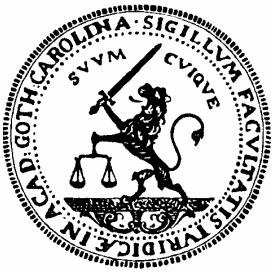

FACULTY OF LAW
University of Lund

Aisha Butt

Formulary Apportionment in the European Union

Master thesis
20 points

Mats Tjernberg

Tax Law/EC Law

Autumn 2004

Contents

Summary

The European Union has discussed the idea of a potential shift from a system of dividing the EU source income of multinational companies based on separate accounting and the arm's length principle, to one based on consolidated base taxation with formulary apportionment. EU businesses have for several years highlighted numerous tax obstacles in the EU that prevent them from operating on the basis consistent with the Single Market. Companies may have to apply up to twenty-five different tax systems. Losses occurred in one Member State cannot be offset against profits in another Member State. Enterprises find it difficult to reorganise their structures. There is a risk for double taxation and the there are problems associated with the separate entity accounting with the arm's length principle.

The Commission has presented four comprehensive methods and all these would require an allocation formula. The formula apportionment addresses the problems related to economic interdependence between related entities and the transfer pricing issues. Formulary apportionment is though not without problems. It does not determine the precise origin of an income. The formula implies that each unit of a factor earns the same rate of return. There is no theoretical reason for profits to be a fraction of payroll, property and sales.

Formulary apportionment could replace both the residence-based and the source-based taxation. The logic of formulary apportionment advocates that tax should be paid where the apportionment factors are located.

An issue that has to be addressed is the definition of the territorial scope of application. If the allocation formula would be limited to the EU, the separate entity accounting with the arm's length principle would continue to be applied with respect to transactions with third countries. Another issue that will arise is the definition of income. The income could be divided into apportionable and non-apportionable income. However, one of the most fundamental issues will be to define a group and the EU has to take several features like legal-, economic- and political aspects into consideration.

When designing a formula the EU has to decide if the formula should be based on micro- or macro factors. Some argue that the most important thing is to agree on a common formula and that the choice of the factors is not so important. The formula should however reflect how income is generated and recognise the contributions made by the manufacturing and marketing states. The three-factor formula does not always have to be the right formula but it strikes a balance between the competing influences. Companies doing business in several jurisdictions can employ a variety of techniques to minimise their tax liability under an allocation formula. Under the separate entity accounting with the arm's length principle, tax planning might take

the form of manipulating transfer prices while under formulary apportionment the tax planning might take the form of manipulation of the location of the factors.

A current move from the present system to a system based on formula apportionment is impossible before the Member States can evaluate the impact on their revenue and this cannot be done knowing neither the base nor the formula.

Preface

And this is the end of the road. I would like to see this as the beginning of something new; they say that you learn as long as you live.

I would like to thank my supervisor, Mats Tjernberg for all his support and guidance. I would also like to thank Anette Bruzelius for her valuable advice. Furthermore, I would like to thank my initial supervisor, late professor Sture Bergstöm for all his encouragement.

Finally, I would like to express my great appreciation to my beloved family for all the love and support during my years at the law school.

Aisha Butt
Lund, January 2005

“In a fully competitive world, indeed, the net income of a firm would be attributable to capital and entrepreneurial effort, not to payrolls or sales. On the whole it would probably be better simply to eliminate sales from the formula, and possibly to limit the payroll factor to salaries paid in excess of an amount representing payments to nonmanagerial labor.”
(William Vickrey, a 1996 winner of Nobel Prize in Economics)

1 Introduction

1.1 Background and purpose

"…a company will in any event be subject to the tax legislation of the State in which it is established."[1] According to Russo, this statement made in the "Lankhorst" case can be translated into that there is no need for a strict application of the arm's length principle because companies involved in inter-company transactions operating in the European Union will eventually pay taxes in the EU. This could be interpreted into that the arm's length principle has played out its role.[2] The separate entity accounting with the arm's length principle is currently used across the European Union. The European companies are facing several problems with the current tax systems used in the EU. The idea of a common corporate tax system has been discussed for several years with no result. The main problems that companies in the EU are facing are:

- enterprises may have to apply up to 25 different tax systems, which result in higher compliance costs
- enterprises cannot currently set off losses in one Member State against profits in another Member State
- with increased cross-border activities, the enterprises are subjected to an increased risk for transfer pricing and double taxation, which results in a potential "over-taxation" due to the fact that the unitary character of businesses is ignored
- enterprises find it difficult to reorganize their corporate structure due to several tax systems
- companies may face the problems associated with withholding taxes

The purpose of this essay is to illustrate how a consolidated tax base can be shared among the Member States and what questions a potential implementation of the formulary apportionment in the European Union will raise. Just recently, the EU has again started to discuss the establishment of a consolidated tax base and an agreement about the base must be reached before an allocation mechanism can be applicable. In the Commission Staff Working Paper SEC (2001) 1681 four methods are presented: Home State Taxation, Common Consolidated Base, EU Company Taxation and Compulsory Harmonisation. The four methods will only be roughly mentioned so that the reader may see that these approaches have in common that they require a mechanism for allocation.

[1] Case 324/00 "Lankhorst/Hohorst".
[2] Antonio Russo, 2005: *Formulary Apportionment for Europe: An Analysis and A Proposal*, p. 2.

The paper will explore the following questions:

- What are the implications of formula apportionment?
- What are the advantages and disadvantages with formula apportionment?
- What can the EU learn from the corresponding problems in the US and Canada?
- How should a European allocation formula be designed?

1.2 Delimitations

Allocation formulas are applied in the US, Canada, Switzerland and in Germany. The essay will only explore the US and the Canadian approaches. The reason for why only these two approaches will be examined is that these two countries have been in focus of the papers of the Commission related to direct taxation.

1.3 Method and material

The essay describes the formula apportionment used in the US and in Canada. The main aim with this essay is to present the advantages and the disadvantages with an implementation of formula apportionment in the European Union. The starting point is mainly the US approach. Possible solutions to the problems associated with formula apportionment are sometimes presented but the centre of attention has been to highlight issues that can emerge prior to a successful implementation. Some official documents from the Commission of the European Union have been read. Articles have mainly been studied to write this essay. The following two views have been analysed in this essay:

- ratione personae; to whom the formulary apportionment should be applicable to
- ratione materiae; what the territorial scope and the apportionable income should be

1.4 Disposition

The essay starts with analysing the legal basis for a harmonisation. Then formulary apportionment as applied in the US and in Canada is introduced. Subsequently, issues, which have to be addressed before an implementation in the EU, are presented and examined. Finally, some concluding remarks are followed.

2 Harmonisation

2.1 Legal basis

Direct taxation falls within the competence of the Member States, which means that the fundamental sovereignty to arrange the tax base and the tax rate is not effected by the EC Treaty. According to Art. 5, para. 1 EC the Community is obligated to have a legal basis in the Treaty before it can take any legislative actions.

In the field of indirect taxation, Art. 93 EC provides a mandate to harmonise but there is no such provision concerning direct taxation in the EC Treaty. Art. 94 EC (approximation of laws) on the other hand can create the possibility of harmonisation in the field of direct taxation.

2.1.1 Effect on the Internal Market

In accordance with Art. 94 EC a harmonisation of direct taxes is only possible if the provisions are intended to "directly effect the establishment or functioning of the Common Market." Provisions that touch cross-border exercise of the fundamental freedoms do effect the Internal Market. However, the question, which arises, is if tax rules, which belong to general tax systems of the Member States without touching cross-border situations, can be considered to affect the Internal Market.[3]

The abovementioned question is the key-question. It is natural as Schön points out, that provisions that touch cross-border activity indeed effect the Internal Market. The question is if general tax measures can effect the Internal Market. The same answer as to the provisions concerning cross-border activity could be legitimate. Business-decisions are often if not always effected by tax conditions among other things. When a company chooses its location, the tax burdens in different countries are considered. Unambiguous evidence is that countries are lowering their corporate income taxes to attract business.[4] One of the tasks of the EU is to abolish obstacles in the Internal Market according to Art. 3 EC. Consequently, EC law could require that transfer pricing regulations should be abolished. How? If the transfer pricing regulations are considered to be an obstacle to the Internal Market. But who decides if an obstacle exists or not? That question is not answered. A recent study shows that companies in Europe see transfer-pricing issues as the biggest challenge in more than 20 per cent of the cases.[5] This study obviously shows that there exists a great dissatisfaction with the arm's length principle. Is this dissatisfaction enough to replace the arm's length principle?

[3] Wolfgang Schön, 2000: *Tax Competition in Europe - the legal perspective*, p. 101.
[4] See Wolfgang Schön, 2000, p. 102.
[5] Antonio Russo, 2005, p. 2.

