between taxation at grant and taxation at exercise (compared to a system in which taxation at exercise is the only rule) would be that risk-taking by employees could be better rewarded. If the shares of a company develop well, grant taxation can result in a relatively low effective tax rate — especially if the up-front taxation were combined with certain tax benefits such as exemption from social contributions. Employees who trust in a favourable development of their company could be rewarded with lower taxes for their willingness to bear the risk of the up-front tax payment (which will be final). A system of alternative grant taxation could thus be used as a catalyst for more intrapreneurship.

At the same time the tax payment might create a closer link between the employee and the company. The employee who has already "invested" the tax payment in his stock option will take a stronger interest in the development of his company than the employee who will only be taxed on exercise, i.e. only if a gain arises.

An important point is that such a system of choice would have to be designed in a way that avoids tactical manipulations by either the employee or the employer. Of particular importance would be that the choice has to be irrevocable. Moreover, there have to be unambiguous solutions for the valuation problem. Otherwise employees might e.g. first opt for taxation at grant, then they might question the valuation of the granted shares and postpone the actual taxation (e.g. by a law suit) until exercise and only then decide finally on the more favourable time of taxation.

Naturally, a choice-system would entail greater administrative complexity and would also tend to create problems in cross border cases (see below). Nevertheless, such a system might be viewed favourably especially in countries that do not tax private capital gains. Where private capital gains are generally taxed, the employees' willingness to take an entrepreneurial risk can be rewarded by introducing lock-up periods and postpone taxation until the final sale of the shares. In other countries, introducing a choice between the possibility of low effective grant taxation and normal taxation at exercise might be an alternative.

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48 See e.g. Deutscher Industrie- und Handelstag (2000).

49 The Netherlands could be seen as an exception. Since taxation takes place at either vesting or exercise granting vested shares could in fact establish the choice between grant taxation and exercise taxation.

### *5.1.4. Mitigation of the effects of progressive tax schedules*

In the case of employee stock options the gain taxable as employment income usually accrues over a period longer than the normal tax period (i.e. one year). Given that income tax schedules are progressive, the average tax burden on employee stock options could therefore be higher than on regular wage income.

There are several ways to avoid this effect:

- Taxation at grant, especially if a valuation method such as Black-Scholes is used, since this form of valuation results in a discounted expectation value. Taxation at a discounted value (i.e. taxation of a lower base) implicitly takes into account the fact that the gain accrues over a longer period and thus mitigates the effect of progressive tax scales. As said above, however, taxation at grant – at least as the general tax rule – is not a favourable way of taxing stock options.

- Taxation as capital gains: Capital gains are often taxed at a rate lower than employment income. Thus the fact that capital gains often accrue over several years is implicitly taken into account.

- Special rules for averaging the income. Such rules exist in several tax systems, e.g. in Germany, France, the Netherlands or Sweden.[50] The basic logic of these rules is the same in the various countries but the actual calculations vary. Usually the income that accrues over several years is at first divided by the number of years over which it accrued or by a standard factor. Then a tax rate is calculated for the resulting share of the income plus the normal income (e.g. an averaged income or the normal income of the year of taxation). The resulting tax is then multiplied by the number of years to ascertain the final tax burden.

  Generally the effect of the averaging rule increases with the size of the exceptional income in comparison to the normal income. Moreover, the effect is strong if the normal income is not already subject to the maximum tax rate. Thus for employees whose stock options are a relatively minor perk on their cash salary the effect of the averaging rules could be relatively small. The same holds true for CEOs who receive a high income and already pay the top rate. The effect of the averaging rules is probably highest for employees who are not in the top income bracket and who receive a substantial part of their income in the form of employee stock options.

  In many countries the overall effect of the averaging rule also strongly depends on whether such rules are only applicable for income tax purposes or also for compulsory social contributions.

  Although such rules are in general beneficial for the tax payers it has also to be considered that they increase the complexity of tax systems.

- Another example how the effects of progressive tax schedules can be mitigated is the 40% reduction of the tax base allowed under Spanish income tax law. The reduction is

[50] A similar rule exists in Finland but is not applicable to employee stock options.

granted for income that is generated over more than two years and that is not recurrent. However, the reduction is applied only to a limited amount of the tax base.[51]

#### *5.1.5. Taxation of discounts*

In the majority of cases options are granted "at the money". Sometimes, however, stock options are granted to employees with a discount, i.e. the strike price is lower than the market price of the underlier at grant. Generally the discount is taxed less favourably than the rest of the benefit from the option. Where there is a discount the differences regarding the timing of taxation are of particular importance.

When taxation occurs at grant or vesting the discount needs to be considered especially since it increases the value of the option. In particular after vesting, the discount element is a benefit that, in principle, could be immediately liquidated by the employee. But when the option is not vested and taxation takes only place at exercise there does not seem to be a need for a special treatment of the discount. From the employee's point of view the discount of a non-vested option is of course a factor that increases the value of his option. But it is very similar to a situation where the option was granted at the money and the stock price had risen.

Apart from the taxation issues, the incentive effects of an option granted at a discount deserve special attention. An employee holding an option that was granted at the money would probably welcome a high variance of the underlying stock since this should give him, at some time, the chance to exercise the option with a sizeable gain. But if the option is offered with a discount (provided the discount is not marginal) a high variance of the underlying stock would also increase the risk of losing that discount. From the two kinds of options, i.e. with or without discount, different kinds of management decisions could, all other things being equal, be expected. In the first case relative "risky" behaviour, in the second case rather "conservative" behaviour.

### 5.2. Tax consequences for the employer

From the point of view of the employer the following tax-related questions are probably of greatest importance:

- Are the costs for setting-up and operating stock option plans deductible?
- Is the cost of the stock options deductible? And if so, to what extent? Does the possibility to deduct the cost depend on the way the stock given to the employee is obtained?
- Does the employer have to pay social security obligations?
- Are there withholding obligations regarding the taxes that the employee has to pay?
- What are the rules if the costs are recharged?

[51] This limited amount is calculated by multiplying the average declared income of natural persons and the number of years over which the income was earned.

Generally the answer to the first question is "yes". Costs incurred by the employer for setting up and running a stock option plan will be considered business expenses. These cost include e.g. fees for consultants who give advice on the appropriate scheme, expenses for tax advice, wages for employees who manage the plan, etc.

The answer to the second question is rather complex. With a grant of employee stock options the employer commits himself to make the requested number of shares available at the moment the employee exercises his options. This obligation can be met in various ways of which only the two most common will be discussed here:

- Re-purchase of shares (at the moment of grant or exercise, or between the two dates)
- Issuing of new shares

If the shares are re-purchased the granting company incurs a real cost if the re-purchase only takes place when the employee exercises the option (the cost will equal the gain realised by the employee). Or, if the re-purchase already takes place at grant, there will at least be an opportunity cost since the employer will have to give away the shares for less than he could get if he sold them at the market. If the company chooses the second alternative, i.e. if the shares given to the employee are newly issued, there is no direct cost for the company but only an indirect cost for the owners of the company since their rights in the company will be watered down.

The most common practice seems to be that the cost of re-purchased shares is deductible for company tax purposes while there is no tax deduction for newly issued shares. There appear to be exceptions to this general rule. In Belgium a deduction of the spread is not possible, no matter how the company obtains the shares.[52] In the Netherlands the deductible amount does not depend on the actual cost but equals the taxable amount for the employee's income tax purposes.[53]

As regards social security obligations the situation varies within the EU. In most countries employer's social security contributions will, in principle, be due since the income from employee stock options is considered to be employment income. In some countries, though, (Belgium, Denmark, Ireland, Luxembourg and Portugal) no contributions have to be paid, at least not in general. While the taxation of the employee's income is (except in the Netherlands) not linked to corporate taxation the social security obligations of the employee and the employer are directly connected. Employers face the same problems regarding valuation and liquidity as their employees. But for the employer these problems can be more severe for two reasons:

- The employer cannot predict when the employee will exercise his options. So planning the tax liability is difficult as regards both timing and amount (which will depend on the share price on the day of exercise).

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52 PricewaterhouseCoopers (2002), Belgium, paragraphs 3.5.2.1. and 3.5.2.2..

53 PricewaterhouseCoopers (2002), The Netherlands, paragraph 3.5.2.3. The amount that can be subtracted equals what would have been taxable for the employee in case taxation at vesting applies.

- The employee can sell part of the stock to cover the tax liability, but the employer does not have such a possibility (there is however an inflow of capital from the employee paying the exercise price).

In general the employer will have an obligation to withhold the income tax payable by the employee. The resulting drain in liquidity for the company can, however, be avoided by passing on the tax obligation to the employee. This is relatively easy in case of taxation at exercise, i.e. the employer will demand the payment of the tax together with the payment of the exercise price. Problems can occur where taxation takes place at grant or at vesting. In both cases the employee will not necessarily have the liquidity to pay the taxes and the employer might have to advance the money or subtract it from the usual cash salary which might not be sufficient (moreover, in some countries such a procedure is not possible for legal reasons). In case of taxation at vesting there is also the problem that the employer will have to install a tracking system for all granted options to ensure that he will not miss the moment when taxation is due.

In some cases the employing company does not grant options over its own shares but options over shares of a connected company. In such a case the company in whose shares the options are granted might recharge the cost to the employing company. The rules in such cases are rather complex and it is not always clear if the employing company will be entitled to deduct theses costs. In any case an explicit recharge agreement is usually advisable.

## 6. INTERNATIONAL COMPARISON OF LEVELS OF TAXATION

### 6.1. General remarks

The overall levels of taxation (including compulsory social contributions) differ considerably between Member States of the EU and also between the EU and other countries such as the USA. Moreover, the structures of the revenues are quite different from one Member State to another.[54] The level of taxes on employee stock options should always be seen in the context of the level of personal income taxation, labour taxation and taxation of capital gains in general as well as in context with the overall level of public expenditure.

Conclusions on the right or appropriate level of taxes on employee stock options are difficult to draw. Because of the numerous potential advantages that stock options offer to companies and employees, it is nevertheless fairly clear that employee stock options should at least not be disadvantaged in comparison with ordinary employment income (cash wages). When comparing the tax burden on employee stock options it should also be taken into account that these taxes are, on average, to be borne by the more mobile part of the labour force. Thus high taxes on options are a potential obstacle for the recruitment of highly-qualified internationally-mobile persons. To the extent that employee stock options are intended to attract and keep qualified personnel, sizeable differences in taxes between the EU and other countries could be problematic.

