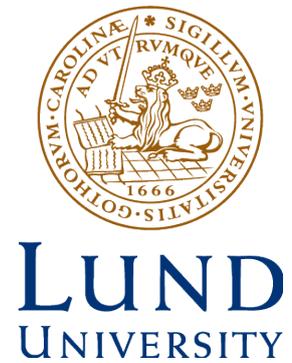


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MASTER THESIS

**TO WHAT EXTENT ARE TAX INCENTIVES FOR RESEARCH & DEVELOPMENT
COMPATIBLE WITH EUROPEAN UNION LAW?**

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1 INTRODUCTION

The European Union is striving for a market that is preferably highly focused on research and development (R&D). In 2002 the Member States agreed on boosting R&D up to 3 % of the GDP by 2010.¹ To achieve this goal there is a broad range of possible tools, inter alia State aid in the form of direct funding or indirect tax incentives for research and development. In late 2006 the European Commission noticed the need to expand the State aid provisions on tax incentives for research and development to give Member States more possibilities to achieve the self-set objective by 2010.² However Germany is one of the few Member States of the European Union that does not provide for tax incentives to promote research and development and rather bases its support on direct funding. For this reason the German industry represented by the *BDI* (Federation of the German Industry) comes out in favour of indirect R&D support in form of tax incentives.³ Additionally scholars are supporting the introduction of indirect support for research and development as well.⁴

Whereas scholars are discussing R&D tax incentives in an economical context there is no contribution to the discussion up to which limit such tax incentives are in line with European Union Law, although there is an inherent risk for legislators as well as practitioners to run into pitfalls especially in the form of the State aid provisions in direct tax matters⁵. Accordingly, Member States have to restore the conditions that were present before the incentive was introduced if it is found to be prohibited State aid.⁶ The restoration of the competition conditions contains the repayment of the granted aid by the benefited undertakings.⁷ If the tax incentive is found to run counter the Fundamental Freedoms Member States could face the repayment of the unduly levied tax⁸ or, alternatively, compensation for damages. Thus the risk of unlawfully introduced R&D tax incentives is intrinsic for both Member States as well as undertakings.

Therefore this paper tries to contribute to this discussion by evaluating to what extent tax incentives for research and development are compatible with European Union Law. Furthermore it contains the questions of which legal framework to apply for tax incentives especially in the case of R&D and in how far it deviates from the basic legal framework. This in turn raises the issue whether the legal framework targeted to promote R&D within the Community leaves a broader scope for the legislator especially in the field of the State aid provision.

To answer the aforementioned questions the applied method is two-fold. In a first step European Union primary law is outlined with its connected secondary law. Doing so, it can be

¹ *Barcelona European Council 15-16 March 2002, Presidency conclusions* (SN 100/1/02 REV 1, 2002).

² Community Framework For State Aid for Research and Development and Innovation [2006] OJ C323/1 4.

³ BDI, *Positionspapier - Steuerliche Forschungsförderung unverzüglich einführen!* (2009).

⁴ Christoph Spengel and Christina Elschner, 'Steuerliche Anreize für Forschung und Entwicklung - Empirische Befunde, internationaler Vergleich und Reformansätze für Deutschland' [2010] *Zeitschrift für Betriebswirtschaft (ZfB)* 1.

⁵ Alexander Linn, 'Practical Implications of Fiscal Aid for Taxpayers from a German Perspective' (2012) 40 *Intertax*, 140.

⁶ Cécile Brokelind, 'Risk Capital Incentives, a Risky Business?' [2012] *European Taxation* 11.

⁷ Brokelind 2012 12.

⁸ Joined Cases C-397/98 and C-410/98 *Metallgesellschaft* [2001] ECR I-1727 para. 84.

analysed which legal provisions have to be taken into account, when introducing tax incentives to promote R&D. Furthermore relevant case law and Commission's decisions are outlined that shall be taken into account.

The revealed legal sources shaping tax incentives are then categorized into provisions that are generally applicable to tax incentives and provisions that are specifically applicable to tax incentives promoting R&D. Based on this step it can be found in how far the provisions specifically addressed to promote R&D are deviating from the generally applicable framework.

In a next step each provision is assessed on its level of risk to run counter European Union Law. The assessment is based on a three-step benchmark. Firstly the legal certainty and the clarity of the provision are taken into account. Secondly, the scope of the provision is taken into account and lastly the nature of a R&D tax incentive itself. All three factors are determining the risk to either successfully or unlawfully introduce a R&D tax incentive. The assessment is based on the actual wording of the provisions and backed up by doctrine. If the provision is connected to a risk, the analysis tries to determine up to which point a R&D tax incentive is most likely to be in line with European Union Law. This is based on the Commission's decisions outlined beforehand.