2.1.2 The principle of Subsidiarity

The subsidiary principle can be found in Art. 5, para. 2 EC. The principle applies to all Community Institutions but a citizen of the European Union cannot derive any direct rights from this principle. The scope of the principle is clear; in areas where the Treaty shares the competence between the Community and the Member States, the principle limits the power and in areas where the Community lacks competence, the principle does not create additional competence. The principle is not either applied in field of the exclusive competence of the Community. The limits of the principle can however be vague because of Art. 308 EC, which can extend the competence of the Community to areas where the Community lacks competence, in order to achieve Treaty objectives. The principle contains two objectives:

- to allow the Community to act when the Member States are unable to resolve an existing problem adequately, own their own
- to sustain the authority of the Member States

There exist three preconditions for Community action in Art. 5, para. 2 EC:

- the concerned area must not fall within the exclusive competence of the Community
- the objectives of the proposed action cannot be achieved satisfactorily by the Member States
- the action can by reason of scale or effects be more successfully implemented by the Community[6]

But is the principle of subsidiarity applicable? The answer is not clear. The Commission and some writers mean that legislation concerning the Internal Market falls within the exclusive competence of the Community while others are of the contrary opinion. According to Schön, the question of exclusivity should not be decided on the objective of the measure but it should be decided by taking account to the area, which in this case is tax law. But the key-question, if tax differences between Member States demand harmonisation, will not be solved while Art. 5, para. 2 EC says that the Community may act if the *objectives* of the proposed action cannot be sufficiently achieved by the Member States.[7]

2.1.3 The ”Neccessatity” criterion

The task of the European Union is among other things, to establish a Common Market Art. 2 EC. According to public finance theory, taxes distort economic decisions but the distortion can be reduced if the allocation

[6] European Parliament Fact Sheets 1.2.2 Subsidiarity 2000-10-16.
[7] Wolfgang Schön, 2000, p. 103. and European Parliament Fact Sheets 1.2.2 Subsidiarity 2000-10-16.

of resources is not influenced by differences in tax bases, tax rates and finally enforcement of taxation.[8]

According to the Commission, differences in general tax levels between Member States do not constitute an obstacle in intra community trade because their aim is not to hit cross-border situations. An obstacle exists when "a cross-border investment is subject to an extra charge that a domestic investment is not subject to either in the home state of the investor or the host state of the investment."[9] The Commission is however concerned about following effects that effect investments in a cross-border situation:

- higher compliance cost due to different tax systems
- no loss-consolidation
- tax charges due to reorganizations
- double taxation due to differences in the tax systems
- transfer pricing issues[10]

Is a harmonisation necessary then? The "necessity" criterion can be found both in Art. 3, para. 1 (h) and in Art. 5, para. 2 EC. This criterion leaves a large margin of discussion. There is a clear tendency that countries with high corporate income taxes like France and Germany seem to think that a harmonisation is necessary while countries with low corporate income taxes find a harmonisation unnecessary. The Community institutions have not discussed the implications of the necessity criterion. Should the criterion be considered as an economic or a political criterion? What does it mean? When is an objective not satisfactorily solved by the Member States?

2.1.4 The principle of Unanimity

Harmonisation in the field of tax law is only possible with the consent of all the Member States according to Art. 95, para. 2 EC. The principle of unanimity meets the Pareto criterion. A unanimous decision requires that there is no alternative state where an individual is better off and no one is worse off. This fact indicates that the Member States have to be able to compare their current tax bases with their potential share calculated according to an allocation mechanism before they can make a decision on if a harmonisation is preferred or not.

[8] Wolfgang Schön, 2000, p. 92.
[9] Wolfgang Schön, 2002: *The European Commission's Report on Company Taxation: A Magic Formula for European Taxation*, p. 279.

[10] Wolfgang Schön, 2002, p. 279.

2.2 The concept of harmonisation

It have been discussed what harmonisation means, what the desirable level of harmonisation is and how the harmonisation should be achieved. These questions are very controversial but they must nevertheless be solved before the European Union can achieve any kind of harmonisation.

It has been suggested that harmonisation refers to any situation where taxation differences between the states are reduced by cooperation or by federal government policy. Other suggests that harmonisation means some kind of coordination between different tax systems. In this case, the harmonisation is a "low-level" form of harmonisation. Some mean that harmonisation is achieved when fiscal systems are adjusted to conform to some economic aims. Another view is that harmonisation means that all countries in the EU have an identical fiscal system. A different definition is defined as a process of planning how to approximate the tax systems in order to achieve the objectives of the European Union in a better way. This means that there is no standardisation but a harmony is attained.[11]

The Commission has proposed that the tax base should be harmonised while the tax rates will continue to be a national task of the Member States.[12] According to Schön, the tax rate works as a signal for investors because they can compare the taxation level with the level of public goods. The harmonisation will lead to a reduction of spread in nominal tax rates across the Community while the Member States will be unable to combine high rates with low bases and vice versa.[13] This will according to the Commission result in more transparency, which is a requirement for "fair" tax competition.[14]

If the EU would choose to harmonise the tax base the second step would be to design an allocation formula. Different allocation formulas are applied in different countries and the EU has decided to look at the US and the Canadian approaches. The consolidated base with the formulary apportionment would replace the separate entity accounting with the arm's length principle.

[11] Jean-Philippe Chetcuti, 2001: *Corporate Taxation in the EC: The Process of Corporate Tax Harmonisation in the EC.*
[12] COM (1994) 533 final, p. 4.
[13] Wolfgang Schön, 2002, p. 279.
[14] The Commission's Study, note 2, Part IV.C:14.1., p. 406.

3 Formulary Apportionment

3.1 What is formulary apportionment?

Under formulary apportionment, a corporate group consolidates the total income of its units firstly and secondly the group uses an apportionment formula to apportion the income to the jurisdictions in, which its units does business. Formulary apportionment presents a rough approximation of the amount of income generated in a jurisdiction.[15]

3.2 Which problems are adressed?

If the formulary apportionment is implemented it will replace the arm's length principle. There are well known difficulties attached to separate accounting with the arm's length principle, which will be addressed with formulary apportionment:

- economic interdependence between related entities will be noticed
- the need to identify arm's length prices, which often do not exist in reality, will disappear
- transfer pricing problems, which result in that income is shifted to low tax jurisdictions, will be reduced[16]

3.3 Which are the associated problems?

Formulary apportionment addresses the abovementioned problems related to the separate entity accounting with the arm's length principle but there are some fundamental problems associated with the formulary apportionment. Some of the associated problems are:

- formulary apportionment does not determine the precise origin of the income and the result can sometimes be arbitrary
- formulary apportionment assumes that all factors earn the same rate of return
- there is no theoretical basis for why profits are a fraction of payroll, sales and property
- there are problems related to changes in exchange rates[17]

[15] JoAnn Martens Weiner, 2002a: *Would Introducing Formula Apportionment in the European Union be a Dream come true or the EU's worst Nightmare?*, p. 523.
[16] Charles E. McLure, 2002: *replacing Separate Entity Accounting and the Arm's Length Principle with Formulary Apportionment*, p. 586-587.
[17] Charles E. McLure, 2002, p. 587-588.

3.4 Where and how is formulary apportionment used?

Formulary apportionment has been adopted by some federal countries as the US and Canada. There are some particular reasons, which the EU lacks, for why the formulary apportionment has been successful in these countries that could be worth mentioning:

- the provinces in Canada and the states in the US operate under a federal tax system and the federal tax authorities can be called when needed
- the sub-national jurisdictions use the same accounting conventions
- the tax environment is different from the EU, for example, there are no cross-state or province barriers
- the US states and the Canadian provinces are more integrated economically than the Member States of the EU[18]

Formula Apportionment in the USA
FACTS: Federal State, with 50 states and the District of Columbia
SYSTEM: Classical system, levied on consolidated group income (80% ownership test)
TAX RATES: Federal Tax Rat: 33% (<$10m income), 34% (>$10m income)
State Tax Rate: determined by each state, ranges from 0% to 12%, average of 7%, deductible for Federal Tax, therefore effective State Tax Rate ranges from 0% to 8%, average of 4%. Federal plus State Rate: 33% to 42%
Proportion of total tax (Federal plus State tax) which is State Tax, which is based on apportionment of profits by formula: from 0% to 19%.
SOVEREIGNTY: States have the right to define the base, the formula, and the rate. Rules for computing the state tax base differ from state to state but in general, the starting point is the Federal Tax Base, which, subject to any specific adjustments, is allocated by formula apportionment. This apportions total income according to the share of total business activity in each state. Each State can set its own formula. The vast majority use three factors, property, payroll and sales, but not all states weight each factor equally. The definition of the factors may vary between different sectors. Most common is the 'Massachusetts Formula' with equal weighting of all three, but increasingly sales are double weighted giving 25%, 25%, 50%; rather than 33%, 33%, 33%.

19

[18] JoAnn Martens Weiner, 2002b: *Formulary Apportionment and the future of Company Taxation in the European Union*, p. 15-16.
[19] SEC (2001) 1681, p. 409-410.

Formula Apportionment in Canada

FACTS: Federal State, with 10 provinces and 3 territories
SYSTEM: Modified imputation system, levied on individual corporations.
TAX RATES: Federal Tax Rate: 38%, reduced to 28% on domestic income. With 4% surcharge the effective Federal Rate is 29.12% Provincial Tax Rate: determined by each state, ranges from 14% to 17%, average of 16%, for manufacturing and process income this is reduced to a range from 0% to 10%, average of 6%. It is not deductible for Federal Tax. Administration of Provincial Tax by Federal government, except in 3 provinces who self-administer. Federal plus Provincial Rate: 43.12% to 46.12% (manufacturing & process 29.12% to 39.12%) Proportion of total tax (Federal plus Provincial) which is Provincial Tax, which is based on apportionment of profits by formula – from 32% to 37% (0% to 26% for manufacturing & processing).
HARMONISATION: Provinces for whom the Federal government provides the administration have no right to either define the base or the formula, only the rate. Rules for computing the province tax base are harmonised – it equals the Federal Tax Base. It is allocated by formula apportionment, which apportions total income according to the share of total business activity in each state. Each Province uses the same formula, based on two factors, payroll and sales.

20

[20] SEC (2001) 1681 p. 409-410.

4 Formulary apportionment in the European Union

4.1 The Tax Base

Before an allocation mechanism can be designed, the tax base has to be defined and quantified and the accounting standards will have to be uniform. In 2001, the Commission proposed the following four approaches to harmonise the tax base. The approaches have in common that an allocation formula to share the tax base will be required. The methods will only provide for the tax base and the tax rates will be set by each Member State.[21]

	Home State Taxation	**Common Consolidated Base**	**EU Company Taxation**	**Compulsory Harmonisation**
Basis	Mutual Recognition	Harmonisation	Harmonisation	Harmonisation
Tax Code	Existing	New	New	New
Application	Optional	Optional	Compulsory or Optional	Compulsory
Participation	All or some companies	All or some companies	All or some companies	All companies
Establishment	Could be outside EU institutional framework	Via EU institutional framework	Via EU institutional framework	Via EU institutional framework
Tax Systems	Existing 15	Existing 15 plus new one	Existing 15 plus new one	One
Common treatment for all participants	No- potentially 15 "Home" States	Yes	Yes	Yes

[21] SEC (2001) 1681, p. 380.