Comparing the exact tax burden on employee stock options between countries is difficult for several technical reasons. First, different taxes are levied on the returns from employee stock options (e.g. personal income tax, compulsory social security contributions, capital gains taxes) and, secondly, these taxes are levied at different times during the life cycle of a stock option. Naturally a tax of amount *x* weighs heavier if it is due at the grant of an option than the same amount of tax at exercise or even at the sale of shares. Finally, the calculation of the tax base on which the taxes are levied varies between countries.

In order to compare the taxation in countries that tax options only at grant with countries that tax at exercise and countries that tax (certain kinds of options) when the shares are finally sold, effective tax rates have been developed, based on a standard scenario (see graph). The scenario includes the whole life-cycle of an option/share-investment. The rates were calculated by PricewaterhouseCoopers (London) in the framework of the study on the legal and administrative rates for employee stock options in the EU and the USA.[55]

In order to take into account the effects of different income levels and different family situations (married, single, with or without children) on the income tax the effective tax rates were calculated for different (standard) types of tax payers. In this paper only the effective rates for a single person with an annual cash income of €50 000 and a (one off) grant of stock options representing stock of €16 500 at grant was selected. It should be

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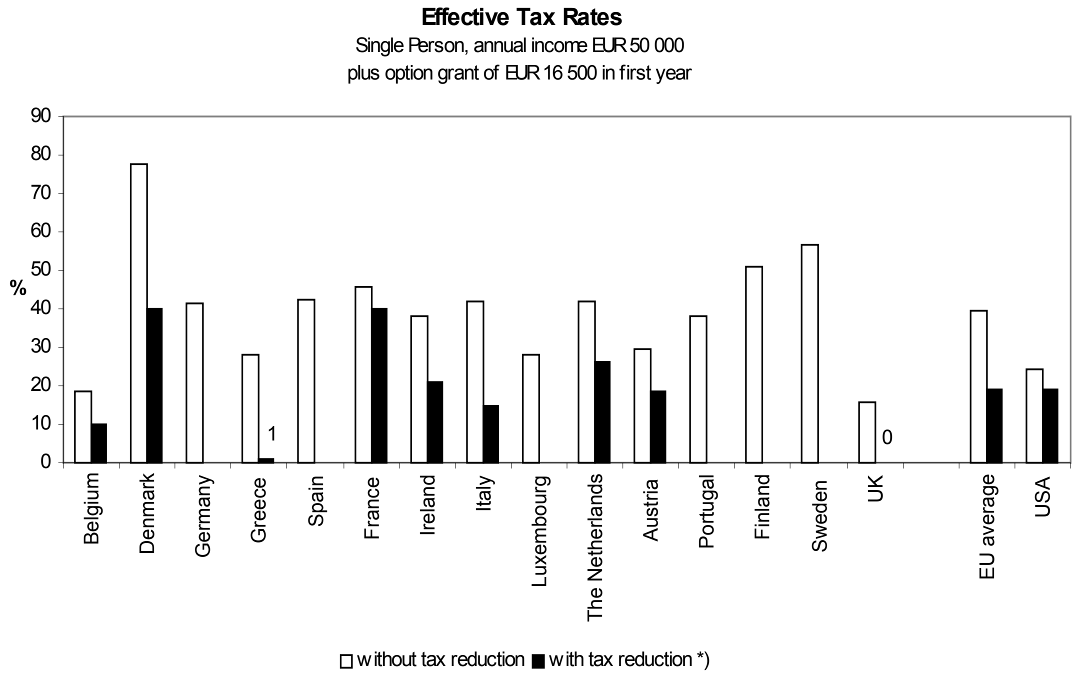
[54] See e.g. European Commission, Structures of the Taxation Systems in the EU 1995-2001.

[55] See also the internet pages of the European Commission at: http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/stock_options/tax_rates.htm

noted that for some countries the effects of the different income and grant levels as well as the different family situations can be quite significant.




*) DK 40% paid by employer, IRL and UK approved schemes

*Source:* PricewaterhouseCoopers.

The rates reflect the effective tax and social security burden over the whole option-share investment from the grant of the option to the final sale of the shares. It is assumed that the options are granted at the money and that they are held for three years after grant before being exercised. Afterwards the stock is held for another two years before it is sold. Only the final gain at the liquidation of the stock is considered as a gross gain from the investment, mere book-gains are not taken into account. The effective tax rates includes all income tax payments (e.g. at grant or at exercise) and social contributions plus the capital gains taxation (if applicable) at the end of the total investment period of five years. All taxes and also the payment of the exercise price are discounted with a rate of 5%. It is assumed that the value of the stock increases by 10% per year.

Note that for different scenarios (regarding income and grant levels, growth and interest rates) effective tax rates could in some cases be different.

The white columns in the above graph show the effective tax rate on an investment in employee stock options for normal options, i.e. employee stock options that do not enjoy a special tax treatment. In some countries (Belgium, Greece, France, Ireland, Italy, the Netherlands, Austria, UK, USA) special tax privileges are granted provided the option plans fulfil certain conditions. In Spain there exists a tax exemption of € 12 000 for certain plans.[56] Unfortunately, no calculations of effective tax rates for such plans are

[56] The relief is granted on the benefit that arises at the exercise of the option. It is subject to the condition that the plan operates under the general remuneration policy of the company. The employee must hold

available. In Denmark there is the possibility of a 40% flat rate tax to be paid by the employer. The effective rates that result from the more favourable treatment are represented by the dark columns (for the UK the value is 0).

### 6.2. Conditions for favourable tax treatment

Ten of the fifteen Member States of the EU either have special tax favoured plans or offer at least a more favourable tax treatment for employee stock options provided a company plan fulfils certain conditions. Only in Germany, Luxembourg, Portugal, Finland and Sweden there is no special possibility of a reduction of taxes on employee stock options.[57] France, Ireland and the UK have a relatively long-standing tradition of employee stock options. Their legislation recognises specially defined plans which companies can use. Companies can apply to have their own stock option plans recognised under an official scheme. If the tax authorities authorise the plan, the favoured tax treatment follows automatically.

The tax concession can consist in a postponement of the tax payment (usually from exercise of options to sale of shares), a reduced tax rate (e.g. levying the rate for capital gains taxation on the employment income realised at exercise) or more favourable methods of valuing the taxable gain. Often the tax favour is limited, i.e. it only applies below certain income thresholds etc. and/or it does not apply to a discount at grant.

In order to enjoy the favourable tax treatment plans have to fulfil certain conditions. The most common and most important are:

a) Clear definition of the options and the option plan.

   Tax favoured plans have to state clearly what the exercise price is and later changes (re-pricing) are usually not allowed.

   The option term must not exceed certain limits (e.g. ten years).

   With these conditions tax authorities try to avoid possible abuse of options and control the possible loss of revenues.

b) Clear link between company and employee

   A favourable treatment is usually only possible for options to buy share of the employing company or closely related companies.

   The options must not be tradable or transferable and optionees must not have the possibility to hedge the option risk. Often there is also the condition of a certain vesting period.

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the shares for a period of at least three years. Moreover neither the employee nor any relatives up to the second degree must have a direct or indirect participation in the company exceeding 5%.

57 The special reductions for some stock options should not be confused with the general possibilities to mitigate income taxes on income accruing over several years which can also apply to income from employee stock options.

c) Size of the option grant

   Often the size of the grant is restricted for the plan in general and for the individual grant.

   Probably considerations of distributive justice are responsible for these conditions. Moreover, a limitation of the size of the option grant protects shareholders from the risk that their stock could be diluted excessively.

d) Coverage of the plan

   In general tax-favoured plans have to be broad-based plans, i.e. they have to be offered to a large part of the staff and must be non-discriminatory.

e) Eligibility of optionees

   Certain restrictions may apply as to who can benefit from a tax-favoured plan. Persons who are not employees or directors and persons who have a material interest in the company are usually excluded.

f) Restrictions on the shares that may be used

   Shares must usually be ordinary shares without special restrictions. Moreover, they must be fully paid up.

Where countries grant tax concessions the conditions that have to be fulfilled are rather similar. One can assume that the basic political intention behind the tax-favoured plans is to promote broad-based plans combined and to restrict the benefit for recipients of high incomes. Given these similarities one might think of defining common conditions for tax favoured plans in the EU. Such a plan should in particular facilitate the situation for employees who work (subsequently and while holding options) in different Member States and would potentially increase employees' mobility. The current differences in income taxation and social contributions are probably already an obstacle to employee mobility. Differences in the treatment of employee stock options can be an additional hurdle, especially where they could result in the loss of a tax favour that had in the past (i.e. before the decision to move to another country) motivated an employee to accept stock options.

Moreover, a list of common conditions could enable companies that have subsidiaries in different Member States to draft uniform plans for all their countries of activity. This would result in cost reductions and thus promote the use of employee stock options and financial participation of employees in general. Common conditions for tax favoured plans would be especially beneficial to high-tech growth companies in smaller countries that are forced by the limitations of their home market to operate internationally.

Even if a list of common requirements existed for all Member States, no country would be obliged to actually grant tax concessions. In particular those countries that nowadays do not grant any tax advantages to stock option plans could not be obliged to do so even if a company plan fulfils the commonly defined criteria. On the other hand commonly defined criteria would be useless if no country granted any tax advantages. Thus at least those countries that today grant tax favours provided certain conditions are met should also consider granting tax concessions if the commonly-defined criteria are met.

Each country willing to grant a tax favour to stock option plans that fulfil the common conditions could still decide individually and independently on the nature of the benefit. While one country might e.g. lower the tax rate, another might lift the obligation to pay social contributions and a third could postpone the payment of the tax. In the same way the size of the tax favour could be decided independently by the countries depending on their budgetary situation, on how strongly they want to promote financial participation etc.

The existence of a common scheme would also not hinder Member States from employing further schemes that differ from the common scheme. In order to pursue country-specific policy goals, different plans could be introduced or maintained and exist in parallel with the common plan. The suggestions put forward in this chapter do not in any way question the sole right of Member States to decide on changes in their legal systems, especially regarding taxation.

## 7. INTERNATIONAL MOBILITY OF EMPLOYEES AND THE RISK OF DOUBLE-TAXATION

### 7.1. The problem

The differences between the national taxation rules for employee stock options can pose particular difficulties in cross border situations. These problems are not discussed in detail in this chapter. The following paragraphs present only the main lines along which solutions could be sought, and will not describe detailed provisions on how each theoretically possible case should be treated.