Based on the results, several hypotheses are worked out in order to analyse how the adjustment of the State aid framework regarding R&D affects the Commission's decisions in reality and thus how it affects the options for Member States to pass legislation as riskless as possible. Hence the analysis is empirically expanded in the second step by screening the Commission's decisions on State aid cases since 2000.

As the thesis connects both broad economical as well as legal themes that are inevitably entangled, it needs to draw a line to achieve a contentwise balance that serves the research question at hand. Therefore chapter 2 only gives a fairly short introduction to research and development in general, its macroeconomic effects as well as market failure. The chapter aims to give the reader a general idea of the correlation between the legal and the economical side of tax incentives on research and development. However, there is a vast body of literature based on both microeconomic model-theoretical as well as macroeconomic econometric approaches that deal with growth effects, the reduction of market failure and spill-overs in depth.⁹ Additionally the thesis draws a picture of the extensive legal framework the European Union is providing for. In the field of the State aid provision, especially as regards *material selectivity* not every detail is elaborated. It rather draws a short picture of the development and the actual state of affairs, which suffices to approach the research question at hand. However it

⁹ R. Griffith, S. Redding and J. Van Reenen, 'Mapping the two faces of R&D: Productivity growth in a panel of OECD industries' (2004) 86 *Review of Economics and Statistics* 883 Charles I. Jones, 'R&D-Based Models of Economic Growth' (1995) 103 *Journal of Political Economy* 759 Charles I. Jones and John C. Williams, 'Measuring the Social Return to R&D' (1998) 113 *Quarterly Journal of Economics* 1119 Paul S. Segerstrom, 'The Long-Run Growth Effects of R&D Subsidies' (2000) 5 *Journal of Economic Growth* 277.

should be kept in mind, that authors like *Raymond Luja*, *Conor Quigley* or *Pierpaolo Rossi-Maccanico* devoted an extensive body of literature to the matter of selectivity and State aid.¹⁰

As regards the discourse of the Fundamental Freedoms the focus of the selected cases is on the established case law regarding the abandoning of territorial restrictions.

Furthermore the empirical analysis is limited to a descriptive univariate approach due to the available data. Besides it is the legal analysis that certainly carries more weight in this thesis.

¹⁰ Raymond J.C. Luja, '(Re)shaping Fiscal State Aid: Selected Recent Cases and Their Impact' (2012) 40 Internax 120 Pierpaolo Rossi-Maccanico, 'The Notion of Indirect Selectivity in Fiscal Aids: A Reasoned Review of the Community Practice' [2009] European State Aid Law Quarterly 161

2 BACKGROUND

Research and development is nowadays considered to be essential for the overall welfare of society as it drives economic development and leads to new products and increased productivity. The screening of academic but also non-academic literature reveals the term *research and development* being used frequently as well as casually at the same time and thus matching typical criteria of a contemporary vogue expression or *buzzword*. Nevertheless the OECD defined the term already in 1963 in its so-called *Frascati Manual*, which addresses standard practices for surveys on R&D. Accordingly research and development *comprise[s] creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications* and includes basic research, applied research and experimental development.¹¹

Innovation always has been subject to research across several disciplines and is therefore also a classical research area in the field of welfare economics. As far back as 1776, Adam Smith already observed when *[e]ach individual becomes more expert in his own peculiar branch, more work is done upon the whole, and the quantity of science is considerably increased by it*¹². In the 1960's economists like *Zvi Griliches, Edwin Mansfield* or *Dale Jorgenson* started to devote research to economic growth and its determining factors, e.g. R&D, resulting in a higher attention of the U.S. government to promote R&D by changes in tax treatment.¹³ Today it is commonly recognized that R&D is an important source of economic growth and contributes to overall welfare.¹⁴

Therefore the Member States set the goal to spend 3 % of the overall EU27 GDP on R&D by 2010. By setting this goal the EU is in good company across the world as worldwide expenditure on R&D is increasing consistently.¹⁵ In 2010 however the EU27's R&D expenditure summed up to 1.91 % of the GDP whereas the OECD average spending was 2.40 %.¹⁶ The expenditure across Member States is highly heterogeneous. Whereas Finland represents the high end of the EU27 with an expenditure of 3.87 %, Greece is floundering with 0.60 % expenditure of the GDP.¹⁷

Respectively Member States have to face several peculiarities, when tackling R&D in general. Knowledge in itself is considered to be a public good among economists as it is a good that can be consumed by an individual without reducing the level of possible consumption for other individuals.¹⁸ These types of goods may lead to market failure in the form of lowering

¹¹ OECD, *Frascati Manual - Proposed Standard Practice for Surveys on Research and Experimental Development*, vol 5 (OECD ed, OECD 2002) 30.

¹² Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) 1.10.

¹³ Rolf Piekarz, 'R&D and Productivity Growth: Policy Studies and Issues' (1983) 73 *American Economic Review* 210, 210.