Loss consolidation	Yes, or no according to MS rules	Yes	Yes	Yes
Transfer Pricing	Resolved amongst participants	Resolved amongst participants	Resolved amongst participants	Resolved
Rate set by Member States	Yes	Yes- possibility of "special" rate	Yes, but could be EU rate	Yes
Allocation Method	Yes	Yes	Conceivable	Yes
Implementation by group of Member States	Yes- assumed	Possible	Possible	Possible (enhanced cooperation)

22

4.2 How much uniformity is required?

As shown in the boxes above there are considerable differences between the US and Canada concerning the use of formulary apportionment. In the US, states are free to adjust:

- the tax rate
- the weight on the factors
- the categorization of taxable income[23]

The provinces in Canada on the other hand have uniform rules concerning:

- the factors, which means that all the provinces use the same formula
- the weight on the factors
- the tax base[24]

According to McLure, it is only logical that the following things are completely harmonised to eliminate, gaps and overlaps in the tax bases of countries, distortion to business decisions, avenues of tax avoidance and evasion opening and complexity in compliance and administration:

- the jurisdiction to tax income

[22] SEC (2001) 1681, p. 380.
The existing tax systems are now 25.
[23] JoAnn Martens Weiner, 2002a, p. 524.
[24] JoAnn Martens Weiner, 2002a, p. 524.

- the method of deciding apportionable income
- the treatment of non-apportionable income
- the apportionment formula
- the method to define the factors
- the weight of the factors
- the group definition
- mechanism to solve disagreements[25]

The US system can be considered more flexible than the Canadian system due to the fact that the states may alter the tax base and the weight on the factors when needed. Studies[26] have however indicated that the states have an incentive to manipulate the formula to stimulate additional investment for example .The crucial aim with an introduction of a consolidated tax base in the European Union is that that the Member States do not have to comply with up to twenty-five different tax systems. If the European Union adopts a system similar to the US system, we will be back to square one while the Member States will now have to comply with different apportionment formulas instead of twenty-five different tax regimes. The Commission[27] has also emphasized that a system similar to the Canadian is suitable for the European Union since an implementation of a single formula will eliminate the risk of double or non-taxation. At first sight, it seems attractable to let the individual countries set the weight on the factors because the economic situation varies in each Member State but the risk of exploitation is too overwhelming so the best solution is to harmonise everything else than the tax rates. This solution can seem to be drastic but it seems like this is the only solution, which will protect the functioning of the Internal Market. The Member States will still be able to set the tax rates and that should be enough because the rate will show the public expenditure.

4.3 Should the formula be applied to idividual corporations or to corporate groups?

In the US, the formula apportionment is applied to corporate groups and in Canada, there is no consolidation, which means that the formula is applied to individual corporations. The question which method the European Union should choose arises here. Here one should go back and carefully examine the aim with a harmonisation within the European Union. The European Union wants to achieve neutrality in cross border situations as described in 2.1.3. The separate entity accounting with the arm's length principle has shown to be unsatisfying. It should therefore be natural that the EU chooses the Canadian approaches because as McLure[28] highlights, most corporations establish a separate entity to conduct business abroad, which means that the

[25] Charles E. McLure, 2002, p. 596.
[26] JoAnn Martens Weiner, 2002b, p. 17.
[27] SEC (2001) 1681, p. 413.
[28] Charles E. McLure, 2002, p. 591.

need to identify the arm's length principle would still be required and at the same time the problems associated with economic interdependence would not be addressed.

4.3.1 What is a corporate group?

How should a corporate group be defined? A tax regime that is designed for corporate groups has to define what constitutes a corporate group. The problem with defining a corporate group also arises when an entity leaves or enters the group and when there is any kind of change in the shareholding.[29]

The term "associated enterprises" can be found in the OECD Model Convention for the Avoidance of Double Taxation on Income and Capital. Art. 9 of the Model Convention states:

> Where an enterprise of a Contracting State participates directly or indirectly in the management, control or capital of an enterprise of the other Contracting State, or
>
> the same persons participate directly or indirectly in the management, control or capital of an enterprise of a Contracting State and an enterprise of the other Contracting State/…/

Art. 9 of the Model Convention does not seem to provide minimum or maximum limitations concerning direct or indirect participation in management, control or capital. The term seems to refer to the domestic company law of the Contracting States. Two conclusions could be drawn from the OECD Model Convention according to Russo. First, no general definition of a group can be extracted from the wording of Art. 9. Second, the test under Art. 9 should be given a broad interpretation.[30]

The definition of a corporate group will most certainly be one of the most fundamental questions. When a definition will be outlined, the EU has to address several issues. The definition should be given a broad interpretation so that all forms of integration is captured, not only economic integration. A definition should be flexible but on the other hand, anti-abuse provisions have to be introduced.

The definition of a group is a central issue and there are many proposed methods. Questions, which will arise despite the choice of method, are:

- Who will have the burden of proof?
- Should there be an individual test in each case?
- Which authority will be considered competent to decide if consolidation is allowed or not?
- Should there be a possibility to appeal?

[29] Wolfgang Schön, 2002, p. 281.
[30] Antonio Russo, 2005, p. 8-9.

It seems easier to put the burden of proof on the companies. It is easier for a corporate group to proof that it is a unitary business or not. The tax authorities cannot have access to all the information that the companies possess. How the burden of proof will be fulfilled crucially depends on, which method will be preferred by the EU. There should also be an individual test in each case but how the test will be made once again depends on, which method the EU will chose. The procedure should however not be too time-consuming and there should be solutions like a simple document, which could be filled in. In dubious cases, there could be other procedures and these will off course take more time but that will be necessary to avoid abuse. How the competent authority will settle these questions is a difficult problem. It is perhaps easiest to appoint the tax authorities of the country where the headquarter is situated. There should also be a possibility to appeal. The appeal will probably be made to the courts of the country of the headquarter if the tax authorities in that country are assigned as the competent authorities.

4.3.1.1 Legal criterion

The group definition could be based solely on a legal control of the entities. A legal definition has the advantage of being objective, certain and easy to administer. There are however two weaknesses in such an approach:

- there could be a misattribution of income as affiliated but economically unrelated entities would apportion income that they maybe have not contributed to
- a legal criterion could lead to manipulation by adjustment of the ownership percentage

If the consolidated group includes less than the 100-percent owned affiliates, the question of much of the income should be apportioned arises. In the US, all income of an affiliate is apportioned once it is determined that the affiliate belongs to the corporate group. The most appropriate method would perhaps be to include only the pro rata share of the affiliate's income. However, as Hellerstein and McLure point out, the former approach is simpler to administer.[31] The control test could be used as the sole test deciding if an entity belongs to a group. This test can be justified on the ground that unless an entity contributes to the group in some way, the entity would be replaced.[32]

If the European Union prefers the legal criterion, anti-abuse provisions addressing ownership-manipulations have to be introduced. As Martens Weiner[33]highlights, tax planning can occur regarding the corporate tax structure. A corporate group can remove a profitable entity located in a low

[31] Walter Hellerstein, Charles E. McLure, 2004: *The European Commission's Report on Company Income Taxation: What the EU Can Learn from the Experience of the US States*, p. 203-204.
[32] Jinyan Li, 2002: *Global Profit Split: An Evolutionary Approach to International Income Allocation*, p. 845.
[33] JoAnn Martens Weiner, 2002a, p. 528-529.

tax jurisdiction to minimise its tax liability and on the other way around a group can bring an entity into the group when the entity is facing losses due to costs associated with start ups. The anti-abuse provisions could for example require a certain possession time to reduce the manipulation opportunities. These provisions must naturally enclose exceptions, which would be applicable under certain circumstances.

4.3.1.2 Economic criterion

Under this approach, it is possible for an entity to be engaged in more than one activity, which results in that different formulas could apply to the various activities. This approach could be considered superior to the legal definition because under this approach a consolidated group would be categorized as all commonly owned entities engaged in a single economically integrated business. If two commonly owned entities have no economic relationship other than the ownership, there is no justification for why these should apportion their income between them. The disadvantage with this method is that it can be considered uncertain and inconsistent. This approach also consists of an element of subjectivity.[34] But what is a unitary business? The US Supreme Court has given the states wide latitude in defining what a unitary business is. The Court has said that a unitary business can be identified as operations that contribute to and depend on each other. The Court has also spoken about "functional integration, centralization of management, and economies of scale" as indicia of unitary business."[35]

There is no justification for why income of two entities should be apportioned when the commonly owned entities have no other economic relationship than the ownership. In the US, there is wide latitude in defining what a unitary business is. A single and precise definition must be applicable in the European Union to avoid or to minimise the subjectivity problem. The definition of a unitary business has to be sought in economic theory.

4.3.1.3 A combination

In the US, the definition of a unitary business for tax purposes is defined based on three different tests; the control test, the flow-of-value test and the operational interdependence test. The control test consists of an ownership test. Under the flow-of-value test, a business is integrated if there is a flow of value among the units under common control. The operational interdependence test establishes that a business is integrated if interdependent operations are carried on to a substantial extent in different jurisdictions by the branches or subsidiaries that constitute the controlled enterprise. Interdependence is determined by the flow of tangible goods, services and sometimes intangibles. It is also crucial that, when defining a unitary business to make a distinction between activities that are a part of

[34] Walter Hellerstein, Charles E. McLure, 2004, p. 204.
[35] Charles E. McLure, 2002, p. 591.

the unitary business and activities that are not a part of the unitary business.[36]

The legal definition seems to be the most accurate from a legal perspective because it provides certainty but from an economic point of view, this definition is unsatisfying. The economic criterion seems to be the most accurate criterion but the element of subjectivity is disturbing. The fact that a business can be engaged in several different activities can be troublesome. If the legal criterion would be preferred the European Union has to decide the ownership percentage that constitutes a corporate group and if all of the income of the affiliate or a part of it should be apportioned. A European definition of a corporate group can be found in the 7th Company Law Directive on Group Accounts. According to this definition, any majority shareholding even if it does not exceed 50 per cent constitutes a group. According to Schön,[37] this definition seems to be too broad and a clear-cut solution to include only a 100 per cent could be ineffective. Another definition of a corporate group can be found in the Parent-Subsidiary Directive (90/435/EEC) with a 20 per cent shareholding interest and a third definition is found in the Interest and Royalties Directive (2003/49/EC) with 25 per cent of shareholding interest.