The following discussion will focus on the three most important problems:

- The conceptual problem concerning the classification of income from employee stock options (employment income or capital gains?)

- The conceptual problem to what employment period the options relate.

- The practical problem arising from the fact that that countries tax income from employee stock options at different points in time.

Questions regarding cross border taxation are usually decided by a system of double taxation conventions (DTCs) between countries. Most of these (bilateral) conventions are based on the OECD model tax convention. But this model does not specifically discuss the problem of taxing the relatively new instrument of employee stock options in cross border situations, although Member States are already using it to deal with them. In 2001 the OECD refocused its work on the issue and presented a public discussion draft on income tax issues in cross border cases in March 2002. The following pages are to a large extent based on the OECD draft, which discusses most of the relevant income tax problems regarding employee stock options that arise for the employee, and also touches briefly on issues of importance for the employer. Moreover, the paper proposes interpretations of the OECD Convention that are intended to solve the cross border taxation problems. [58]

### 7.2. Definition of the kind of income

The OECD model convention distinguishes between different kinds of income which lead to different tax treatments. In the context of employee stock options two types of income are of potential interest: income from employment (Article 15) and capital gains (Article 13).

According to the OECD model convention, personal income is, in principle, taxed by the state of residence. Accordingly, capital gains are taxed by the state of residence. Article 15 in connection with article 23 (MC) nevertheless provides that in cross border cases the country in which the employment is exercised has the right to tax the remuneration from the employment.[59] To avoid double taxation the state of residence shall either exempt the

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[58] OECD (2002), Cross-Border Income Tax Issues arising from Employee Stock Option Plans, A Public Discussion Draft, Paris (available at the internet).

[59] At least in principle. Only exceptionally are taxes levied by the state in which the employee is resident, e.g. in the classic case of a short-term secondment. Such cases are not discussed here.

income from taxation or grant a tax credit for the taxes paid in the country of employment.

There is general agreement that income from dependent employment is income that a person receives as a remuneration from an employer in which business he is integrated and from which he takes orders. For the decision whether a certain benefit is employment income the functional relation between the benefit and the services rendered is important. It should not be important in what form the benefit arises, e.g. if it is given in cash or as a stock option. Moreover, it should not be important when the benefit is paid or accrues. A benefit resulting from an employment relationship could be given to the employee after the work has been finished (and e.g. after the employee has changed his residence) or, alternatively, before the work has been taken up.

Countries put the dividing line between employment income and capital gains at different moments in the life cycle of an option (see chapter 5). From this, problems can result in the international context. Two examples:

Employee E working for a company in country A is granted options under a special plan that fulfils certain criteria. Country A accordingly taxes these options only at the sale of the shares as capital gains. E is seconded for three years to country B which taxes all employee stock options at exercise. While still in country B, E exercises the options and pays taxes on the gain at exercise. After his return to A he sells the shares. Country A wants to tax the whole gain from the option as capital gain and does not acknowledge any right of B to tax part of the gain as employment income.

Employee E is resident of country A but is currently working in country B where he is granted an option. Country A concedes that the grant is remuneration for employment in B which is not taxable in A but considers any subsequent gains from the option/stock to be capital gains which it, as the residence state, may tax.

Due to the fact that:

- a non-vested conditional option is only the promise of a future gain
- there exist serious valuation problems for employee stock options
- taxation of the total gain for options/share as capital gains occurs not on grounds of principle but as a simple method of granting a tax concession
- the majority of countries considers the exercise of an option as the decisive moment for the distinction between earnings of employment and capital gains

it appears natural and convenient to choose the exercising of the option as the event that marks the change from employment income to capital gains in the international context. Although national rules and international rules could in theory be different, the two sets of rules have to be compatible. Thus, if at national level taxation at exercise is the preferred solution, taxation at grant or vesting should not be the rule for cross-border cases since at grant it often cannot be foreseen if a cross-border case will arise.

### 7.3. The period to which the benefit from employee stock options relates

In most cases employee stock options are granted because of their incentive effects, i.e. they are oriented towards the future. But there can be cases where they will be given as a reward for past services, or there could be a mixed motivation for their grant, partly oriented towards the past, partly towards the future. To which working period stock options relate cannot be decided *a priori*: it depends on the concrete terms of the stock option plan. If the amount of options granted depends on certain success indicators measuring past performances and if they are unconditionally vested on grant they are probably to be regarded as a reward for past services. If stock options are granted to somebody upon entering a firm they clearly have incentive character. If two different tax jurisdictions define the period to which the stock options relate differently, overlaps and double taxation could occur.

Since the most practical dividing line between employment income and capital gains is the moment of exercise, one could also assume that options are a remuneration for the employment between grant and exercise. This however could lead to difficulties in some cases, as the following example shows.

Employee E is granted options while working in country A. After three years the options vest. E retires and returns from A to his country of residence B. After two more years he exercises the option. A should has the sole taxing right since the time spent in B could no longer be considered as having a connection to the employment.

To avoid problems of the kind shown by the example, the employment period to which options relate should, in principle, be the time between grant and vesting of the option. In the event that an employee works in more than one country between grant and vesting of his options, the tax base has to be divided between the countries on a pro rata basis.

### 7.4. Time of taxation

If all countries followed the principles suggested above regarding the division between employment income and capital gains for allocating the incomes to certain periods, different points in time should, in theory, not lead to double taxation or non-taxation. There are however still practical problems:

Employee E is granted stock options in country A (where he is resident). A taxes options at grant. Shortly afterwards E moves to country B to work there. In B the options vest and are exercised. All in all, E spent 90% of the time between grant and vesting/exercise in country B and only 10% of the time in country A where he was taxed at grant.

Since there is no common rule to calculate the taxable base for personal income tax purposes, there is no commonly agreed tax base to which the above percentages could be applied. Instead, each country will have to apply the percentages to the taxable base calculated according to its own rules. This means that country A would only have a taxing right over 10% of the base calculated at grant, and country B would have a taxing right over 90% of the gain at exercise. It would also mean that the country taxing at grant would have to refund taxes already paid.

The mobility of employees is increasing. It will become more and more common, for example, that an employee is temporarily seconded to subsidiaries of his employer in other countries. Finding solutions to difficulties which can arise as a result of differences in the taxation of employee stock options will thus become increasingly important. Following the above-stated principles in cross-border taxes, and use of double taxation conventions based on the OECD model tax convention, would solve double and non-taxation problems.

# 8. ACCOUNTING FOR EMPLOYEE STOCK OPTIONS

## 8.1. European-style accounting for stock options

As a consequence of the growing use of employee stock options, accounting provisions for them will gain more importance since different rules could lead to different presentations of companies' results. Moreover, the accounting rules could have consequences for the companies' corporate tax liabilities. As yet, however, there are hardly any detailed and explicit accounting rules for employee stock options to be found in European national codes.[60] Given the lack of explicit rules in Europe, no detailed overview of the accounting practices in the Member States of the EU is attempted here.[61] Instead the activities of the International Accounting Standards Board will be briefly reported. Accounting provisions in the USA will be discussed in a second section. Finally, some reflections on the appropriate accounting method will be offered.

In July 2002 the European Parliament and the Council adopted a regulation providing for the application of International Accounting Standards (IAS or IFRS, International Financial Reporting Standards) for the consolidated accounts of all publicly-quoted companies as of January 2005.[62] However, the International Financial Reporting Standards will not be automatically applicable. The new Accounting Regulatory Committee which is chaired by the European Commission and is composed of representatives from Member States will decide on the endorsement of IFRS for the EU. The committee will be advised by a group of accounting experts (European Financial Reporting Advisory Group, EFRAG).

As yet no IFRS on employee stock option exists. It is nevertheless quite likely that the International Accounting Standards Board (IASB) will in the future issue a standard regarding employee stock options. Recently the Board published an "Exposure Draft" on Share-Based Payments and advocated expensing employee stock options in the profit and loss accounts.[63]

It can therefore be expected that in the future IAS/IFRS will rule that:

- Employee stock options (along with all other forms of share-based remuneration) have to be accounted for as expenses at the date of grant. For equity-settled share-based payment transactions, the compensation cost will be measured at the grant date, based on the fair value of the award at that date, but this will then be recognised over the service period (between grant and vesting date). However, for cash-settled share-based payment transactions (e.g. share appreciation rights), the charge will be re-measured at each reporting date and a provision will be built up over the service period so that, at the time the payment is eventually made, the amount of the liability should equal the amount of the payment.

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60 See International Accounting Standards Board (2001), G4+1 Position Paper, p.13 (available at the internet).

61 For more detailed information see chapters 9 in PricewaterhouseCoopers (2002).

62 Regulation (EC) No 1606/2002 of the European Parliament and the Council, 19 July 2002, Official Journal of the European Communities, L243, 11.9.2002, pp. 1-4.

63 Publications by the IASB can be found at the institution's webside: http://www.iasc.org.uk.

- Their value will probably have to be estimated according a Black-Scholes Model or a Binominal Model or a variation of these models that takes into account the special provisions of the individual stock option plan.

### 8.2. US style accounting for stock options

The first accounting rules for employee stock options were published in the USA as early as 1948 and today the USA is probably the country with the most elaborate accounting rules for this type of remuneration. A short description of the US provisions is accordingly given here. At present two sets of rules are valid. First, Opinion No. 25 of the Accounting Principles Board (APB 25) of 1972 and second, statement No. 123 of the Financial Accounting Standards Board of October 1995 (SFAS 123).

According to both standards, employee stock options are considered as staff expenditure for the period between grant and vesting of the options. The value of the stock options is divided proportionally over this period and the countervalue for the expenditure is registered in the paid-in-capital.

The crucial difference between the standards is the method of valuing stock options. The first draft of SFAS 123 released for comments in 1993 initiated a lively debate in the USA on the proper way of accounting for employee stock options. The concern of the numerous critics of the draft was the proposed "fair value" valuation of employee stock options. The protest against this suggestion was so strong the SFAS as finally published in 1995 was much weaker than the original draft. It encouraged companies to use fair value accounting but nevertheless left it to them to decide if the wanted to value employee stock options at their fair market value or according to the old APB 25 which only took the internal value at grant into account. Since most options are granted at the money, the accounting value of most options according to APB 25 is zero. Today the majority of companies appear still to apply APB 25, and as a result the granting of employee stock options usually has no effect on the profit and loss figures.