¹⁴ Jones, 'R&D-Based Models of Economic Growth' 1995 Jones, 'R&D-Based Models of Economic Growth' 1995 Nancy L. Stokey, 'R&D and Economic Growth' (1995) 62 *Review of Economic Studies* 469.

¹⁵ OECD, *Main Science and Technology Indicators, Volume 2011 Issue 2* (OECD Publishing, 2011) 21.

¹⁶ OECD, *Main Science and Technology Indicators, Volume 2011 Issue 2* 2011 25.

¹⁷ OECD, *Main Science and Technology Indicators, Volume 2011 Issue 2* 2011 25.

¹⁸ Paul A. Samuelson, 'The Pure Theory of Public Expenditure' (1954) 36 *The Review of Economics and Statistics* 387, 387.

the incentive of companies to produce knowledge if the overall welfare for society caused by spill-overs is significantly higher than their accrued return on the initial investment. Economists refer to this problem as the *Free Rider Problem*¹⁹, which, from a state's perspective, can be challenged in two ways to foster private activities in research and development.²⁰ On the one hand states created legal constructs such as patents and copyrights to protect the source of income. On the other hand states are giving financial incentives in the form of either direct subsidies or indirect fiscal benefits like tax incentives. Both forms of market intervention are aiming at the same goal, namely the reduction of market failure by compensating the potential loss of returns created by the *Free Rider Problem*. However they can be implemented differently. Whereas patents and copyrights have an *ex post* compensational effect, tax incentives can be deployed *ex ante* to reduce initial investment costs, but also *ex post* to compensate for losses arising from market failure.

Typical tax incentive schemes are outlined in the following. Tax incentives in general relieve an eligible tax subject temporarily or permanently, partly or fully from its tax burden arising from a particular tax object. The eligibility to enjoy the tax incentive is based on specific criteria to delimit the incentive from the general tax scheme. Therefore it only favours a specific group of tax subjects. This selective component of a tax incentive is likely to distort competition within a market resulting in conflicting interests between the promotion of certain economical activities and a neutral tax system. The Commission however gave priority to the promotion of R&D by broadening the State aid provisions that are normally seeking for a neutral competition between Member States. Thus the overall expected welfare gains arising from the promotion of R&D must be higher as the expected welfare losses caused by distorted competition within the internal market in order to result in an overall welfare gain. Several Member States therefore adopted tax incentives in their legislation to foster R&D. These provisions differ in their details, but have common features to fulfil the aforementioned definition. For a better comprehension a typical R&D project is outlined followed by an introduction to typical tax incentive schemes addressed to promote research and development.

A typical R&D project is normally structured in two stages, namely the development and exploitation stage.²¹ Whereas in the development stage high initial investments for a considerable period of time may occur, these investments can only be recovered in the exploitation stage after the product (tangible as well as intangible) is fully developed. A typical example would be the elaboration of a pharmaceutical that may take years to develop with high initial investments, but may turn into a cash cow with high inbound cash flows after a successful development.

Thus tax incentives to foster R&D can be targeted at the development stage and/or the exploitation stage²² resulting in a different impact on investment behaviour. Both types of incen-

¹⁹ Theodore Groves and John Ledyard, 'Optimal Allocation of Public Goods: A Solution to the "Free Rider" Problem' (1977) 45 *Econometrica* 783, 783.

²⁰ Tor Jakob Klette, Jarle Møen and Zvi Griliches, 'Do subsidies to commercial R&D reduce market failures? Microeconomic evaluation studies' (2000) 29 *Research Policy* 471..

²¹ Jens Wittendorf, 'Taxation of Intangibles in the Nordic Countries' [2011] *European Taxation* 348.

²² Wittendorf 2011 349.

tives have in common that the overall net present value of the project is increased in the end. Tax incentives that are targeted at the development stage of a project have in common that the initial costs for the project are effectively reduced. Thus the discounted outbound cash flows are decreased which in turn increases the net present value of the project. On the other hand tax incentives aiming at the exploitation phase are increasing the discounted inbound cash flows. In the end R&D tax incentives are placing R&D projects into a better situation compared to non R&D projects with a comparable cash flow structure.