A combination of ownership test with other tests seems to be the most conspicuous approach. It seems inappropriate, especially with regard to the OECD Model Convention, to provide minimum or maximum limitations regarding direct or indirect ownership, control, management, capital or integration. In absence of limitations the risk for uncertainty and abuse will rise. The most favourable solution would be an individual test in each case and the tax authorities in the Member States together could potentially issue some guidelines concerning the topic to provide some degree of certainty for the taxpayer.

4.3.1.4 Control

The key element in this approach is to identify if the parent company has the ability to control the business decisions of an affiliate. Control includes legal control which can be fulfilled with majority ownership or majority ownership over the voting rights. This can sometimes be a result of large minority interest when not all the shareholders exercise their right to vote. Control is constituted if the controlling entity has the power over the assets of the entity to achieve the objectives of the controlling entity. Control enables the parent company to control the affiliates capital for example but it also allows the parent to obtain economic benefits. The benefits can sometimes be difficult to identify but they are nevertheless factual and valuable for the parent.[38]

[36] Jinyan Li, 2002, p. 845.
[37] Wolfgang Schön, 2002, p. 281.
[38] Joann Martens Weiner, 1999: *Using the Experience in the US States to Evaluate Issues in Implementing Formula Apportionment at the International Level*, p. 30-31.

What does control mean? Here, we are once again facing the problem with identifying when there is a legal control, which ownership percentage is required? A large minority can also be in control when they cast the majority of the votes because not all the shareholders exercise their voting rights. This approach can be complicated because when the other shareholders vote they will be in control and when they do not vote, another party will be in control. So you will never know in before hand if you will be in control or not. What are the objectives of the controlling entity? What are economic benefits and how will the benefits be identified? How much benefits must there be? In addition, are only pure economic benefits taken into consideration and why cannot other benefits be considered? Is there any justification for why economic benefits are considered to constitute a unitary business? Cannot entities be related for other purposes?

4.3.1.5 The three unities test

The California Supreme Court defined in 1941 in the "Butler Bros" case that a unitary business exists if the following circumstances are present:

- unity of ownership
- unity of operation as evidenced by central purchasing, advertising accounting and management divisions
- unity of use in its centralized executive force and general system of operation

Unity of ownership is identified as a single taxpayer owning a majority of the voting stocks of two or more corporations directly or indirectly. Unity of operations exists when there are common purchases, centralized advertising and record keeping, common legal representation and intercompany financing etc. Unity of use arises from flow of goods and by shared management and information, common knowledge and expertise etc.[39]

Once again, what constitutes a majority of the voting stocks? If we turn to the question of unity of operations, this criterion seems to be difficult to administer. Moreover, are the abovementioned criterions as common purchase etc only example? Is the fulfilment of only one criterion enough to constitute unity of operations or must several criterions have to be fulfilled? Unity of use is defined as flow of goods and shared management etc. To which extent should the flow of goods and the shared management exist to meet the requirement? What is management, which persons have to be "shared", is it enough with one person and to which extent should this person's competence and knowledge be shared? How will companies be able to proof that they share the management etc?

[39] Joann Martens Weiner, 1999, 31.

4.3.1.6 Dependency or contribution

According to this definition, a business is unitary if the operation of the portion of the business within the state is dependent upon or contributory to the operation of the business outside the state.[40]

This criterion is also very difficult to administer although this criterion can be justified from an economic point of view. What does dependent mean? What does contributory mean? Which concrete aspects should be taken into consideration and which should be left out? This definition seems to be too vague and to broad but it could potentially be considered to be very narrow; it depends on how the method is applied.

4.3.1.7 Interdependent basic operations

This approach implies that a business is unitary if interdependent basic operations are carried on to a substantial extent in different states by branches or subsidiaries, which compromise the controlled enterprise in different states. This test captures the purchasing and the manufacturing of goods and excludes everything else. For administrative ease, Hellerstein has recommended that the method should require a certain share of flow of goods or services between the corporations. The main advantage associated with this method is that the test can be measured by receipts or costs.[41]

However, this approach is vague and the definition does not seem to be clear. What do interdependent basic operations mean? What constitutes a substantial extent? When do branches and subsidiaries compromise the controlled entity?

4.3.1.8 Three stage test

This test determines whether a company can use separate accounting to identify the profits of the individual companies under common control. McLure has suggested that a unitary business exists if three stages are fulfilled:

- Is there a common control via ownership and management? If not there can be no unitary business.
- If there is common ownership and management, are there shared expenses, economies of scale or scope, intragroup transactions, vertical integration, or other economic interdependencies? If not, there is no unitary business.
- If any of the abovementioned elements exist, are they so substantial that they would fail to produce a satisfactory division of profits between members of the group?[42]

[40] Joann Martens Weiner, 1999, 31.
[41] Joann Martens Weiner, 1999, 32.
[42] Joann Martens Weiner, 1999, 32.

The identical problems arise repeatedly. What is a common control? Is there a certain percentage of ownership that constitutes control? What are economic interdependencies? What does substantial mean?

4.3.1.9 Flow of value

The Supreme Court has stated that the application of the unitary business principle requires a careful examination in each case. The examination includes an examination of the corporate structure, how the corporate enterprise operates and the relationship with the taxing state. There does not have to be a flow of goods between the entities under common control but there has to be some type of flow of value between the entities.[43]

The Supreme Courts notion seems to be correct that the unitary business principle requires an examination in each case. The assumption that only a flow of goods does not constitute a unitary business seems to be accurate to. There is no justification for why a flow of goods should constitute a unitary business. Nevertheless, the problem with this approach is that the definition of flow of value is not lucid. Although each case demands a separate examination, the definition of flow of value has to explained.

4.3.1.10 Activity test

Almost all the definitions of a unitary business have in common that certain activities create an economic unit. The activities that can be included are common control, common ownership and interdependencies among the activities.[44] Which activities should be included? Is it enough that one activity is "shared"?

4.4 Should the formula be applied to international or domestic groups?

The EU has to decide whether the apportionment formula should be applicable only to international groups or if it should be applicable to domestic groups also. In reality, the EU has to decide if the harmonised tax base should be accessible to domestic groups also.

Schön emphasizes that the principle of subsidiarity seems to advocate that the harmonised tax base should only be obtainable to international groups. However, if the harmonised tax base would be available only to international groups it may lead to reverse discrimination.[45]

In the European Union, there is a need for tax base harmonisation. There should not be a distinction between international and domestic groups. The principle of subsidiarity seems to be applicable in the first stage. In the first stage the question, which should be asked, is if a harmonisation is justifiable. If the answer is affirmative, there is no reason why the principle

[43] Joann Martens Weiner, 1999, 33.
[44] Joann Martens Weiner, 1999, 33.
[45] Wolfgang Schön, 2002, p. 280.

of subsidiarity should be applicable when it is decided if the harmonised base should be available to domestic groups also. The EU should not establish new disparities between purely domestic and cross-border situations since the aim of the EU should be to establish tax neutrality within the European Union.

4.5 Should the formula only be applied to incorporations?

The Commission has stated that in most European countries internationally active enterprises are incorporated. The outcome is that the Commission finds it unnecessary to cover partnerships and sole proprietors by the harmonisation proposal. This approach is not neutral with respect to legal form and it can harm those countries in which non-incorporated legal forms play a substantial role in the economy. In Germany, for example many multinational active groups are headed by limited partnerships.[46]

The European Union should probably offer the harmonised tax base to every kind of organisation. The tax system should be neutral with respect to the legal form; this situation could be compared to the situation with the free choice to establish a branch or a subsidiary. Just because most internationally active enterprises in the European countries are incorporated does not mean that it is justifiable to leave out every other form than the incorporations. The immense complication here is that in the Member States the partnerships are not subject to corporate income tax because they are instead subject to general income tax. This means that we touch the national tax sovereignty here, but this situation should not be too complicated to solve while to leave out everything else than incorporations would certainly create more serious problems.

4.6 Should all income be apportioned?

McLure explicates that the answer to the question; if all income should be apportioned or not, depends on the type of income in question and on whether apportionment formula is applied to corporate groups or to individual corporations.[47] The definition of income will determine the size of the tax base to be divided between the participants; both the corporations and the countries. There exists no international agreement on the computation of profit and the definition could conceivably be found in current practices. The definition could also be developed from a number of principles that are commonly recognized. According to Li, the intra-firm transactions should be excluded and only transactions made with third parties should be included. With respect to expenditures, it has to be decided if all expenses should be aggregated and divided or if some expenses should be handled separately. “Local expenses” could alternatively be excluded and

[46] Wolfgang Schön, 2002, p. 280.
[47] Charles E. McLure, 2002, p. 592.

they could be defined as locally incurred expenses that are not fungible. One example of local expenses is rent costs for office space. Li emphasizes that to include all expenses would be simple to administer but it could force countries to allow deductions for local "day-to-day operating" expenses, which could be considered as unacceptable.