### 8.3. How to account for employee stock options

As the discussion on the proposed fair value accounting method in the USA demonstrated, the first and most important question to be answered is if employee stock options should be recorded as staff expenses in the profit and loss account at all. If the company has to buy existing stock on the market for a price higher than the strike price paid by the employee who exercises his options the difference certainly constitutes a cost that has to be recorded. But in most cases the necessary stock is provided by issuing new shares. Thus there are no direct payments by the company and thus, it could be said, there is also no cost to the company, i.e. the cost will be borne by the shareholders only. Still, employee stock options are granted by a company to its employees in exchange for valuable services. Receiving and consuming these services is a transaction and an economically important fact that could require an accounting entry just as a transfer of cash or a valuable asset would have to be registered.

Against including employee stock options in the profit and loss account it has been argued that such a procedure would be inconsistent with the framework of accounting rules since employee stock options do not represent an expense. But the IASB has already declared that this is not the case. According to the IASB any depletion of assets constitutes an expense. In this opinion it is crucial that the term "asset" is not restricted to such items that could be recorded in a balance sheet. In a broader sense assets also include resources in the form of services provided by employees that are immediately consumed when they are received.

Here is not the place to judge the quality of the above arguments. Such technical discussions are of great importance in order to ensure that any new accounting rule is consistent with the existing body of rules, but they do not automatically answer the question how to account for stock options. Employee stock options are a phenomenon that had not been foreseen when accounting standards were drafted and therefore it cannot be expected that the correct way of treating them can be simply deduced from existing standards. How to account for employee stock options is basically a matter of decision.

Those who oppose the expensing of employee stock options have argued that it would be detrimental to economic development since the profits presented would be lower. This argument is untenable. There is no sufficient empirical evidence that companies that changed their accounting practice and expensed employee stock options have suffered. Moreover it would not be acceptable to artificially boost stock prices by incomplete information to shareholders, especially not in the light of recent accounting scandals in some companies. The number and amount of granted or outstanding employee stock options and their respective exercise price are important pieces of information for investors. When the outstanding options are exercised the employees will become entitled to future dividends etc. for an amount (the exercise price) that is lower than the market price of the stock at that time. It is obvious that investors must have the possibility of being informed about employee stock options of the company that they own or want to buy shares in. It is therefore clear that companies must be obliged to provide this information in one form or other and that this information should be correct and complete.

The question now under discussion is whether it is enough to present information on employee stock option outside the profit and loss account, or whether the information has to be included in the costs figures. In order to answer this question practical problems have to be considered parallel to the arguments regarding consistency of accounting standards, e.g.:

- How should the expenses represented by employee stock options be valued?
- Employee stock options are generally valid for several years. How are the costs to be divided over several periods?
- What happens if options lapse?
- Where should the counter value be registered (e.g. capital reserve)?

Given the far-reaching consequences that IFRS can have as a result of the regulation of July 2002 it is important that the standards conform to a widely-shared international consensus. Developing such a consensus will need further consideration and discussion. On the other hand, information on employee stock options and similar instruments is vital for sound investment decisions. This is all the more true after the recent scandals and cases of fraud in some companies.

At the present moment one should therefore concentrate on quickly developing comprehensive and unambiguous standards for the disclosure of information on share-based payment. Parallel to this but without undue pressure, standards could be developed on the expensing of options and similar instruments.

## 9. LABOUR LAW AND DATA PROTECTION

In the majority of EU countries existing labour law does not appear to pose insurmountable obstacles for the installation and management of employee stock option plans. However, especially where stock options are still relatively uncommon and no specific legislative acts or pertinent court decisions exist, there might be some uncertainty regarding the obligations that an employer accepts by introducing such a plan. In what follows not all aspects of labour law that might have an effect on stock option plans can be discussed. The discussion is focused on the most common problems, i.e.:

- the need to consult works councils or similar institutions
- problems of discrimination
- data protection
- the question if options can become acquired rights for the employees
- the problem that vesting periods might not be enforceable.

In general the influence of employees' representations on stock option plans is limited, especially in the case of discretionary schemes or schemes for the higher echelons of management. Only if stock options are intended to replace remuneration will works councils have more influence, provided such a substitution is legally possible in the first place. In case of broad-based plans employees' representatives might have to be informed and consulted. This, however, will usually not be considered a hindrance, but will be part of a good communication strategy anyway.

While the consultation of works councils is generally not a particular obstacle for the introduction of employee stock option plans, compulsory consultation of trade unions might prevent many employers from installing such plans. Moreover, the introduction of stock option plans and similar schemes would probably suffer if such arrangements were subject to collective bargaining.

Discriminations in a stock option plan that are based on gender, religion, race, sexual orientation etc. are prohibited by all Member States, largely also on the basis of European directives. The discrimination must neither be direct nor indirect. For this reason a discrimination solely on the ground of the type of contract (part time / full time, open end / fixed term) is usually also not possible. A discrimination is only possible on the basis of objective, i.e. work- or performance-related reasons. The most important examples for such justifiable reasons for discrimination are the condition that an employee has completed a minimum period with the company or the performance of management functions. It is generally also possible to reserve the award of stock options to clearly defined sub-groups of the staff such as the members of the research department etc.

The possibility to differentiate (on an objective basis) between employees is often necessary for a well-functioning option plan. There should thus be no attempts, at political level, at union level or by employees representations, to broaden the scope of what is currently defined as non admissible discrimination. Employers on the other side have to be careful to draft their plans in a way that no unintended discrimination occurs.

In accordance with the European Union's data protection directive[64] and national laws on data protection, employees have a right to control the use of their personal data (such as income level etc.). If a stock option plan is managed entirely inside the employing company usually no problems will arise. Sometimes, however, the management of the plan is delegated to outsiders. Especially if the management of the plan takes place outside the EU, i.e. in countries that are not covered by the European data protection directive, compliance with data protection law becomes an important issue. Penalties under the national laws for violations of the data protection rules can be severe. Therefore companies will often feel the need to protect themselves and try to obtain written consent from the employee regarding the processing of his data. In larger companies this can lead to onerous and costly procedures.

Probably the most pressing concern for employers is that stock option schemes once granted could be considered part of the ordinary remuneration, i.e. that an obligation to grant such options on a regular basis could arise. One the one hand this would undermine the special incentive character of stock option schemes. Even worse would be that the schemes turn into a fixed cost. Moreover, additional costs could arise if options were e.g. included in calculations of severance payments etc.

The danger that options turn into acquired rights is particularly great if options are granted on a regular basis. A mere stipulation in the option plan that the options are discretionary might not be sufficient in all countries to prevent this. In many cases a written agreement by the employee might be helpful to prevent options from turning into vested rights which of course results in administrative costs. In addition, companies are generally well advised to stipulate in their option plans that dismissal does not give rise to compensation claims. In cases of unlawful or unfair dismissal such provisions will, however, be void. Generally this does not pose a problem for the introduction of a stock option plan.

A central reason for granting employee stock option is the wish to tie important employees to the company. Therefore the options are usually not vested at grant but become exercisable only after a certain period. Stock option plans also stipulate that should an employee leave against the company's wish the unvested options become void. But this rule is not always enforceable. In some cases courts have decided that the employee is entitled to exercise the unvested options on a pro rata basis (i.e. depending on the amount of the vesting period that has already elapsed). While such a decision might be defendable in special cases[65], it undermines, in principle, the usefulness of employee stock options for the company.

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[64] Directive 95/46/EC of the European Parliament and the Council of 24 October 1995, OJ L281, 23.11.1995.

[65] Such as, perhaps, cases where the vesting period is uncommonly long or where the employee's departure was in some way provoked by the employer.

## CONCLUSIONS

The national experts and the Commission´s Enterprise Directorate have analysed and evaluated the potential benefits and risks of employee stock options for companies (in particular for the important field of growth companies), for investors and employees. They have also looked at the existing legal and administrative environment for employee stock options in the Member States of the EU and in some third countries. On the basis of this analysis the group puts forward some conclusions on the possible ways to design the legislative and administrative framework for employee stock options in a way that is conducive to the promotion of entrepreneurship. In doing this the national experts and the Commission´s services do not in any way question the sole right of Member States to decide on changes in their systems, especially regarding taxation.

*1) Policy decisions on treatment of employee stock options should bear in mind the wide range of factors which influence a company's decisions about the use of employee stock options.*

Studies have indicated that a company's use of employee stock options is influenced by a very wide range of factors including, for example: The economic climate; Awareness & understanding of the pros and cons of using stock options; Availability of a traded equity market; A stock market listing; The company's financial and organisational structure; Human resource management strategies; A strategic dimension to pay vs. a preference for ad-hoc responsiveness to labour and product market pressures; The incidence of the cost of establishing and maintaining stock option plans to the company; Degree of willingness of owners to share control with employees and risk dilution of control.

*2) Measures to promote employee stock options will be most beneficial if they are part of consistent national approaches to employee participation. The legal and administrative environment for employee stock options should be structured to consistently encourage entrepreneurship and allow employers to make decisions in this field based on fundamental commercial considerations.*

Employee stock options can be an important economic tool in promoting a more enterprising Europe. To be efficient, financial participation schemes need to take into account the special situation of the company that uses them. Stock option schemes will not be the most appropriate form of financial participation of employees in every case. But especially for young companies with liquidity constraints and high ambitions for growth, stock options can be an ideal instrument to attract and retain important personnel and protect the investment in human capital.

The legal and administrative environment for employee stock options (and in particular incentives to introduce such schemes) can have an important effect on companies' decisions about whether to introduce some form of financial participation or not. The rules on employee stock options should therefore be part of a consistent approach to the promotion of entrepreneurship and employee participation in general. They should not unduly influence the selection and design of such schemes by the companies and thus lead to a misallocation of resources. Policy decisions about tax treatment of employee stock options should avoid distorting companies' decisions such that option schemes are used where other form of employee participation would be more in line with the company's situation and objectives.

*3) Employee stock options constitute employment income. Taxation at grant should be considered only for freely-tradable options. In general, employee stock options should not be taxed before exercise. In case of blocking periods on the sale of shares special solutions should be considered to prevent hardship should the share price fall during such periods.*

Since employee stock options are granted on the basis of an employment relationship they are, in general, considered employment income and taxed accordingly.

There may be instances in which taxation at exercise would create a disproportionate effect. For example, if the options are tradable and if their true value to the employee can be clearly ascertained (e.g. because they can be traded on a stock exchange) taxation at grant ensures consistency with the usual taxation of similar forms of employee remuneration (e.g. grant of shares).