Tax incentives for research and development are entailing tax credits, deductions for R&D-related expenses and reduced tax rates to R&D-related income.²³

A reduced tax rate to R&D-related income is effectively increasing the discounted inbound cash flows of R&D projects and is targeted at the exploitation phase of a project. Reduced R&D-related tax rates can be implemented for instance as a low tax rate on royalty income, low withholding taxes on outbound royalties or a low taxation on gains arising from the selling of intellectual property.²⁴

Tax credits can both be targeted at the development stage by giving tax refunds to the eligible loss-making company or at the exploitation phase by reducing the amount of tax due. Normally the amount of the credit is directly connected to the expenses relating to the R&D project²⁵ and is either determined in an incremental or volume-based way²⁶. The amount of an incremental tax credit is assessed on the differential of an average level of expenditures caused by ordinary business activities in the last years and the increased level of expenditures caused by an extraordinary R&D project. For instance a company undertakes an extraordinary project in R&D and therefore its expenses are increasing by 40% compared to the average expenses of the last two years, the amount of the credit is determined on the differential of 40%. Thus the motivation for companies to carry out extraordinary activities in R&D is effectively increased. Projects are more likely to be undertaken that would not have been carried out without the additional tax credit. On the other hand a volume-based tax credit is granted to all expenses that are qualifying for R&D purposes during a fiscal year and therefore does not necessarily gives an incentive for extraordinary projects.²⁷

R&D tax incentives in the form of tax deductions (allowances) are designed to lower the initial investment costs in the development stage of the project. An immediate deduction of the R&D-related expense or a faster depreciation of a R&D-related asset compared to assets used for ordinary business activities can be used to give an incentive effect. In addition tax deductions can also be designed to grant a deduction for tax purposes that exceeds the sum of 100% of the respective expense called *super deductions*.²⁸ Therefore the tax base is effectively reduced.

²³ Aleksandra Bal and René Offermanns, 'R&D Tax Incentives in Europe' (2012) 52 *European Taxation* 167, 168.

²⁴ Wim Eynatten, 'European R&D and IP Tax Regimes: A Comparative Study' (2008) 36 *Intertax* 502, 503.

²⁵ Eynatten 2008 503.

²⁶ Bal and Offermanns 2012 168.

²⁷ Bal and Offermanns 2012 168.

²⁸ Eynatten 2008 518.

As shown the design of tax incentives for research and development is highly influenced by the specific nature of R&D projects. Nonetheless the design of tax incentives within the European Union has to be in line with European Union Law, which will be outlined in a next step.

3 THE EUROPEAN UNION'S LEGAL FRAMEWORK

The legal framework of the European Union leaves the Member States with the sovereignty to pass legislation in the field of direct taxation. This results in a situation where there is almost no harmonization of direct tax law among the Member States of the EU in contrast to the field of indirect taxation. However Member States have to comply with the superior EU legal framework when legislating tax law, but also within jurisdiction. The Court of Justice already started to develop the concept of supremacy in the early days of the EEC in the case *Falminio Costa v. ENEL*.²⁹ Besides the well-established case law, the TFEU obliges Member States to implement legally binding Union Acts such as regulations. In addition, the principle of effectiveness binds Member States to apply European Union Law in national courts.³⁰ Thus Member States cannot adopt measures that are prohibited by the TFEU and its two main legal pillars: the State aid provisions and the Fundamental Freedoms.

3.1 STATE AID PROVISIONS

The establishment of an internal market, which allocates resources efficiently and reduces cross-border transactions costs, is one of the aims the European Union is striving for.³¹ An optimal allocation of resources and thus a functioning market is, as economic theory implies, pushed forward by competition between economic operators. As Member States are sovereign, they do not necessarily act in concert to strive for an internal market. By giving selective advantages to certain economic operators or economic sectors they may try to strengthen their own domestic economy, which is a typical problem of moral hazard as the State changes its behaviour ex post. Thus European competition law aims at ensuring the European Union's common interest of a functioning internal market by preventing distortion in competition between undertakings,³² which remains as one of the major goals of the European Union³³. More specifically the State aid provision according to Art. 107 (1) TFEU is aiming to prevent Member States from granting either direct or indirect aid on a selective basis.³⁴ Not only tax measures fall within the scope of Art. 107 TFEU, but all public measures even if the EU lacks any competence in it (like direct taxation) and eventually has a very broad material scope.³⁵ What sounds trivial in theory may turn out genuinely complicated in practice, as there has a distinction to be made between a general tax measure that clearly falls within the

²⁹ Case C-6/64 *Flaminio Costa v ENEL* [1964] ECR 585.

³⁰ Takis Tridimas, *The General Principles of EU Law* (2 edn, Oxford EC Law Library 2006) 418.

³¹ Art. 3 (3) TEU.

³² Brenda Sufrin Alison Jones, *EC Competition Law: Text, Cases, and Materials* (3 edn, Oxford University Press 2007).

³³ Wolfgang Schön, 'Taxation and State Aid Law in the European Union' (1999) 36 *Common Market Law Review* 911, 911.

³⁴ Marie-Ann Mamut, *The State Aid Provisions of the TFEU in Tax Matters* (Michael Lang ed, Introduction to European Tax Law on Direct Taxation edn, 2008) 267.