4.6.1 Worldwide Income or Water's Edge

The European Union has to decide whether the worldwide income of EU multinationals should be apportioned or if only income from EU sources (water's edge) should be apportioned. Sörensen assumes that stopping at the water's edge seems to be the appropriate approach since this will reduce coordination problems.[48] Hellerstein and McLure also seem to conclude that stopping at the water's edge seems to be appropriate due to the following grounds:

- international differences in accounting standards
- the need to convert documents prepared in other languages
- differences in the productivity of factors of production
- differences in exchange rates
- the need to renegotiate tax treaties with non-member states which are based on separate accounting and the arm's length principle[49]

There exist two situations where the boundaries of formulary apportionment are uncertain:

- EU sourced income from non EU based affiliates
- non EU sourced income from EU based affiliates

If one look at the first situation it seems reasonable to include the income because the source of the income is the EU. Another argument in favour of an inclusion is that exclusion would ultimately result in tax avoidance problems because entities could operate in the EU without being liable to pay tax due to their residence and exclusion would require profound transfer pricing documentation.[50]

An inclusion could raise issues of compatibility with international tax law. To include non-business income such as dividends, interest or royalties from European sources could be incompatible with Arts. 10, 11 and 12 of the OECD Model Convention for the Avoidance of Double Taxation on Income and Capital. If business income on the other hand is included Art. 7 of the Model Convention necessitate a sufficient nexus. If it can be concluded that sufficient nexus exists, the question of how much income should be included remains unsettled because the formulary apportionment is not recognized as a valid method to comply with the arm's length principle

[48] Peter Birch Sörensen, 2002: *Company Tax Reform in the European Union*, p. 95.
[49] Walter Hellerstein, Charles E. McLure, 2004, p. 206.
[50] Antonio Russo, 2005, p. 15.

according to Art. 9 of the Model Convention. A possible solution could be to argue that Art. 7 para. 4. of the Model Convention is applicable, which states that the use of formulary apportionment is customary in the industry in which the company operates.[51]

The second situation, which has to be examined closely, is when EU based affiliates are "receiving" non-EU sourced income. If such income is included, foreign companies and multinational firms would calculate to see if they lose or gain having European states apportion income. The outcome would depend on the tax rates in the EU and in the foreign country. If the income is apportioned, the income could be taxed by several countries then the question of who is going to provide for relief for taxes paid abroad arises. One method could be to exclude foreign sourced income. Such a method would however be a modification of the current situation based on residence principle. An option could then be to maintain two separate systems, one for EU source income and one for non-EU sourced income.[52]

While the coordination problems with the non-member states will be addressed by the water's edge principle, new coordination problems will arise according to Sörensen. One example is that if we suppose that the US tax authorities decide to increase the transfer price of a product delivered from an affiliate in US to its parent company in France. The affiliate's taxable profit will then increase and the French tax authorities should then adjust the taxable profit downward in France. Under the current system this described example is a matter solely between the US and France but under a European system this will effect the tax base of other countries in the EU assuming that the multinational operates across Europe.[53]

The EU will probably prefer the water's edge principle because this approach is more appropriate since it is easiest coordinated. The detriment is that the EU will have to master two parallel approaches if formula apportionment is not universally adopted. Nevertheless, this seems to be the only possibility as the tax treaties concluded with the non-member states are based on separate accounting with the arm's length principle. The issue is however not trivial because a large number of transactions[54] occur between EU and non-EU companies.

4.6.2 Business (active) income and non-business (passive) income

In the US, a distinction is made between business and non-business income. Business income is defined as "income arising from transactions and activity in the regular course of the taxpayer's trade or business" and non-

[51] Antonio Russo, 2005, p. 15-16.
[52] Antonio Russo, 2005, p. 16-17.
[53] Peter Birch Sörensen, 2002, p. 95.
[54] See Joann Martens Weiner, 2002c: *Formula Apportionment in the EU: A Dream come true or the EU's worst Nightmare?*, p. 8-9.

business income is characterized as “all income other than business income”. The business income is apportioned according to the formula and non-business income is attributed to the source state of the income.[55]

There are problems with the US approach when distinction between business and non-business income is made:

- it is difficult to distinguish between business and non-business income
- it is difficult to attribute non-business income as it is difficult to “identify” the source state and that state does not always have to be the only source of the income
- the opportunities for tax planning increases as a “race to the bottom” concerning the non-business income can arise
- business income is almost certainly more considerable than the non-business income[56]

Both Hellerstein and McLure conclude that it makes sense to make a distinction between business and non-business income from tax policy perspective. The aspire of formula apportionment is to attribute income to its source. There is no reason why income that has arisen from discrete activity in one state should be shared with another state in which unrelated activity is conducted. The apportionment formula is the second best test, which apportions income where there is an element of uncertainty.[57]

At the first glance, it seems appealing to distinguish between business income and non-business income. The apportionment formula is the “second best” method as Hellerstein and McLure rightly put it. It is also justified from a theoretical tax policy view to make such a distinction but there are several complications that the EU has to overcome before such a method can be successfully implemented. If a distinction between business and non-business income is made, there will be an incentive for companies to place non-business income to low tax jurisdictions, which will lead to distortions. There is an impending risk for a “race to the bottom”, which will lead to distortions in the Internal Market as the Member States still will be free to set their own tax rates.

4.6.3 Income from Nonconsolidated Affiliates

There are three potential scenarios when affiliates will be excluded from the corporate group for tax purposes:

- non-EU affiliates
- affiliates in Member States that will not participate in the harmonised tax base with formulary apportionment if optional
- EU-affiliates excluded from the group definition

[55] Walter Hellerstein, Charles E. McLure, 2004, p. 202.
[56] Walter Hellerstein, Charles E. McLure, 2004, p. 203.
[57] Walter Hellerstein, Charles E. McLure, 2004, p. 202.

Hellerstein and McLure agree that the reason for why an affiliate is excluded should not matter. In all the abovementioned situations, the affiliate should be treated as a "stranger" resulting in that the affiliate will not be participating in formulary apportionment. The transactions with the non-participating parties will continue to be governed by separate accounting with the arm's length principle.[58]

Hellerstein and McLures method seems to be accurate. It would be unjustified and to complicated to include income from "non-affiliated" entities. If the entities are excluded by the definition once, there is no reason why the income of these entities should be included.

4.7 Which factors could be chosen and how should they be weighted?

4.7.1 Fundamental problems

As mentioned earlier, formulary apportionment only provides a rough approximation of the origin of the source of the apportionable income, which means that the formula is unable to identify the precise geographic source of income. The US companies accept the fact that the formulary apportionment only provides a rough approximation because this rough approximation does not cause enormous distortions in the US due to the fact that the corporate tax rates are relatively low and that there is little cross-state variation. As Weiner, correctly, highlights these rough approximations might not be acceptable in the EU because tax rates are relatively high and there are great cross-country variations.[59]

The immense inconvenience with formulary apportionment is that it only provides a rough approximation of the source of the income. The separate entity accounting with the arm's length principle on the other hand aim to decide the precise origin of income. The fundamental problem, which will arise, with the foundation of formulary apportionment is that it should be used when the precise origin cannot be identified. The question, which then has to be answered is, should formulary apportionment be applied when the precise origin can be identified.

4.7.2 A possible solution to one of the fundamental problems- relief mechanism

If the outcome of an application of the formula presents a result that is contradicted by undisputed facts, there should be relief mechanisms that allow deviation from the apportionment formula. Most states have adopted relief mechanisms, which has resulted in that tax administrators may deviate from the formula if the provisions are inappropriate and this allows the

[58] Walter Hellerstein, Charles E. McLure, 2004, p. 206-207.
[59] Joann Martens Weiner, 2002c, p. 3.

taxpayer to use another method of apportionment. The different states have authorized the taxpayer or the tax commissioner to use different allocation methods when the prescribed one fails. The taxpayer may petition for or the tax administrator may require in respect to all or any part of the taxpayer's business activity:

- separate accounting
- the exclusion of one or more factors
- the inclusion of one or more factors
- the employment of another method[60]

Theoretically, there should not be any need for a relief mechanism but in reality; there could be situations where the formulary apportionment presents an unacceptable result. How the mechanism will be defined remains to be seen. It should however be formed as a general clause so it can capture every possible situation. The states should however not use such a clause on a regular basis because such a clause should be used only in extraordinary situations. The EU should design a relief mechanism carefully because the relief mechanism should not be designed in a way that creates incentives to manipulation by the individual corporate group or by the Member State in question. A question, which remains open, is the question of who should be authorized to grant the relief. Should the relief mechanism be granted by the tax authorities in the Member State in question or should it be some EU institution (already existing or a new one)? If an EU institution is authorized, one may claim that there will be a homogeny in the application and at the same time, it will hinder the Member States from favouring some corporations. If the Member States are authorized, one can argue that it is easier, cheaper and sometimes less time consuming to contact the national tax authorities for the taxpayers. Then there is the question of appeal, should it be possible to appeal and if so, to which authority? A possible solution could be that national decisions would be appealed at the EU level.

4.7.3 Elements in the formula

It has often been suggested that the choice of the formula and the choice of the apportionment factors is less important that presumed. It is much more important to agree on a common formula.[61] From a tax policy perspective, this assumption could be correct because it is important to gain consistency, the experience from the US shows that loud and clear. However, from a tax payer view this assumption seems to be incorrect while the company income tax will be a tax on the given factors and the choice of the factors play a major role because the factors should reflect the origin of an income.

The Commission has scrutinized that the factors must reflect the source of the income while taxation under formulary apportionment will be a tax on

[60] Joann Martens Weiner, 1999, p. 37.
[61] See Joann Martens Weiner, 1999, p. 13.

the given factors. The Commission has illustrated that the three traditional factors — sales, capital and labour are vulnerable to manipulation but they do show the capacity to generate income so the choice of the factors has to be examined cautiously and two main questions have to be answered:

- How would companies react and change their investment strategy or corporate structure faced with different models of formula apportionment?
- How would the distribution of the EU tax base between Member States differ as compared with the current distribution?[62]

A problem, which undisputedly arises when designing a formula, is the trade-off between accuracy and simplicity. The most accurate measure, generally speaking, also tends to be the most complex one and the compliance costs rises. The traditional three-factor formula does not always have to be the "right" formula but it fairly represents the factors generating the income. The three-factor formula does however reflect how income is generated and recognizes the contributions made by the manufacturing and marketing states.[63]

The formulary approach has been criticized because the factors do not reflect all the factors that generate income. Calculations have however shown that the exact definition of the formula is not that important. In the US, the Willis Committee estimated how the tax base would change if the states moved from a property-payroll formula to a property-payroll-sales formula with sales measured on a destination basis. The result was that the revenue impact was small, for 37 of 38 taxing states less than 1percent of the total revenue was involved. The Willis Committee concluded that no state would lose more than 1,6 per cent, if the states moved from the present formula to a two-factor and three-factor formula.[64]

The factors in the formula will ultimately decide how the tax base will be shared among the Member States and they will have a behavioural effect both on governments and on enterprises. The factors have to fairly reflect the source of the income and at the same time, these should not be easy to manipulate. The choice of the factors will be very challenging from a political, economical and technical point of view. Either the EU has to design a formula that is suitable for all industries alternatively the EU could design different formulas for different industries. If different formulas for different industries are introduced the EU has to define different industries. Another issue that will arise is that a single corporation could be engaged in more than one industry. However, an analysis that the EU has to make before it can design a formula is the economic situations in the Member States vary and that different formulas can favour different kinds of economies.