Where employee stock options are not freely tradable and where their value is not easily and clearly ascertainable (even though valuation formulas such as the Black-Scholes formula exist) such options should, as a general rule, be taxed on exercise. In this case the taxable benefit should equal the value of the acquired shares at exercise minus the strike price and other costs necessary to exercise the options, in particular any price that might have been paid for the option. This implies that if the options were granted in the money the discount is only taxed at exercise. Increases in the value of the shares after exercise should be considered capital gains and treated accordingly.

If restrictions apply to the sale of the shares special solutions should be considered to avoid that employees end up paying taxes on gains at exercise that they are unable to realise when the sales restrictions are lifted because of a fall in share price between these two events. One solution could be that taxation is postponed until the restriction on the sale of shares is lifted. An alternative could e.g. be an abatement on the gain chargeable to income taxes.

*4) The introduction of a choice between taxation at grant and at exercise could be considered in countries that do not tax private capital gains.*

In addition to the general taxation at exercise (or later) it could also be considered to offer the possibility of taxation at grant as an alternative to the general rule of taxation at exercise. Such a choice could be interesting for companies that want to use the up-front tax payment as an instrument to create a stronger bond between company and employee and companies that want to signal their staffs' commitment and expectations to other investors. In case of grant taxation the valuation should take into account the value of the underlier at grant and the effects of the option terms.

*5) Special rules can mitigate the effects of progressive tax schemes.*

In case employee stock options are taxed on exercise or later it may be beneficial if in the calculation of the tax burden it is taken into account if the gains accrue only during the tax year or – which will typically be the case – over several years. In the latter case special rules can be used to mitigate the effects of progressive income tax scales (e.g. by reducing the nominal tax rate applied to these gains, by only taking into account a part of the gains or by a similar method). However, care should be taken that this does not create complexities sufficient to discourage the use of employee stock options, nor distort the intended balance of tax treatment between earnings from employee stock options and other forms of earnings.

*6) In general companies are entitled to deduct costs of setting up and operating a stock option plan from their profits. In addition, companies need to decide whether to buy own shares on the market or issue new shares to fulfil claims from employee stock options plans. Tax treatment should not be a factor influencing this decision.*

In many cases employee stock options constitute a substantial cost factor for the company. Use of employee stock options on a wider scale could be encouraged by allowing companies to deduct these costs for tax purposes. Irrespective of the policy objectives, it is also important that the tax rules do not unduly influence the company´s choice whether to repurchase stock on the market or whether to issue new shares. Therefore the tax treatment should be neutral regarding the various alternatives to obtain the stock to fulfil the obligations arising from employee stock option plans.

*7) Special tax incentives can be used to promote the broad-based use of employee stock options.*

Experience in several European countries shows that financial participation of employees in general, and stock options in particular, can be effectively promoted by granting tax concessions for the respective income. Depending on the structures of the national tax systems such tax favours can take different forms such as reductions of rates, a relief from social contributions or the postponement of taxation until the sale of shares.

In countries that tax private capital gains the easiest way to promote employee stock options is to treat the total benefit from such options as capital gains. In countries that do not (or do not as a rule) tax private capital gains, the most effective approach is to require payment of the tax at exercise and grant the tax concession by means of a reduction of the income tax and/or the social security contributions.[66]

*8) In particular special tax schemes targeted at small growth companies could be considered.*

While the practice of granting tax favours to broad based plans is welcomed, Member States might also wish to consider special schemes targeted at smaller growth companies. The UK's Enterprise Management Incentive schemes could serve as a conceptual blueprint for such schemes. The EMI was designed to help small higher-risk companies

[66] Note that in such a case postponing of the tax until the moment of the ultimate sale of shares would have several shortcomings. If the tax were calculated on the basis of the proceeds from the sale of shares and the exercise price this would result in the introduction of a tax on private holding gains. If the tax were calculated at the moment of exercise (difference between stock price at exercise and exercise price) there would be a risk that, if the stock price fell, the final proceeds from the sale of the shares would not be sufficient to cover the tax.

recruit and retain employees with the skills that will help the company grow and succeed. Only independent trading companies with gross assets of less than £15 million can benefit from the scheme. These companies can grant share options up to a maximum value of £100,000 to any number of employees (subject to a maximum share value of £3 million under EMI option to all employees). Apart from some rather special cases options under an EMI schemes are only taxable at the final sale of shares and are only subject to capital gains taxes. As a result many EMI options will be completely tax free (see annex for details). The EMI is still relatively new. No formal evaluation has yet been conducted to demonstrate to what extent the scheme has fulfilled its policy objectives.

*9) Countries might wish to consider the introduction of common tax favoured schemes.*

Common principles of tax favoured option schemes could be beneficial for companies that employ staff in more than one country. Given that the issue is extremely complex it is not possible at this moment to propose the definition of such common tax favoured schemes. However, independently of current arrangements, Member States could consider this policy option and investigate its feasibility in greater detail. The European Commission would need to coordinate any further feasibility work at EU level.

It has to be emphasised that a list of common European conditions that could be applied to a European employee stock option scheme in order to benefit from a favourable tax treatment is a matter for Member States and could not, therefore, reduce or circumvent Member States' independence and autonomy in this important area of taxation. No Member State could be forced to grant a tax favour and countries that wish to grant a tax favour would still be able to decide independently on the conditions to be fulfilled and benefits granted for use of their own schemes.

*10) In cases of cross-border taxation the dividing line between employment income and capital gains should be the moment of exercise. If an employee works in more than one country during the period between grant and vesting of the options the taxing rights should be allocated to these countries on a pro rata basis.*

Following the lead given by the OECD, income accruing until the exercise of an employee stock option should be considered employment income and, under the terms of the relevant Double Taxation Convention, would usually be taxable by the state of employment. Income accruing later should therefore be considered capital income and, under the relevant Double Taxation Convention, would be taxed solely by the state of residence (subject to anti-avoidance measures that countries might feel necessary in an bilateral context). In cases where an employee works in more than one country the employment income might have to be apportioned between these countries. For the allocation of the taxing right only the period between grant and irrevocable vesting of the options should be taken into account since the period between vesting and actual exercise is not necessarily connected to the employment.

*11) It is important that quoted companies provide complete and detailed information on employee stock option plans, e.g. in their annual reports. At least for the time being expensing stock option plans appears less important.*

The existence of a stock option plan, its scope, size and details (such as vesting conditions etc.) are important facts that need to be communicated clearly and completely to capital owners and potential investors. Work is ongoing at the level of the accounting standard setting bodies to establish an appropriate accounting standard for employee stock options. It would be convenient if the information regarding employee stock option plans could be condensed in a cost figure and be included in a company´s profit and loss account. However, given the variety and complexity of plans it appears doubtful if this can actually be achieved in a comparable way for all companies. Regardless of whether stock option plans are expensed or not there would be clear advantages to obliging companies to publish the full details of their stock option schemes (e.g. in their annual reports).

*12) The final decision on the introduction of employee stock option schemes has to remain with the employer/company. Remuneration from employee stock options is not to be considered as normal, recurrent wage income.*

Where employee representatives are able to participate in a company's management decision process, a good communication strategy on the part of the employer will ensure that such a representation is properly informed about broad-based employee stock option plans. A formal consultation process or the consultation of bodies that are not part of the company could, however, introduce unnecessary administrative burdens, reduce companies' flexibility and endanger the introduction of employee stock options.

Even if option grants occur more or less regularly, they should not be considered part of the contractual remuneration for the employment. They are a form of bonus earnings to be awarded as and when appropriate, as part of the employer's remuneration and performance management strategy. From this it follows that they should not be included in the calculation of severance payments. If the recurrent grant of options entailed the employer's obligation to future grants, the special incentive character of the instrument would probably be lost. In order to create a strong bond between company and employee vesting rules have to be respected.

## ANNEX I – SOME EXAMPLES OF GOOD PRACTICE[67]

### Some examples for tax relief for the employee

The **Irish** Approved Share Option Plan (ASOS) offers a rather generous treatment for options that are granted under a broad based plan and are granted to all employees on similar terms. There is no minimum holding period for the options. If employees respect a period of three years between grant of the option and sale of the shares only capital gains tax is charged on the difference between the proceeds from the sale of the shares and the exercise price. There are a number of conditions which must be satisfied before the Irish Revenue will approve an ASOS. Apart from the ASOS, employee stock option plans can also be structured as a Save as You Earn plan (SAYE) which offer similar tax favours again various conditions must be satisfied before the Irish Revenue will grant approval to such a plan. Under a SAYE plan employees enter into a savings contract for several years. Monthly instalments are deducted from their net salaries and the savings are later used to exercise stock options.

In **Austria** employee stock options are generally taxed at exercise (only transferable options are taxed at grant). The taxable benefit (difference between the stock price at exercise and the exercise price) is considered to be employment income and is subject to income taxes and social contributions. However, for options with a fixed expiration date that are not transferable and that are granted to all employees or certain objectively identifiable groups of employees (e.g. all employees in the research department etc.) certain tax exemptions apply. The exemptions depend on the period for which the options are held by the employee. In order to make maximum use of the preferential tax treatment the options should be held for five years. In that case 50% of the exercise benefit becomes tax free. It is not necessary to keep the stock after exercise. Yet holding on to the stock results in a later payment of the tax since the tax is only due on the sale of the shares, the cessation of employment or on 31 December of the seventh year following grant, whichever comes first.

The **United Kingdom** has a long tradition of financial participation of employees and stock option schemes in particular. There exist several special plans that provide for a special tax treatment of employee stock options such as the Company Share Options Plan (CSOP), the Enterprise Management Incentive (EMI) (see below) and the Save As You Earn plan (SAYE). Under a CSOP plan the company can grant options over stock worth up to £ 30,000 (day of grant) at any one time. Tax advantaged options must be held at least 3 years following the day of grant and there must be a gap of at least 3 years between each tax-relieved (see below) exercise. The options are not transferable and cannot be granted at a discount. Gains from approved options under a CSOP are only taxable at the final sale of the shares and the benefits are treated as capital gains. (It is only when the options are exercised in an approved manner that the employee benefits from favourable tax treatment of the gain arising from exercise)

[67] The following examples cover only those countries that were represented in the expert group.