³⁵ Phedon Nicolaidis, 'Fiscal State Aid in the EU: The Limits of Tax Autonomy' (2004) 27 *World Competition* 365, 367.

sovereignty of the Member State and a selective tax measure that may fall within the scope of Article 107 (1) TFEU.³⁶

3.1.1 ARTICLE 107 (1) TFEU

A public measure has to fulfil all conditions that are laid down in Art. 107 (1) TFEU to be classified as State aid.³⁷ Accordingly the tax incentive firstly has to confer an advantage on its recipient, secondly this advantage is granted from state resources and the measure has to have a distortional effect on competition and trade between Member States.³⁸ Speaking of tax incentives, the conferred advantage can be of such a nature that it reduces the tax subject's tax base, the amount of tax due or alternatively a deferment of the tax debt.³⁹ This criterion goes hand in hand with the necessity of a granted state resource in order to be able to determine a certain measure as prohibited State aid, because a loss of tax revenue is comparable to the consumption of state resources.⁴⁰

To determine whether the public measure distorts competition and is affecting trade between Member States the Commission and the CoJ adopted a broad scope.⁴¹ Even a potential distortion of competition falls within the scope of Art. 107 (1) TFEU, which puts an economic operator into a better situation than a competing company in the relevant product market.⁴² Looking at the affection of intra-community trade the scope of Art. 107 (1) TFEU may even expand to purely domestic programmes as they can have an influence on trade.⁴³

Albeit, empowered by Council Regulation (EC) No 994/1998⁴⁴ the Commission adopted a Regulation⁴⁵ (*de minimis*) in 2006 defining aid below a certain financial threshold as compatible with Art. 107 (1) TFEU. The amount depends on the economic sector the aid is granted for. The overall assumption that is inherent in the *de minimis* Regulation is no significant distortion of competition may occur when the granted aid does not exceed a certain value. According to Art. 2 (2)⁴⁶ the granted aid to one economic operator must not exceed EUR 200,000 over a period of three fiscal years.

In addition, and not mentioned yet, the measure to be assessed has to fulfil the criterion of selectivity, which is mostly the core issue, when evaluating a public measure in the light of

³⁶ Schön 1999 912.

³⁷ Nicolaides 2004.

³⁸ Commission notice on the application of the State aid rules to measures relating to direct business taxation [1998] OJ C384/3 4.

³⁹ Commission notice on the application of the State aid rules para. 9.

⁴⁰ Commission notice on the application of the State aid rules para. 10.

⁴¹ Mamut para 322.

⁴² Mamut para. 314 f.

⁴³ Mamut para. 319.

⁴⁴ Council Regulation (EC) No 994/1998 of 7 May 1998 on the application of Articles 92 and 93 of the Treaty establishing the European Community to certain categories of horizontal State aid [1998] OJ L142/1.

⁴⁵ Commission Regulation (EC) No 1998/2006 of 15 December 2006 on the application of Article 87 and 88 of the Treaty to *de minimis* aid [2006] OJ L379/5.

⁴⁶ Commission Regulation (EC) No 1998/2006.

Art. 107 (1) TFEU⁴⁷. Accordingly, aid is incompatible with the internal market if it is only granted *to certain undertakings or the production of certain goods*. Whereas this criterion may be easier to determine in a situation where direct and overt financial subsidy is given to a specific undertaking, it may turn out to be more sophisticated to determine whether a specific tax scheme favours only a certain economic sector or certain undertakings. Therefore in its 1998 Notice the Commission shed some light on the selectivity of tax measures.⁴⁸ Provided that tax measures are available to any undertaking without any distinction on an equal access basis they are generally compatible with the internal market. The fact that certain companies or sectors benefit more than others does not necessarily mean that the respective measure is incompatible with the State aid provision.⁴⁹ In spite of this it still does not qualify when a specific tax measure (for instance a R&D tax incentive) only favours certain undertakings and is therefore incompatible with the internal market.

In essence the Commission follows an approach that compares the actual public measure in question to the common tax system to determine whether only certain economic operators are able to benefit from this measure. The literature distinguishes between regional, sectoral, material and de facto selectivity. In the following the focus is on sectoral and material selectivity.

Whereas sectoral selectivity can be explained shortly, it is not the case for material selectivity of tax incentives aiming to promote R&D. Sectoral selectivity, for example, aims at promoting R&D, but only promotes a specific sector of the economy (like the pharmaceutical sector) due to specific requirements only this sector can meet.⁵⁰

Material selectivity on the other hand follows a discrimination test by assessing whether the measure is advantageous in relation to other undertakings that are in a comparable factual and legal situation.⁵¹ This *selectivity test* was subject to some important developments since 1998 and appears today as a three-step test.⁵² The first step is to determine the policy objective pursued by the measure at hand in order to be able to see which undertakings are in fact in a legal and factual comparable situation.⁵³ The Commission and the CoJ follow a very broad scope when identifying undertakings in a comparable situation. Even if the respective measure takes into account several sectors of the economy, other undertakings could still be in a comparable situation and excluded from the scheme.⁵⁴

⁴⁷ Raymond H.C. Luja, 'Group Taxation, Sectoral Tax Benefits and De Facto Selectivity in State Aid Review' [2009] European State Aid Law Quarterly 473, 473.