[62] COM (2003) 726, p. 23.
[63] Joann Martens Weiner, 1999, p. 13, 21.
[64] Joann Martens Weiner, 1999, p. 21-22.

4.7.4 Firm or (group)- specific or industry average

In the US and in Canada the apportionment factors relate to activities of the taxpayer or the corporate group. McLure has shown that the use of firm specific factors transform the corporate income tax to direct tax on the chosen factors. It could then be possible to use factors based on industry averages because the firm specific formula distorts business decisions by manipulation of the location of the factors. The employment of industry averages would reduce the possibility of tax planning. The weakness with industry average is the possibility to produce unacceptable results since it bases tax liability on the activities of others in the industry instead of the activities of the taxpayer. A small taxpayer located primarily in a low tax jurisdiction could potentially pay most of its tax in a high tax jurisdiction where it has few activities and enjoys few public services. This result would be produced because its competitors would be larger and primarily located in the high tax jurisdiction. The result of industry average would be arbitrary if a firm only operates in one jurisdiction. McLure asks if it should be required or allowed to use industry averages to apportion income among the jurisdictions where it competitors operate rather than paying tax only to the sole jurisdiction where the firm operates.[65] According to Sörensen, there are two advantages associated to industry average. Firstly, it would not be possible for companies to shift income from high tax jurisdictions to low tax jurisdictions and secondly there would no longer be a distortion on business decisions concerning the location of the factors. A problem related to the use of industry average is, as Sörensen observes, that a single firm alternatively a corporate can belong to several industries and the determining of an industry can create difficulties.[66]

The use of industry average can seem to be attractive because it eliminates some of the tax planning problems but this approach produces unacceptable results. The approach breaks the link between economic activity and taxation and that cannot be justified on any grounds. Another problem that arises is if a firm only operates in one single jurisdiction because the approach could assert that income is apportioned to jurisdictions, which the company lacks nexus to.

4.7.5 The Sales Factor

If sales should be included in, the formula depends on which economic view is supported. In the supply/demand model, the sales are included.[67] The supply/demand model balances the interest of the demand side through the sales factor and the supply side through the payroll factor.[68] In the US, the sales factor is not limited to only sales of goods but the factor includes all

[65] Charles E. McLure, 2002, p. 596.
[66] Peter Birch Sörensen, 2002, p. 96.
[67] Charles E. McLure, 2002, p. 593.
[68] JoAnn Martens Weiner, 2002b, p. 18.

gross receipts not allocated to a specific state. The sales factor is broad because it includes sales of tangible property, services, rentals, royalties and business operations.[69] The attribution can be made to the following locations:

- for sales of goods to the place of origin (the place of the seller) or to the place of destination (the place of the consumer)
- for sales of services to the place of the consumer or to the place where services are rendered
- for sales of intangibles the place of origin or the place of the payer[70]

Sales of tangible property are as a rule attributed to the state of destination and sales of other than tangible property is assigned to the state where the income producing activity is performed. If the income producing activity is performed in several states, the sales are attributed to the state where the greatest proportion of the income producing activity is performed. The income producing activity is measured based on the costs of performing the activity.[71]

Many states apply the so-called throw-back rule, which "throws" back the sales to the state of origin if the sale is made to the US government or if the seller is not subject to tax in the destination state. This rule prevents the income from escaping taxation.[72] According to Hellerstein, the most suitable solution would be to apply a "throw-out" factor, which will exclude the sales from the formula. Hellerstein also thinks that sales made to foreign nations, which do not tax income but where the taxpayer has, nexus should be excluded from the numerator of the sales factor but not from the denominator.[73]

A problem that can arise is that it could be possible to manipulate transfer prices to lodge sales in low tax jurisdictions. This could be possible if some affiliates are not included in the consolidated group. Anti-abuse provisions will probably have to be introduced to hinder such manipulation. The same situation as with the current situation with separate entity accounting with the arm's length principle will be created but the tax saving from such a manipulation will probably be less than under the current system as stressed by Hellerstein.[74]

Why should the place of seller be the place of origin, the seller does not always have to perform any largely activity to sell the merchandise. Enterprises could then easily set up their places of retail in low tax jurisdictions and "export" the merchandises from high tax jurisdictions. If the EU should chose the destination principle there are many problems that

[69] Walter Hellerstein, Charles E. McLure, 2004, p. 212.
[70] Jinyan Li, 2002, p. 848.
[71] Walter Hellerstein, Charles E. McLure, 2004, p. 212.
[72] Joann Martens Weiner, 1999, p. 16.
[73] Walter Hellerstein, Charles E. McLure, 2004, p. 213.
[74] Walter Hellerstein, Charles E. McLure, 2004, p. 213.

have to be identified and solved. It can for example sometimes be difficult to identify the destination when sales are made over the Internet. What will take place when consumers will travel to low tax jurisdictions to make their purchases? What does the "income producing activity" mean, which costs are included and how are they measured, as the one single currency is not used across the EU? Why should all of the income be assigned to the jurisdiction where the greatest proportion of the income activity is performed? The rule may be easy to administer but it lacks economic justification. The "throw-out" rule seems to be the most reasonable method; it would be easier to ignore the sales in question because there are no justification for "throwing" back the sales to the state of origin. However, anti-abuse provisions will have to be introduced but it will be very complex to design such rules and the outcome of such rules will create a situation where the ultimate result will not be foreseeable for the taxpayer. The thing that speaks in favour of the "throw-back" rule is that it is easier to administer and there is not any element of uncertainty and the result is foreseeable for the taxpayer.

4.7.6 The Payroll Factor

The payroll factor reflects the labour compensation to employees and it includes employee compensation including wages, salaries, commissions and other forms of remuneration. In-kind payments are considered to be income if the payment is considered to be income under federal law. The term employee includes officers or individuals who have the status of employee. Payments to independent contractors or to other persons who are not classified as employees are excluded. The term employee can be found in the Model Unemployment Compensation Act and the term corresponds with the term used for unemployment insurance purposes. The location of the factor is where the employee works and if the employee works in more than one state, the compensation is attributed to the employee's base of operation. If an employee has no base of operation, the state assigns the payments to the residence state of the employee.[75]

If the payroll factor is included in the apportionment formula, there has to be some kind of adjustment for differences in labour costs between the jurisdictions according to McLure. The result may otherwise be unacceptable because a corporation may have operations in low cost jurisdictions to save labour costs but the profits would be attributed to high wage jurisdictions disproportionately.[76]

The payroll factor follows the federal definition of employee for unemployment insurance and the EU does not have any uniform definition so the Member States will have to design a uniform definition of employee. It is also extraordinary that the compensation to the independent contractors is not included in the payroll factor. When an independent contractor is

[75] Joann Martens Weiner, 1999, p. 16.
[76] Charles E. McLure, 2002, p. 594.

hired, the contractor is hired to contribute to the income so there is no economic justification for excluding compensation to independent contractors. If the EU would choose to exclude compensation to independent contractors, corporations may hire independent contractors to reduce the payroll factor if needed. In-kind payments and all labour compensation irrespective of form should be included in the payroll factor to reduce abuse of the rules. If an employee works in more than one state, it seems justifiable to allocate the entire payroll expense to each country instead of allocating the income to the base of operation.

Under supply or supply/demand view[77] there is no justification for including the labour costs in the apportionment formula. The view that supports that labour compensation should not be included in the formulary apportionment seems to be accurate but it is easy to include the factor in the formula. One reservation that has to be made though is that in some sectors the profit is really the return of efforts of the labour.

4.7.7 The Property Factor

Tangible property is possibly the most reliable factor according to Li. The factor is easy to locate and it is furthermore easy to quantify. According to Li, the jurisdiction in which the property lies is entitled to tax because the jurisdiction provides legal protection as well as infrastructure.[78]

The property factor includes real and tangible property, which means that intangible property is ignored completely. However, both owned and rented property is included in the factor. Such property includes land, buildings, machinery, stock equipment etc. The owned property is valued at its original cost and the rented property is valued at eight times its net annual rental rate. In principle, the US state should define the property factor identically but in practice, the states define the factor differently.[79]

There are however, some problems related to the property factor, which cannot be overlooked:

- it is inappropriate to ignore the intangible property because this kind of property can be the “crown jewels” of the corporation
- the cost of assets provides a poor approximation of the value and the user cost of capital
- equally valuable assets will be treated differently if the historical cost is different
- the contribution of old assets is overstated because the depreciation is not considered
- the contribution of old assets is understated during an inflationary period
- the use of a single multiplier to capitalise payments on leases of varying length is inappropriate

[77] See Charles E. McLure, 2002, p. 593.
[78] Jinyan Li, 2002, p. 848.
[79] JoAnn Martens Weiner, 2002a, p. 526.