**A special scheme for growth companies: the Enterprise Management Incentive Plan of the UK**

The UK is the only country that offers a special favourable tax treatment for small companies with an orientation towards growth: the Enterprise Management Incentive plan (EMI). The EMI was launched in 2000. Its intention is to enhance entrepreneurial activity and to help smaller independent companies to attract or retain particularly important employees. In order to qualify for the scheme the company must fulfil the following conditions:

- The company issuing the options must be independent (quoted or unquoted)
- The company must not have gross assets over £ 30 million (on grant of the option).
- It has to be a trading company, mainly trading in the UK
- It has to be conducted on a commercial basis with a view to profits
- It must not carry out an "excluded activity" (e.g. financial services, legal or accounting services, property development, farming, hotels)

Under the EMI scheme an employee can be awarded options for stock up to a total value of £100,000 (i.e. numbers of options multiplied by the value of the stock at the time of grant). The share option pool is limited to £ 3 million. In order to be eligible under the scheme an employee must work at least 25 hours per week for the business (or if less, at least 75% of his/her total working time). Moreover, the employee must not have a material interest in the company. A material interest is a stake of more than 30% of the capital. In order to qualify under the EMI the options must be capable of being exercised within 10 years. The options must be over fully paid ordinary shares.

Options granted under an EMI plan are (apart from some special cases) only taxed at the time of the sale of shares. In principle, the taxable gain is the difference between the exercise price and the value of the stock on sale . The gains are taxed as capital gains. They profit therefore from two reliefs:

- a relatively large annual exemption (£ 7,700 for the tax year 2002/03)
- a taper relief which reduces the taxable gain depending on the length of the period the options/shares were held by the employee.

The taper relief is a general mechanism that does not only apply to stock options. Usually the relief takes into account the period over which shares were held by the employee. For EMI options, however, the whole period between option grant and sale counts for the calculation of the relief. In practice most EMI options will benefit from the maximum taper relief. Since the annual exemption has also to be taken into account many EMI options will not be taxable at all.

It should be noted that, as EMI is still relatively new, no formal evaluation has yet been conducted to demonstrate to what extent the scheme has fulfilled its policy objectives. For more information on the EMI see:

http://www.inlandrevenue.gov.uk/shareschemes/emi/

**Avoiding liquidity problems and connecting employers' and employees' tax liabilities: The Danish case**

Generally Denmark taxes income from employee stock options at exercise as employment income. The tax rate can be relatively high, i.e. around 63%. The costs for the employer are deductible regardless of the way the shares are obtained.

Under the Danish system there is a special possibility to mitigate the tax burden for the employee and also avoid the liquidity problem. The company and the employee can declare that the tax burden is shifted from the employee to the company. The company will have to pay a fee at a flat rate of 40% on the employee's gain. At the same time the company will lose the right to deduct the cost of obtaining the shares. To compensate for the fee and the loss of deductibility the company can reduce the option grant. In the end the employee will profit from this rule as the following example shows:

An employee is granted an option that, at exercise, earns him DKK 100. On this he has to pay taxes at a rate of 63% so his net gain is DKK 37. Since the cost is tax deductible for the company and the company tax rate is 30% the actual cost to the company is DKK 70. If the special rules are invoked the company will lose the right to deduct the costs of the scheme (which are equal to the employee's benefit). In compensation the company reduces the option grant from DKK 100 to DKK 70. On this the company pays a 40% fee, i.e. DKK 28. This fee is subtracted from the employee's gain which is thus reduced to DKK 42, i.e. DKK 5 more than in the standard case. Apart from the lower tax burden the main advantage of this arrangement is that it eliminates the liquidity problem for the employee at the exercise of the option.

It should be noted that in the future Denmark is likely to add another optional tax scheme, where the employee will have to pay a tax based on the gain at exercise. The payment of the tax will however be postponed until the moment of the sale of the shares. The taxbase will then be net of any capital loss resulting from a fall in the share price. If the shares are held for a minimum period of three years the tax rate decreases considerably for the employee (it can in fact reach zero percent). This gives the employee an incentive to hold the shares for a longer period, which will benefit the company by strengthening the entrepreneurship in the company. Moreover it also eliminates the liquidity problem at exercise.

**Mitigating the risk of restricted shares: Abatements on the chargeable gain in the case of restricted shares in Ireland**

It is the Irish Revenue's view that a restriction on the sale of a share does not affect the market value of such a share. However, the Irish Revenue Commissioners recognise that a restriction on the sale of shares could be said to reduce the benefit acquired by the individual particularly, for example, where the individual would like to dispose of the shares immediately but is prohibited. The Irish Revenue are prepared, in cases where there is a genuine restriction, to allow the following % abatements on the gain chargeable to income tax:

| **Number of years of restriction on sale** | **Abatement** |
|---|---|
| 1 Year | 10% |
| 2 Years | 20% |
| 3 Years | 30% |
| 4 Years | 40% |
| 5 Years | 50% |
| over 5 Years | 55% |

Example: An employee acquires a share worth € 5,000 by exercising an employee stock option with a strike price of € 4,000. There is a blocking period of 3 years. Therefore not the whole gain of €1,000 would be taxable. Taking into account the abatement of 30% the chargeable gain would only be € 700.

The prohibition on the disposal of shares must be for genuine commercial reasons and not simply used for the purpose of tax avoidance and the prohibition on disposal must be an absolute prohibition.

## ANNEX II - OVERVIEW OF EUROPEAN INITIATIVES RELATED TO EMPLOYEE STOCK OPTIONS

### Employee participation

In order to prepare a community instrument on the financial participation of employees[68], announced in the Action Programme for the implementation of the Community Charter of the Fundamental Social Rights of Workers[69], the European Commission presented in 1991 the so-called PEPPER-report (PEPPER standing for Promotion of Employee Participation in Profits and Enterprise Results). Based on the report the Council of Ministers adopted a recommendation[70] concerning the promotion of participation by employed persons in profits and enterprise results. The Council invited the Member States to acknowledge the potential benefits of PEPPER-schemes and recommended that adequate legal structures were provided for them. Moreover, Member States should consider if financial participation could be promoted by fiscal incentives.

In January 1997 PEPPER II reported on the application of the recommendations. Despite the potential benefits of participation schemes not much progress had been made in Member States. In order to stimulate the dialogue between the players concerned a study "A company perspective on financial participation in the European Union. Objectives and Obstacles" followed the PEPPER II report.[71] It investigated the use of participation schemes in the 500 biggest European companies and identified, for a majority of EU countries, tax systems and legal and administrative provisions as the most important obstacles to a wider distribution of such schemes in Europe.

Following the announcement in the Social Agenda (28.6.2000) the European Commission adopted a Communication in July 2002[72] in order to launch a new appeal to governments to improve conditions for the financial participation of workers in companies. In addition it set up a high-level experts' group to examine the transnational barriers currently impeding the introduction of European-wide financial participation schemes for companies with several establishments in Europe and to propose solutions, by the end of 2003.[73]

### Risk Capital Action Plan

In November 1997 the special European Council on Employment in Luxembourg acknowledged "the importance of the role that large pan-European risk-capital markets can play in job creation" and asked the Commission to report on barriers to the

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[68] Com(89)568 final.

[69] The charter was adopted by Heads of State and Government on 9 December 1989 at the European Council of Strasbourg.

[70] 92/443/EEC.

[71] Van Den Bulcke (2000).

[72] COM (2002) 364.

[73] See also the Commission's internet pages at: http://europa.eu.int/comm/employment_social/soc-dial/labour/index_en.htm

development of such markets in the Union.[74] In April 1998 the European Commission published the communication "Risk capital: a key to job creation in the European Union".[75] The communication highlighted several types of barriers to the development of risk capital market and pointed out the important role of the taxation of employee stock options. The venture capital community in the EU was of the opinion that the current tax treatment of stock options in most Member States was acting as "a significant disincentive to the development of new start up companies." Among the priorities in the elements for an Action Plan that were part of the communication the Commission listed the examination of the tax treatment of stock options to encourage high-tech start-ups and also the examination of the benefits of equity pay and employee ownership schemes.

The European Council of June 1998 in Cardiff welcomed the Commission's report on the promotion of risk capital in the EU and called on the Council and the Member States to consider its recommendations including the proposed Action Plan.[76] In March 1999 the European Parliament, in a resolution, welcomed the Commission's communication.[77]

On 24 November 1998 the European Commission organised the Conference "Risk capital markets, a key to job creation in Europe: From fragmentation to integration" in Brussels. Speakers at the conference underlined the important role that employee stock options play in attracting and keeping highly qualified personnel and identified the tax regimes on stock options as a barrier to the development of risk capital and high-growth companies. The discussions at the conference led to a set of proposals among which was also the recommendation to reduce the taxation of stock options.[78]

The European Council of Vienna (1998) invited Member States to report on how they were implementing the risk capital action plan. On the basis of Member State's contributions the Commission drafted a comprehensive document[79] the main results of which were taken up in the communication "Risk Capital: Implementation of the Action Plan. Proposals for moving forward".[80] The Commission found that notwithstanding some progress the overall results were not yet satisfactory. It concluded that the implementation of the Risk Capital Action Plan should be speeded up and proposed a regular review of the progress by a benchmarking exercise. The benchmarking should also identify best practices especially in those areas where major structural reforms were required, among them taxation of start-ups and stock options.

The Lisbon European Council of March 2000 set the strategic target to fully implement the Risk Capital Action Plan by 2003.[81] In order to contribute to meeting this target the Commission, in its communication "Progress Report on the Risk Capital Action Plan" of

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74 Presidency Conclusions, paragraph 30.

75 SEC(1998)552 final.

76 Presidency Conclusions, paragraph 21.

77 Official Journal of the European Communities C175/32, 21.6.1999.

78 Euro Papers No. 32, January 1999.

79 European Economy, Suppl. A, 12/99.

80 COM(1999)493.

81 Presidency Conclusions, paragraph 21.

October 2000[82], reviewed again the progress made in the implementation of the Risk Capital Action Plan. As regards stock options it pointed out that it was important "that Member States design their tax systems so to ensure that the taxation of share ownership and stock options do not act as a disincentive to entrepreneurship." On its communication on the implementation of the Risk Capital Action Plan of October 2001[83] the Commission found that several Member States had "laid down specific rules, or clarified the application of general rules, on the taxation of stock options". These rules or clarifications were however "not always compatible in cross border situations."