⁴⁸ Commission notice on the application of the State aid rules.

⁴⁹ Commission notice on the application of the State aid rules para. 14.

⁵⁰ Martlomiej Kurcz and Dimitri Vallindas, 'Can General Measures Be... Selective? Some Thoughts on the Interpretation of a State Aid Definition' (2008) 45 Common Market Law Review 159, 176.

⁵¹ Hugo López Lopéz, 'General Thought on Selectivity and Consequences of a Broad Concept of State Aid in Tax Matters' [2010] European State Aid Law Quarterly 807, 812.

⁵² Conor Quigley, 'Direct Taxation and State Aid: Recent Developments Concerning the Notion of Selectivity' (1012) 40 Internax 112, 112.

⁵³ Quigley 2012 115.

⁵⁴ Andreas Bartosch, 'Is there a need for a Rule of Reason in European State Aid Law? Or How to Arrive at a Coherent Concept of Material Selectivity?' (2010) 47 Common Market Law Review 729, 732.

Thereby an appropriate reference framework is established to which the respective tax measure can be compared to. By comparing the tax measure at hand to the reference framework it can be found whether the public measure is a derogation, exclusion or differentiation from the reference framework and thus can be considered as selective.⁵⁵

Even though the public measure is determined as being selective, the derogation from the reference framework can still be justified by the nature or general scheme of the tax system and thus not being considered as prohibited State aid. The Commission and CoJ however follow this concept in a very narrow scope of application. As a rule, tax systems follow certain concepts that are inherent in the system such as equality or neutrality to describe the true financial situation of the taxpayer.⁵⁶ Public measures that are striving for these concepts (for example a progressive tax rate) can be justified in the light of the foregoing and do not discriminate between undertakings.⁵⁷

Given these points the concept of material selectivity is a very broad and complex legal construct to assess whether a public measure is only favouring certain undertakings and is highly discussed in literature. Furthermore it is under constant development by the CoJ.

This being so for the research question at hand it might be even more suitable to approach the selectivity test negatively by pointing out rulings in which the Commission adopted a positive decision on a public measure regarding the question whether the measure is general or not.

As already mentioned the scope of application of material selectivity is fairly broad, which results in rather few positive cases ruled by the Commission and CoJ. In the following three cases concerning R&D tax incentives are presented in which the selectivity test failed and the respective measure was considered to be general.

In 2006 Belgium informed the Commission about its plan to adopt three tax incentives to promote R&D.⁵⁸ The measures at hand were designed to partly exempt undertakings from withholding taxes on remunerations paid to researchers engaged in research projects that hold a master's degree in science, a doctorate in applied science or an equivalent degree. Thus the tax incentive effectively reduced the costs of staff. The exemption varied from 50% to 25% of the withholding tax due depending on whether or not the respective beneficiary undertakes research in cooperation with a university or meets certain criteria for being regarded as a "*Young Innovative Company*". A "*Young Innovative Company*" was defined as an undertaking with less than 100 employees, an annual turnover (excl. VAT) less than EUR 7.3 million and assets valued less than EUR 3.65 million. Furthermore the company had to be genuinely (not by restructuring, merger etc.) established within the last 10 years from the date of exemption of withholding tax. The Commission considered employers and not employees as the true beneficiaries as the measure allows companies to retain a certain amount of withholding tax due that should have been remitted to the Belgian State. As regards the exemption in fa-

⁵⁵ Quigley 2012 112.

⁵⁶ López 2010 817.

⁵⁷ López 2010 817.

⁵⁸ Commission Decision of 06 July 2006, State Aid No 649/2005 - Mesures de dispense partielle de précompte professionnel en faveur de la R&D.

vous of “*Young Innovative Companies*” the Commission found the measure being selective as it only applies to companies meeting the aforementioned criteria. On the other hand the Commission decided that the remaining two tax incentives are general measures. Accordingly the measure applies to any type of business, operating in all sectors of activity, without geographic specification and without any restrictions of the type of research or location within the EEA. Furthermore the Commission excluded de facto selectivity, because the Belgian authorities do not have discretion in deciding whether the tax incentive applies or not and the exemption applies automatically once the conditions are verified. Most importantly the requirement of staff holding a certain diploma was not seen as being selective as it does not exclude any type of business, because the Belgian authorities showed that the distribution of researchers meeting the diploma requirement across all economic sectors meets the distribution of research personnel in general in Belgian companies. Thus the measure does not aim to favour a specific sector and is not de facto selective.