- the treatment of leased assets will not be commensurate with other assets because the user cost is approximate and the depreciation and inflation is considered
- it would be possible for corporations to manipulate transfer prices on transaction between an affiliate that is included in the consolidated group and an affiliate that is not included to "misallocate" the property[80]

4.7.7.1 Intangible property

How should the intangible property be treated? Canada omits the property factor from the apportionment formula and the US omits intangible property from the property factor. It is, as mentioned earlier, perhaps inappropriate to exclude intangible assets because these can many times be the "crown jewels" of the multinational enterprises. The problems related to the intangible assets are that the assets are often difficult to quantify, value and locate. First, the problem with the definition arises if the EU wants to include intangible assets in the property factor. One possible solution to this problem could be to use the existing definition of intangible assets in the OECD guidelines. If the definition in the OECD guidelines is followed, both the commercial and the marketing intangibles will be captured.[81]

According to Li, both commercial and marketing assets could be measured by cost. For commercial assets the research, development and the expenditures of acquiring legal protection could be included in the cost. For marketing assets, the advertisement and the marketing expenditures could be included in the cost. However, there are two crucial problems related to measurement by cost. Firstly, there does not always have to be a link between the value and the cost and secondly, historic cost can be difficult to apply since intangibles may be created over a period of time and not necessarily over a year. On the other hand, the cost method is relatively easy to apply but the market value may be the most correct value but this is difficult to establish.[82]

Another problem associated to the intangible property is the location. Where should the assets be located? The answer to this question is not clear. Commercial intangibles could be located to the jurisdiction where research and development took place and marketing assets could be located to the country where products and services are marketed. The problem however is that it can be difficult to locate research and development cost when it is embodied in the human capital or in mobile assets.[83] The problems associated with an inclusion of intangible property can be illustrated by two examples, which are worth to be examined by the EU before it can make a decision about the inclusion or exclusion of intangible property:

Example 1: "X corp. does research in the United States, where a Hungarian immigrant has a bright idea, and in China, where Chinese scientists turn this

[80] Walter Hellerstein, Charles E. McLure, 2004, p. 212-213.
[81] Jinyan Li, 2002, p. 848-849.
[82] Jinyan Li, 2002, p. 849.
[83] Jinyan Li, 2002, p. 849-850.

idea into something potentially useful. Development is done in India, where computer whizzes and "cheap" engineers manage to develop a marketable product. The design is then sent to a Thai factory for further development by process engineers (who come from several different countries), and the final product is "developed" by Thai workers and managers. Finally, the product is manufactured in Nicaraguan and Moroccan factories for eventual sales in NAFTA and EU countries."[84]

Example 2: "Consider, for example, the value of intangibles such as trademarks for a soft drink or the endorsement of sporting equipment by an American sports star. Should these intangible assets be attributed to (for purposes of calculating the property factor), primarily, the country in which the trademark was originally developed or in which the athlete performed, and not to the place where products are sold? Does it matter how much advertising is conducted in the market country? Does it matter that the product enjoys a monopoly position in the local market, perhaps because of government policy? In other words, is there a difference between intangibles based on R & D and those based simply on reputation and advertising (or on monopoly power)?"[85]

Should the intangible assets be included in the property factor or not? It seems unreasonable to exclude the intangible assets because their value is too great to be ignored. Nevertheless, is intangible assets really ignored just because they are not explicitly mentioned? Is not the value produced by the intangibles indirectly allocated by sales, property and payroll? Would it not be easier to allocate the value created by the intangibles obliquely?
If one takes a glance at the traditional factors one may argue that the value created by the intangibles is already captured and allocated. The cost of research and development could be reflected in the salaries and in other expenditures, which arises due to the research and development. The marketing assets are reflected in the sales factor by increased sales. It may be easier to ignore the intangible assets or argue that the intangibles are already captured and allocated by the "traditional" factors but this approach can create unacceptable results in situations where has been proven that the "traditional" factors are unable to capture and allocate the intangibles.

[84] Jinyan Li, 2002, p. 849.
[85] Jinyan Li, 2002, p. 850.

5 The Nexus Problem

Art. 7 of the OECD Model Convention deals with the question of which states have the right to tax business profits. The rule is that an enterprise of one state cannot be taxed in another state unless it carries out business in that state through a permanent establishment.

Under the current system of international taxation based on separate entity accounting the nexus issue is governed by the residence and source principle. Under formulary apportionment, a specific jurisdiction could be entitled to tax if the factors used in the formula are found in that jurisdiction.[86]

In the US, there is a minimum activity test, which differs from the concept of permanent establishment. In California under the water's edge regime, the income of a foreign corporation is included in the combined report if 20 per cent or more of its activity is conducted in the US. The activity is measured by the apportionment factors without regard to whether a permanent establishment is established or not.[87]

The EU will be faced with two choices, either to follow the international standard requiring a permanent establishment or to design an approach similar to the Californian approach. The modern economy especially with regard to electronic commerce seems to advocate the second option. The basic idea of formulary apportionment implies that the location of the factors creates the jurisdiction to tax. New question will however arise here. Should all the factors be situated in a Member State or is it enough with one factor to create jurisdiction to tax? How many per cent of the factors have to be located in a jurisdiction to create tax liability?

The first option with a notion of permanent establishment is already accepted in the field of international taxation and that is the main advantage with the approach. The approach is easy to administer, consistent and it creates certainty for the taxpayer. The second option with factors located in the jurisdiction could be suitable for the EU because the Member States could decide not to apply existing double tax treaties concluded between them. The double tax treaties with "third" parties would still be applicable as before. The reason for why the second option is suitable for the EU is that problems related to inconsistencies like those in the US will not arise if uniformity is achieved (see 4.2.) and therefore there should presumably not be any need for "throw-back" or "throw-out" rules.

[86] Antonio Russo, 2005, p. 18.
[87] Antonio Russo, 2005, p. 18.

6 Apportionment based on macro level

Allocation could alternatively be based on data on the macro level. This method would break the link between the taxpayer and the allocation process because the EU would not seek enterprise specific data instead it would seek economic data at the level of the Member States. The national VAT base or the national Gross Domestic Product could be used. Such a key would be general and the key would also be outside the enterprises control, which would result in that the manipulation possibilities would be reduced. The enterprises would no longer have the responsibility to provide the data. The Member States share and the tax revenues would be determined partially by the performance of other Member States and difficulties could arise since the tax rates vary widely across the EU. There are precedents of the use of macro data, for example a part of the contributions made to the Community's resources are computed in this way but the EU concludes that sharing at the macro level had been appropriate if the tax itself was being allocated instead of the tax base.[88]

Another problem, which cannot be ignored, is that according to Westberg sharing at the macro level could conflict with a basic principle of international tax law. There is no justification for levying income tax on an entity if it lacks a permanent establishment or sufficient connection with the jurisdiction. This problem arises since the basis for levying income tax and consumption tax is different. Income tax is levied on the ground of the company having a residence in the jurisdiction while the consumption tax is levied on the ground of occurred transactions in the jurisdiction.[89] Allocation could alternatively be based on the value added tax instead of using the "traditional" formula. If factors like payroll, property and sales are used, the incentives to locate the economic activities will be effected because an income tax based on the apportionment factors of a taxpayer will be economic equivalent to a tax on the factors.[90]

The three-factor formula is associated with many problems, which seem to be difficult to overcome and sharing at the macro level seems to solve many of the problems relating to manipulation of the factors. While reasons of efficiency suggest that a formula based on macro-economic should be adopted the principle of equity demands that the allocation of the tax base should be made according to each jurisdictions share of the profit making

[88] SEC (2001) 1681, p. 414-415.
[89] Björn Westberg, 2002: *Consolidated Corporate Tax Bases for EU-Wide Activities: Evaluation of Four Proposals Presented by the European Commission, in: Special issue on Company Tax Reform in the European Union: Targeted Measures and Comprehensive Approaches*, p.
[90] Walter Hellerstein, Charles E. McLure, 2004, p. 211.

activities. The EU could choose to design a formula, which allocates the income according to both macro- and micro-economic factors.
Sharing at the macro level could result in that an enterprise without a permanent establishment in a country could be liable to pay tax in that jurisdiction. If this could be considered compatible with international law remains to be seen. If this approach would be considered compatible with international law the jurisdiction to tax would be radically changed.

7 Apportionment based on micro level

There exist two possibilities to share at the micro level, formulary apportionment and apportionment based on value added tax within each Member State. Currently the value added is not used as a base of the countries that apply apportionment formulas. In the EU, the value added is a common concept and VAT data is recorded and collected extensively.[91]

7.1 Value added at origin

Under the origin principle, goods and services are taxed where they are produced. Under such a system, exports are taxed and imports are exempted.[92] The advantages with apportionment based on VAT on origin are that:

- market forces instead of being arbitrary would choose the weight assigned to the two factors
- there would be no need to calculate the cost, value, or the user cost of capital
- the approach could be applicable to all industries
- all Member States do already calculate their VAT liability based on a uniform standard [93]
- the capital and labour ratio would not be disturbed[94]

The disadvantages with apportionment based on VAT at origin are that:

- apportionment based on value added at origin is also exposed for transfer pricing, this problem arises when multinational enterprises manipulate the prices of intra-company sales to allocate the value added to low tax jurisdictions[95]
- basing apportionment on value added at origin combines payments to labour and the return to capital in a single factor,[96] therefore, the disadvantage with this approach could be that the labour cost is included but as explained by Hellerstein and McLure there is no reason for including labour cost, as the profit is a return of capital[97]
- in the Member States, the necessary data for VAT purposes is collected but if a group has permanent establishments and branches outside the

[91] SEC (2001) 1681, p. 414.
[92] Walter Hellerstein, Charles E. McLure, 2004, p. 215.
[93] Walter Hellerstein, Charles E. McLure, 2004, p. 214.
[94] Charles E. McLure, 2002, p. 594.
[95] Peter Birch Sörensen, 2004, p. 97.
[96] See Charles E. McLure, 2002, p. 594.

[97] Walter Hellerstein, Charles E. McLure, 2004, p. 214.