**Taxation**

In 2001 the Commission's Directorate General Taxation and Customs Union conducted an extensive study that investigated the remaining tax obstacles to the Single Market. The study found that in the case of stock options the "incompatibility of Member States' taxation systems … constitutes a serious barrier to cross-border economic activities" [84] Although several countries have in the recent past introduced (and partly already amended) specific legislation as a result of the increasing use of employee stock options the study notes that "(u)nfortunately, so far, there appears to have been no tendency towards convergence of Member States' rules."[85] It is further proposed that the question of employee stock options has to be discussed at EU level and that such discussion should sound out the possibilities of achieving a greater co-ordination or approximation of Member States' domestic rules…"[86]

[82] COM(2000) 658 final.

[83] COM(2001) 605 final.

[84] COM (2001) 582 final, p. 373.

[85] COM (2001) 582 final, p. 450.

[86] COM (2001) 582 final, p. 450.

## ANNEX III– GLOSSARY OF TECHNICAL TERMS

**Call option -** Right to buy stock within a certain period.

**Cashless exercise -** The option is exercised and the acquired stock is sold immediately. The price for exercising the option as well as withholding taxes and fees are covered by the revenues from selling the shares. The remaining cash is then given to the (former) owner of the option.

**Cliff vesting** - All stock options granted to an employee at a certain time vest at the same time (see vesting, see partial vesting).

**Discount options** - (Employee) stock options for which the exercise price is set below the price of the stock at the day of grant. In the extreme case of **nil price options** the exercise price is only a symbolic amount so that the shares are effectively given away free. Discount options are the opposite of **premium options.**

**Employee stock options -** Options granted to employees to buy shares of their employer at a price fixed in advance within a certain period.

**Employee stock <u>ownership</u> plan (ESOP) -** ESOPs are added here because the acronym ESOP is sometimes used for **E**mployee **S**tock **<u>Option</u> P**lans and they are thus often confused with employee stock options. However, they are entirely different. ESOPs work like retirement plans. Employees make contributions into a company plan, the stock is held in a trust fund, employees do not own stock directly.

**Exercise price/ Strike price -** Price that has to be paid in order to obtain the stock when the option is exercised.

**Fair value -** The fair value of an option is the price for which the option could be sold at the stock exchange.

**Grant agreement/Stock option agreement/Stock option plan (SOP) -** Document that spells out the terms and conditions of the employee stock options.

**Intrinsic value** - Difference between the fair market value of the stock and the exercise price of the option. Especially in the case of employee stock options the intrinsic value of an option is often zero or close to zero when it is granted, i.e. the option grants the right to buy the share of the company at the price of the shares on the day the option is granted (see also spread, see also fair value).

**Naked Stock Options -** Stock options that are not connected to other financial titles (e.g. to bonds that have a lower interest rate than the market rate and which offer the possibility to purchase stock at a fixed price in the future – the stock option element – as a compensation for this). In the case of employee stock options "naked" options are the general case.

**Nil Price Options -** see discount options.

**Option Price -** The price that has to be paid in order to acquire an option. For employees the price will usually be zero in cash terms since the option is granted by the company as a compensation for the employee's work. Not to be confused with exercise price or strike price.

**Partial Vesting** - Stock options granted to an employee at a certain time vest in instalments (see vesting, see cliff vesting).

**Performance-vested Options -** Options that only vest/become exercisable if a certain stock price above the price at grant/exercise price is reached.

**Phantom Stock Plans -** Genuine employee stock options can only be granted by companies limited by shares. Phantom Stock Plans provide a form of employee participation for companies with other legal forms that are comparable to employee stock options from the point of view of the employee. After a valuation of the company theoretical share prices are calculated. On the basis of a comparison of such prices at different times employees receive bonuses.

**Plain Vanilla Stock Options -** Stock options that are common or normal, i.e. without special "exotic" conditions.

**Premium options** - (Employee) stock options for which the exercise price is set above the stock price at the day of grant. Premium options are the opposite of **discount options**.

**Purchased Options -** The employee pays for the option at grant. Often the payment is a deposit that will be taken into account when exercising the options as a pre-payment of the exercise price.

**Put option -** Right to sell stock within a certain period.

**Reloading -** So called "reload options" usually work as follows: When the employee exercises his options he can pay the strike price in shares instead of cash. For each share that he turns in he receives a new option. Example: An employee owns an option to buy one share at the price of EUR 12. The current value of the share is EUR 16. Instead of paying the strike price (EUR 12) in cash he turns in a share that he already owns. For the share that he turns in he receives a new option to buy shares at a strike price of EUR 16.

**Repricing -** Lowering the exercise price of an option (or cancelling outstanding options and issuing new options at a lower exercise price). If the market price of the stock falls clearly below the exercise price and it becomes doubtful if the market price will recover in time the company might lower the exercise price so that their staff keep an interest in the options. Often the repricing is combined with a change or restart of the vesting schedule. Sometimes fewer options are issued than cancelled so that the employees bear part of the cost of the repricing.

**Spread** - (sometimes: bargain element, see also intrinsic value) Difference between current (market) value of a share and the exercise price. An option is said to be

- "in the money" if the spread is positive, i.e. if the current value of the stock is higher than the exercise price,
- "at the money" if the spread is zero, i.e. of the current value of the stock is equal to the exercise price,

- “out of the money” or “underwater” if the spread is negative, i.e. if the current value of the stock is lower than the exercise price. If an option is underwater it will not be exercised since one would have to pay a higher price for the stock than if one were to buy it directly.

**Stock Appreciation Rights -** Different from stock options stock appreciation rights do not give an employee the right to actually acquire stock. Instead he will receive a cash payment which is equal to what he would have gained from exercising stock options and selling the shares.

**Stock option -** In general a stock option is the right to buy or sell a certain amount of stock of a company at a certain price that is agreed on in advance (the exercise price) during a certain period. For this right a certain price is paid in advance. If the right to buy or sell is not exercised during the period the option becomes void.

**Strike price** – see exercise price.

**Term -** Period during which the option is valid. For employee stock options the term can be up to ten years or even longer. For exchange traded stock options the terms will usually be much shorter.

**Time value -** Difference between the market value of an option (premium) and its intrinsic value. The time value represents the possibility of gains due to a future increase of the underlier. At the end of the period for which the option is valid the time value moves towards zero.

**Underlier/underlying stock/underlying security -** Stock, commodity etc. for which the option gives a right to buy or sell. In the case of employee stock options the stock of the employing company.

**Valuation -** Stock options that are traded at the stock exchange will be valued at their market price. Options that do not have a market value are usually valued according to the so-called Black-Scholes Formula (named in honour of Myron Scholes and Fischer Black who developed it) which is a kind of statistical expectation value. The formula bases the value of an option on different variables, i.e. the term, the strike price, the value of the underlier, the volatility of the underlier and a risk-free interest rate.

**Vesting** (see cliff vesting, partial vesting)

- of stock: Stock is vested if it can be sold (or be returned to the company for its full value) even if the owner of the stock leaves the company.
- of stock options: usually means that an option can be exercised. The vesting period for employee stock options will often be several years.

**Warrant -** Sometimes the term warrant is used for a stock option that gives its holder the right to acquire newly issued shares. In contrast to warrants stock options are then often understood in the narrow sense, i.e. as a right to acquire existing shares.

## ANNEX IV– BIBLIOGRAPHY


Atasoy, Y. (1997), Employee Stock Ownership Plan. Implementation in Privatization Process in Turkey, Ankara.

Benz, M.; Kucher, M.; Stutzer, A. (2000), Stock Options: The Managers' Blessing. Institutional Restrictions and Executive Compensation, University of Zurich, Institute for Empirical Research in Economics, Working Paper No. 61, October 2000.

Blasi, J.; Kruse, D.; Sesil, J.; Kroumova, M. (2000), Broad-Based Stock Options and Company Performance: What the Research Tells Us, Journal of Employee Ownership Law and Finance, Vol. 12, No. 3, pp. 69-102.

Bueno, M.C. (2001), Guía de las stock options,

Burke, J.A.; Pilv, P. (2001), Recent Developments in Employee Stock Plan Legislation Outside the U.S., Journal of Employee Ownership Law and Finance, Vol. 13, No. 2., pp. 47-60.

Buyniski, T.; Silver, D. (2000), Trends in Equity Compensation 1996-2000. An Executive Summary of iQuantic High Tech Equity Practices Survey, http://www.iquantic.com/flash/SurveysIQIS/rightLINKS/HighTechTrends.pdf.

Cabero, M.I. (2002), Nuevas fórmulas de compensación del trabajo: Referencia a las " Stock Options", Revista del Ministerio de Trabajo y Asuntos Sociales, nº 38, pp. 123-141

Carberry, E. (1999), Communicating Stock Options, Journal of Employee Ownership Law and Finance, Vol. 11, No. 2, pp. 121-130.

Casson, P. (2000), Company Share Options, Chichester.

Chance, D.M.; Kumar, R.; Todd, R.B. (2000), The "repricing" of executive stock options, Journal of Financial Economics, July.

Commission of the European Communities (1997), Report from the Commission, PEPPER II promotion of participation by employed persons in profits and enterprise results (including equity participation) in Member States 1996, COM(1996)697 final.

Commission of the European Communities (1998), Communication: "Risk Capital: A Key to Job Creation in the European Union", SEC(1998)552final.

Commission of the European Communities (1999), Communication: "Risk Capital: Implementation of the Action Plan. Proposals for moving forward", COM(1999)493-EN.

Commission of the European Communities (1999), Risk capital: a key to job creation. Implementation of the Action plan", European Economy, Supplement A (economic trends), n° 12, December 1999.

Commission of the European Communities (2000), Communication: "Progress Report on the Risk Capital Action Plan", COM (2000)658 final, 18.10.2000.

Commission of the European Communities (2001), Communication: “Progress Report on the Risk Capital Action Plan”, COM (2001)605 final, 25.10.2001.

Commission of the European Communities (2001), Company taxation in the internal market, Commission staff working paper, COM(2001) 582 final.

Council Recommendation of 27 July 1992 concerning the promotion of participation by employed persons in profit and enterprise results (including equity participation), OJ No. 0L245, 26.8.1992, pp. 53-55.

Dehn, W.; Wolf, C.; Zehetner, J. (2003), Aktienoptionsrecht, Kommentar. Darstellung und Kommentierung der Rechtslage, Wien.

Deutscher Industrie- und Handelstag (DIHT), Verbesserung der steuerlichen Rahmenbedingungen für Mitarbeiter-Optionen. Positionspapier, 9. November 2000.