By decision of 13 February 2008⁵⁹ the Commission found the Spanish measure of a 50% reduction on revenue from the transfer of patents, designs and models, plans, secret formulas or processes as compatible with the State aid provision. To be eligible for the tax allowance the respective undertaking has to have generated the asset to be transferred itself and the transferee uses the transferred right to carry out economic activities. Furthermore the receiver of the right does not live in a tax-free country. The Commission found that the measure applied is a privileged treatment of income generated by the transfer of an intangible asset and therefore derogates from the ordinary corporate taxation rules, but as it is open to all economic operators across all sectors the Commission sees the measure as being justified by the logic of the Spanish tax system. The fact that certain undertakings benefit more from this measure represents economic reality and not selectivity de facto.

In 2007 Italy notified the Commission about the possible introduction of a R&D tax incentive.⁶⁰ Italy opted for a tax credit rather a tax deduction to make also young companies benefit from the incentive that are not profitable yet. Undertakings, no matter of which size and sector, are entitled to a 10% tax credit for certain R&D expenditures that are capped at EUR 15 million. Expenditures related to contracts with non-profit organisations established in the whole EEA are entitled to a 15% tax credit. In order to benefit from the tax credit the undertaking is only allowed for special expenses such as personnel costs or costs of instruments and equipment to the extent used for the research project. The Commission considered the tax credit not being State aid as it does not apply selectively, but generally to all enterprises, regardless of their size, location and sector. Also the location of the research activities is not restricted to Italy and expenses are eligible as long as they are incurring within the EEA.

As the outlined cases show the Commission stresses that the public measure is open to all operators across all sectors. Furthermore it is important that carried out research is not limited to undertakings within the Member State, but the whole EEA. Certain criteria that might look discriminatory at first (such as the diploma requirement) can be general as long as proof is

⁵⁹ Commission Decision of 13 February 2008, State Aid No 480/2007 - The Reduction of Tax From Intangible Assets

⁶⁰ Commission Decision of 11 December 2007, State Aid No 507/2007 - R&D Tax credit.

given that it does not favour a specific sector or undertaking and applies proportional to every sector of the economy.

3.1.2 ARTICLE 107 (3) TFEU

Even if the public measure is found being prohibited State aid, it can still be eligible for the exemption provided under Art. 107 (3) TFEU (*lex specialis*).

Art. 107 (3) (c) TFEU gives the possibility *that aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest* may be considered compatible with the internal market.

Enabled by the Council Regulation (EC) No 994/98⁶¹ the Commission adopted a Regulation in 2008 (GBER)⁶² laying down detailed criteria when an aid scheme falls under the scope of Art. 107 (3) TFEU and thus can be considered compatible with the internal market. Art. 1 (1) (g) GBER specifically addresses *aid for research, development and innovation* within the scope of the Regulation, whereas *aid* is defined as public measures falling under Art. 107 (1) TFEU. Therefore the aid scheme firstly has to be considered as State aid, before the exemption under Art. 107 (3) can be assessed.

To benefit from the exemption under Art. 107 (3) TFEU the R&D scheme has to fulfil the following general criteria every other aid scheme has to fulfil as well. Firstly the aid has to be transparent under Art. 5 GBER, which in case of fiscal measures means, that the measure is financially capped in order not to exceed the applicable threshold (in the following). Secondly the aid scheme also has to have an incentive effect according to Art. 8 (1) GBER.

When it comes to R&D schemes specifically the following requirements have to be met as well. Article 31 GBER requires the aided part of the R&D project to be fundamental research, industrial research or experimental development. All three definitions have in common that they require the striving for new knowledge. However fundamental research does not contain an underlying commercial use of this knowledge at first place whereas industrial and experimental research include the possibility of using the new knowledge to develop commercially useful products in the end. This fundamental difference is very important when considering the next requirement put forward in Art. 31 (3) GBER, namely the aid intensity.

The aid intensity, or in other words the amount of financial support given by the State, is by definition connected to the expenditure brought up for the R&D project by the undertaking.

This shows that the design of the tax incentive by default has to be connected to the expenditure brought up by the company in order to fall in the scope of Art. 107 (3) TFEU. However the eligible aid intensity is connected to the type of research carried out and must not exceed 100 % of the eligible costs for fundamental research, 50 % of the eligible costs for industrial

⁶¹ Council Regulation (EC) No 994/1998 Art. 1 para. 1 (a) (ii).

⁶² Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty [2008] OJ L 214/3.

research and 25 % of the eligible costs for experimental development. This reflects a clear prioritisation by the Commission.

Eligible expenditures that can be connected to the aid scheme are personnel costs for researchers, technicians etc., costs of instruments and equipment, costs for buildings and land, cost of contractual research, additional overheads and other operating costs as long as they are incurring directly as a result of the research project.