EU problems could arise if such information is not routinely collected there[98]

The greatest problem associated with the origin based VAT is that issues concerning transfer prices may re-emerge. If labour cost[99] is included, the transfer pricing problem will be reduced because it will make it difficult for the companies to estimate the effect of a possible manipulation. Under the destination based VAT there do not exist any incentives for companies to manipulate transfer prices but under the origin based VAT the problem with transfer prices remains. One of the main arguments supporting an introduction of formulary apportionment in the European Union is that separate entity accounting with the arm's length principle cannot satisfactorily solve the problems associated with transfer pricing problems. However, as Lodin and Gammie[100] elucidate that simulations show that the value added base for a whole group is between four to seven times larger than the total profit. Accordingly, although transfer pricing can affect the value added, the scale of the manipulation has to be several times larger to have the same effect on profit allocation as it has on profits. If this is, a correct assumption remains to be seen. If this justification presented by Lodin and Gammie is enough is currently unknown. Otherwise the origin based VAT seems to be the most attractive approach for several reasons. The main advantage with this approach is that it produces a result with the consequence that income is taxed where it originates and the contribution made by each Member States would be recognized. Although the value added has not been used an allocation mechanism anywhere else the situation in the European Union is exceptional. Companies are already collecting, recording and reporting their VAT returns. Even though some adjustments will have to be made, the concept is familiar to both the tax authorities and the enterprises. Consequently, no radical changes have to be made, which will ultimately result in that both the Member States and the enterprises will not have to spend resources on implementing a new system for allocation purposes.

7.2 Value added at destination

Under the destination principle, the goods and services are taxed where they are finally consumed. Under the destination principle, imports are included and exports are excluded from the taxation system.[101]

The advantage with this approach is that the problem with transfer pricing will disappear contrary to the origin principle. The disadvantage with this approach is however that in cross-border trades, the merchant is located in one jurisdiction and the VAT is credited to the jurisdiction where the consumption is made and another issue is that often another vendor is

[98] SEC (2001) 1681, p. 414.
[99] See Walter Hellerstein, Charles E. McLure, 2004, p. 215-216.
[100] Sven Olof Lodin, Malcolm Gammie, 2001: *Home State Taxation- Tax Treaty Aspects*, p. 49.
[101] Walter Hellerstein, Charles E. McLure, 2004, p. 216.

responsible for the payment of the tax. This method results in that if a vendor exports all his production he will not be liable to pay tax but the vendor would be forced to record the destination of the sales, which would create compliance and administrative problems. The outcome is that the vendor who remits the tax has not usually earned the profits in question. The problem with imports also arises because VAT is only collected by the jurisdictions where sales are made to purchasers that are not eligible to take credit for tax paid on purchases and that is mostly consumers.[102]

Apportionment based on value added at destination is associated with many difficulties and the approach does not seem to be realistic for the European Union. The immense detriment with this approach is that unlike with property and payroll the location of sales can be difficult to identify. Sometimes the taxpayer may not be aware of the location of the consumer. Then one could argue that vendors that are involved in cross-border trade could be put in a disadvantage compared to vendors that are not involved in cross-border trade because the vendor that is involved in cross-border trade would be forced to monitor the destination of its sale. Great difficulties with the monitoring would also arise because the monitoring would not only be time consuming it would also involve great costs. Manipulation of the attribution of value added will also be possible. A company could for example choose to export all its goods from a high tax jurisdiction to a low tax jurisdiction and pay all its tax in the low tax jurisdiction. How will this kind of manipulation be prevented?

[102] Walter Hellerstein, Charles E. McLure, 2004, p. 216.

8 The least of two evils

An introduction of a common consolidated tax base with the formulary apportionment would solve many of the current problems associated with separate entity accounting with the arm's length principle but the method presents several new aspects. Once a uniform definition of the tax base has been established, an allocation formula has to be designed. The two questions that the EU initially has to ask are what apportionable income is and how the income should be apportioned in the most optimal way.

A harmonised tax system within the European Union would reduce a number of the problems that enterprises operating in the Internal Market are facing. A multilateral adoption of the formulary apportionment would be optimal because economic cooperation is effective and the economic environment would be improved if conflicts were avoided. If the tax rules were the same the Internal Market would be completed. The lack of uniformity in the US practices is a conspicuous problem and the risk of no taxation or double taxation is overwhelming. The Canadian practices on the other hand which are harmonised completely, seem to be a more realistic approach for the EU since it eliminates gaps and overlaps in the tax system.

One issue that has to be addressed is the territorial scope of the application of formulary apportionment because no country can unilaterally impose its taxing system on another country. The Member States will probably have to administer two parallel systems at the same time because a worldwide implementation of the formulary apportionment is implausible. This implies that countries may have to renegotiate and reinterpret their existing bi-and multilateral tax treaties. Stopping at the water's edge seems to be appropriate because the Member States can either choose not to apply the existing tax treaties concluded between them or declare that Community Law is lex superior. The tax treaties concluded with the third countries are based on the OECD Model Treaty and it is unrealistic to expect that all of these could be renegotiated.

The separate entity accounting may be the most accurate, precise measure but it results in higher compliance costs, and it totally fails to recognise the economic interdependence between related entities, which can result in over-taxation. The formulary apportionment recognises the economic interdependence between related entities but it does only provide a rough approximation of where income originates. The rough approximation could result in arbitrary results and it may not be accepted in the EU as pointed out earlier because the tax differences in the Member States are greater than in the US states. Another great issue with the formulary apportionment is that it assumes that each unit of a factor earn the same return.

When designing a formula, there is a trade-off between accuracy and simplicity. The formula must show where income originates and the formula

must be simple to administer at the same time. There may not exist any "right" formula but the US experience shows that uniformity is very important otherwise the EU will be back at square one and the only way to avoid that is to have a uniform system like Canada.

An allocation formula must be flexible and when it presents an unreasonable result, a relief mechanism should be applicable. Anti-abuse provisions should also be introduced because the introduction of formulary apportionment creates new incentives for enterprises to reduce their tax liability. Enterprises can for example, shift factors from high tax countries to low tax countries and alter the values of its factors.

Currently the apportionment based on value added at origin seems to be the most suitable approach for the EU. The approach does identify the origin of an income successfully and another advantage is that the same method would be applied to all industries. Although the value added tax has not been used as an allocation approach anywhere, the situation in the EU is exceptionable because all Member States do already calculate their VAT liability based on a uniform system.

Higher economic integration requires higher coordination in the field of taxation. Currently, the impact of the formulary apportionment on the tax base of the Member States is unclear. The EU has to do research on how the distribution of the tax base between Member States would differ from the current distribution and how the competitiveness of the Member States would be affected and at the moment a harmonisation seems to be very unrealistic.

"However, it would be unrealistic to expect Member States to enter into negotiations on a new method without a comparison between the old (separate accounting) and the new (formula apportionment)."
(COM (2003) 726 p. 23.)

Supplement A

Company Income Tax Rates in the Member States

Germany	38
Italy	37
Spain	35
France	35
Belgium	34
Austria	34
The Netherlands	30
Denmark	30
The United Kingdom	30
Finland	29
Sweden	28
The Czech Republic	28
Portugal	27,5
Greece	25
Luxemburg	25
Malta	25
Slovenia	25
Poland	19
Lithuania	19
Slovakia	19
Hungary	16
Latvia	15
Ireland	12,5
Cyprus	12
Estonia	0[103]

[103] www.euroinfo.se

Bibliography

Material from the OECD

OECD Model Convention for the Avoidance of Double Taxation on Income and Capital 2003.

Material from the European Union

COM (2003) 726 final.

COM (1994) 533 final.

The Commission's Study, note 2, Part IV.C:14.1.

SEC (2001) 1681.

European Parliament Fact Sheets 1.2.2 Subsidiarity 2000-10-16.

Literature

Lodin, S. O. and Gammie, M. (2001). "Home State Taxation- Tax Treaty Aspects", IBFD Publications BV, Netherlands

Articles

Hellerstein, W. and C. E. McLure Jr. (2004). "The European Commission's Report on Company Income Taxation: What EU can learn from the Experience of the US States", *International Tax and Public Finance* 11, 199-220.

Jinyan, L. (2002). "Global Profit Split: An Evolutionary Approach to International Income Allocation", *Canadian Tax Journal*, 823-883.

McLure Jr., C. E. (2002). "Replacing Separate Entity Accounting and the Arm's Length Principle with Formulary Apportionment", *Bulletin for International Fiscal Documentation* 56, 586-599.

Mintz, J. and J. M. Weiner. (2003). "Exploring Formula Allocation for the European Union", *International Tax and Public Finance* 10, 695-711.

Russo, A. (2005). "Formulary Apportionment for Europe: An Analysis and A Proposal", *Intertax 1*, 2-31.

Schön, W. (2002). "Tax Competition in Europe - the legal perspective", *EC Tax Review 2*, 90-105.

Schön, W. (2002). "The European Commission's Report on Company Taxation: A Magic Formula for European Taxation", *European Taxation*, 276-286.

Sörensen, P. B. (2004). "Company Tax Reform in the European Union", *International Tax and Public Finance* 11, 91-115.

Weiner, J. M. (1999). "Using the Experience in the US States to Evaluate Issues in Implementing Formula Apportionment at the International Level", *US Department of the Treasury OTA Paper 83*, 1-54.

Weiner, J. M. (2002a). "Would Introducing Formula Apportionment in the European Union Be a Dream Come True or the EU's Worst Nightmare?", *info Studien Zeitschrift für empirische Wirtschaftsforschung*, Jg. 48, Nr. 4, 519-532.

Weiner, J. M. (2002b). "Formulary Apportionment and the Future of Company Taxation in the European Union", *CE Sifo Forum*, 1/2002, 15-18.

Weiner, J. M. (2002c). "Formula Apportionment in the EU: A Dream come true or the EU's worst Nightmare", *CE Sifo Working Paper No. 667 (1)*, 2-14.

Westberg, B. (2002), "Consolidated Corporate Tax Bases for EU-Wide Activities: Evaluation of Four Proposals Presented by the European Commission, in: Special issue on Company Tax Reform in the European Union: Targeted Measures and Comprehensive Approaches", *European Taxation* 42 (8), 322–330.

Material from the Internet

www.euroinfo.se

Chetcuti, J. P. (2001)."Corporate Taxation in the EC: The Process of Corporate Tax Harmonisation in the EC"