Deutschmann, K. (2000), Vergütungshalber gewährte Aktienoptionen im deutschen und US-amerikanischen Steuerrecht, Baden-Baden.

European Private Equity & Venture Capital Association – EVCA (1999), Stock Options.

Gelhausen, H. F.; Hönsch, H. (2001), Bilanzierung aktienkursabhängiger Entlohnungsformen, Die Wirtschaftsprüfung (WPg), pp. 69.

González, L.M.A. et al. (2002), Stock options, tres perspectivas: Mercantil, laboral y fiscal, Editorial Aranzadi, Pamplona.

Haas, W.; Pötschan, H. (1998), Ausgabe von Aktienoptionen an Arbeitnehmer und deren lohnsteuerliche Behandlung, Der Betrieb, pp. 2138-2141.

Haines, T.M. (2000), FASB Releases New Guidance for Stock Option Accounting, Journal of Employee Ownership Law and Finance, Vol. 12, No. 2, pp. 47-74.

Hall, B.J. (2000), What you need to know about stock options, Harvard Business Review, March-April 2000, pp. 121-129.

Hall, B.J. (1998), The Pay to Performance Incentives of Executive Stock Options, National Bureau of Economic Research, Working Paper 6674, Cambridge MA.

Hall, B.J.; Murphy, K.J. (2000), Optimal Exercise Prices for Executive Stock Options, National Bureau of Economic Research, Working Paper 7548, Cambridge MA.

Hall, B.J.; Murphy, K.J. (2000), Stock Options for the undiversified executives, National Bureau of Economic Research, Working Paper 8052, Cambridge MA.

Harrer, H. (2000), Hg., Mitarbeiterbeteiligungen und Stock-Option-Pläne, München.

Hernández, M.M. (1999), Stock options, incentivos a la dirección y gobierno de empresas, Cuadernos de información económica, nº 152/153, Noviembre/Diciembre 1999

Herzig, N.; Lochmann, U. (2001), Bilanzierung von Aktienoptionsplänen und ähnlichen Entlohnungsformen -Stellungnahme zum Positionspapier des DRSC, Die Wirtschaftsprüfung (WPg), p. 82.

Hess, D.; Lüders. E. (2000), New Economy accounting: Why are broad-based stock option plans so attractive, working paper University of Konstanz, ZEW Mannheim, http://www.zew.de/de/publikationen/publikation.php3?action=detail&nr=616.

Huddart, S.; Lang, M. (1996), Employee Stock Options Exercises: An Empirical Analysis, Journal of Accounting and Economics, Vol. 21, pp. 5-43.

Innovationsagentur (2001), Stock Options für High-tech Strat-up Unternehmen. Eine praxisnahe Einführung in Stock Options-Modelle, www.innovation.co.at/deutsch/download/sf_stock.pdf.

Institut "Finanzen und Steuern" e.V. (2001) Zur lohnsteuerrechtlichen Behandlung von Aktienoptionen für Mitarbeiter, IFST-Schrift Nr. 394, Bonn.

Jiménez, I. (2001), Stock options. Regulación, economía, política retributiva y debate social, Editorial Dijusa, Madrid.

Joosten, H. (1999), Belgium: New Stock Options Legislation, Journal of International Taxation, June 1999, p. 15.

Kohler, Klaus (1997), Stock Options für Führungskräfte aus der Sicht der Praxis, Zeitschrift für das gesamte Handelsrecht 161, pp. 246-268.

Korn, B. (2000), Vorstandsvergütung mit Aktienoptionen. Sicherung der Anreizkompatibilität als gesellschaftsrechtliche Gestaltungsaufgabe, Sternenfels.

Korpardi, J.W.G.; Poetgens, F.P.G., Smit, P.M. (1998), Tax Aspects of Employee Share Options in Belgium, France, Germany, the Netherlands and the United Kingdom, European Taxation, pp. 278-293.

Kruse, D.; Blasi, J. (1999), Public Opinion Polls on Employee Ownership and Profit Sharing, Journal of Employee Ownership Law and Finance, Vol. 11, No. 3, pp. 3-25.

LaWer, T.  (1999), Evergreen Provisions for Stock Option Plans, Journal of Employee Ownership Law and Finance, Vol. 11, No. 2, pp 113-119.

Lombardi, M. (1998), Clarifications on New Stock Option Rules, European Taxation, p.99-100.

Luber, T. (1999), Incentives für Manager, Capital 4/99, pp. 38-45.

Meyers, A.S. (1998), Handling Death, Divorce, and Leaves of Absence Under a Stock Option Plan, in: Journal of Employee Ownership Law and Finance Journal of Employee Ownership Law and Finance, Vol. 10, No. 4, pp. 121-133.

Meyers, A.S. (1998), Performance-Based Stock Options, Journal of Employee Ownership Law and Finance in: Journal of Employee Ownership Law and Finance, Vol. 10, No. 4, pp. 111-119.

Miller, S. (1998). Communicating Stock Plans to Employees, Journal of Employee Ownership Law and Finance, in: Journal of Employee Ownership Law and Finance, Vol. 10, No. 3, pp. 169-183.

National Commission on Entrepreneurship (2000), Employee Stock Options: Their Use and Policy Implications, Washington.

OECD (2002), Cross-Border Income Tax Issues arising from Employee Stock Option Plans, A Public Discussion Draft, Paris, www.oecd.org.

OECD (2002), Policy benchmarks for fostering firm creation and entrepreneurship, DSTI/IND(2002)13.

Oyer, P. (2000), Why do firms use incentives that have not incentive effects?, http://fmwww.bc.edu/RePEc/es2000/1440.pdf.

Pastore, R.R. (2000), Stock options. An authoritative Guide to Incentive and Nonqualified Stock Options, 3rd print, San Francisco.

Pendleton, A.; Blasi, J.; Kruse, D.; Poutsma, E. Sesil, J. (2002), Theoretical study on stock options in small and medium enterprises, study for the European Commission, Manchester, http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/stock_options/study.htm.

Piccardi, L.; Trezzini, S. (1997), Major Reform around the corner for Reorganizations and Taxation of Italian Entities and Nonresidents on Profits realized in Italy, Journal of International Taxation, October 1997, pp. 471-475.

Portner, R. (1997), Employee Stock Options: Law and Taxation in Germany, Tax Planning International Review, pp. 8-13.

Portner, R. (1997), Mitarbeiter-Optionen (Stock Options): Gesellschaftsrechtliche Grundlagen und Besteuerung, Deutsches Steuerrecht (DStR), 20/97, pp. 786-788.

Portner, R. (1998), (Weitere) lohnsteuerliche Fragen, insbesondere bei Expatriates, Deutsches Steuerrecht (DStR), 40/98, pp. 1535-1539.

Portner, R.; Bödefeld, A. (1996), Taxation of Employee Stock Options, European Taxation, 12/1996, pp. 416-418.

PricewaterhouseCoopers (2002), Employee Stock Options in the EU and the USA, London, http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/stock_options/study.htm.

Ramos, L.M. (1999), Is Employee Ownership Risky for Employee Owners?, Journal of Employee Ownership Law and Finance, Vol. 11, No. 4, pp. 79-97.

Rosen, C. (1999), Simulating Employee Ownership in Very Small Businesses, Journal of Employee Ownership Law and Finance, Vol. 11, No. 1, pp. 169-173.

Scholz, M. (2001), Stock Options in Deutschland und in den USA. Besteuerung bei nationalem und internationalem Personaleinsatz, Wiesbaden.

Schwarz, C.; Michel, J. (1998), Aktienoptionpläne: Refromvorhaben in Deutschland – Erfahrungsvorsprung in Frankreich, Der Betriebsberater pp. 489-494.

Simons, D. (2001), Erfolgsneutrale oder erfolgswirksame Buchung von Aktienoptionsprogrammen? -Eine gegenüberstellende Bewertung anhand eines Beispiels, Die Wirtschaftsprüfung (WPg), pp. 90.

Spierts, E. (1999), Besteuerung von Arbeitnehmer-Optionen in den Niederlanden, Internationales Steuerrecht (IStR) p. 585-588.

Stanley, R. (1998), When Wall Street causes the jitters – repricing stock options in tough markets, http://www.fed.org/onlinemag/nov98/tips.html.

Stern, R.D. (1998), Stock Option Repricings, Journal of Employee Ownership Law and Finance, Vol. 10, No. 3, pp. 159-167.

Thomas, K.A. (2000), Consider your Options. Get the most from your equity compensation, 2nd print, Lisle, Ill.

Townsend, K. (2000), The hidden tax dangers of US executive share options, Financial Times, December 20, 2000.

UNICE (Union of Industrial and Employers´ Confederations of Europe) (2002), Stock Options in the EU: Tax obstacles to cross-border mobility of employees in the Single Market, http://www.unice.org.

Uszczapowski, I. (1999), Optionen und Futures verstehen, München, 4th edition.

Uvalic, M. (1991), The Pepper-Report: Promotion of Employee Participation in Profits and Enterprise Results in the Member States of the European Community, Social Europe, Supplement 3/91.

Van den Bulcke, F. (2000), A Company perspective on Financial Participation in the European Union. Objectives and Obstacles, Research Centre for Financial Participation, Catholic University Brussels.

Vanhulle, H. (1999), Belgium's New Stock Option Rules have various Tax and Social Security Implications, Worldwide Tax Daily, 28.6.1999, p. 123.

Vater, H. (2000), Stock Options für Führungskräfte aus handels- und steuerrechtlicher Sicht, Marburg.

Verdingh, Y. (1999), Belgium: New Fiscal Regime For Stock Options, Intertax 27/12, pp. 460-474.

Wildner, S. (2000), Stock Options: Ausgestaltungsmöglichkeiten und steuerliche Behandlung beim Begünstigten, Aachen.

Wolf, M. (2001), Taking other people's money, Financial Times January 9, 2001.
Zehetner J., Wolf C. (2001), Gesellschaftsrechtliche Rahmenbedingungen für Stock Options, ecolex 2001, 4.

Zehetner J.; Wolf C. (2001), Arbeitsrechtliche Probleme bei Stock Option Modellen, ecolex 2001, 12.

Zehetner J.; Wolf C. (2001), Sozialversicherungsrechtliche Aspekte von Mitarbeiterbeteiligungsmodellen, ecolex 2001, 21.

Zehetner J.; Wolf C. (2001), Die Besteuerung von Stock Options, ecolex 2001, 24.