In addition the respective R&D aid scheme has to comply with the Community Framework for State Aid for Research and Development and Innovation⁶³ (R&D Framework). Whereas the GBER limits the scope of Art. 107 (3) TFEU to the three aforementioned abstract types of research, under the scope of the R&D Framework aid for the following fields of practical application may be compatible with the internal market if the outlined requirements are met.

- Aid for technical feasibility studies
- Aid to SMEs for the costs associated with patents and other property rights
- Aid for young innovative enterprises
- Aid for process and organisational innovation in services
- Aid for innovation advisory services
- Aid for the loan of highly qualified personnel
- Aid for innovation clusters

In the following two cases on R&D tax incentives are outlined that were assessed under the scope of Art. 107 (3) TFEU.

In 2008 the Commission assessed the possible modification of an already introduced R&D tax credit by the UK authorities.⁶⁴ The R&D tax credit was introduced to promote R&D for SMEs by giving the possibility to deduct up to 150 % of the qualifying R&D expenditure or, if SMEs are loss-making, to claim a payable tax credit in cash up to 24 % of the qualifying R&D expenditure. In order to provide more incentives, the UK authorities wanted to raise the credit of an additional 25 %. As only SMEs were able to claim the tax credit, the Commission found the R&D tax incentive being selective and falling within the scope of Art. 107 (1) TFEU. However the Commission assessed the measure in the light of the R&D Framework. The handbook on Community State aid rules for SMEs refers to the R&D Framework in cases, when aid for R&D is given to SMEs. In order to be eligible for the tax credit the undertaking had to carry out research in one of the three categories of research and meet the eligible costs set out in the Framework as well as in the GBER. Furthermore the aid intensity of the tax credit calculated in accordance with the R&D Framework did not exceed the outlined requirement. Additionally the tax credit had an incentive on research and development. Therefore the Commission came to the conclusion that the measure can be considered as State aid in the light of Art. 107 (1) TFEU, but compatible with the common market in the light of Art. 107 (3) (c) TFEU.

⁶³ Commission Community Framework for State Aid for Research and Development and Innovation [2006] OJ C 323/1.

⁶⁴ Commission Decision of 30 May 2008, State Aid No 816/2006 - R&D Tax Credits for SMEs.

In the same year as the previous case the Commission assessed an aid scheme put forward by the Maltese authorities.⁶⁵ As well as the UK authorities Malta asked to introduce a tax credit to promote R&D, which was targeted not only at SMEs, but also at micro-sized, medium-sized and large companies. Although the scope of the measure was rather broad compared to the UK tax scheme, the Commission found the measure being selective. As Malta met the requirements of the R&D Framework, the tax credit was regarded as compatible with the internal market under Art. 107 (3) (c) TFEU. Furthermore Malta made use of the possibility to broaden the measure by opening it to the aforementioned practical fields of application and not only to projects that fall in the field of fundamental research, industrial research or experimental development.

To sum up, the State aid provision with specific regard to R&D incentives offers a broad range of legal sources starting at primary law in the form of the TFEU to secondary law in the form of the GBE Regulation, *de minimis* Regulation and the R&D Framework. Additionally case law significantly shapes the general application of Art. 107 (1) TFEU especially when it comes to the general assessment whether a specific public measure is selective or not in its nature. However as the Commission and CoJ apply the scope of a possible selectivity broadly, it is the opportunity of an exemption under Art. 107 (3) TFEU, that carries more weight in cases when promoting R&D by tax incentives. This is simply shown by the fact that the Commission accepted twelve cases from 2000 till 2012 on R&D tax incentives as being compatible with the internal market under Art. 107 (3) TFEU, whereas only four cases were being considered so general that they do not constitute State aid in the meaning of Art. 107 (1) TFEU. No case at all was considered being incompatible with the internal market.

⁶⁵ Commission Decision of 10 December 2008, State Aid No 604/2007 - Assistance for Research and Development and Innovation Regulations.

3.2 FUNDAMENTAL FREEDOMS

Besides the State aid provision, a tax incentive to promote R&D has to hold water in the light of the Fundamental Freedoms, especially in the form of the Freedom of Establishment (Art. 49 TFEU) and the Freedom to provide Services (Art. 56 TFEU). Whereas the Commission normally assesses the public measure in the light of the State aid provision before a possible introduction, the Fundamental Freedoms come into play, when the measure already has been introduced by a Member State. Furthermore the State aid provision can be applied in purely domestic situations in contrast to the Fundamental Freedoms that are employed in cross-border settings by the CoJ.

This being so the scope of the Fundamental Freedoms is rather narrow compared to the State aid provision according to Art. 107 TFEU when looking at tax incentives to promote economic activities. Nonetheless the CoJ dealt with four important cases regarding R&D tax incentives and thus giving more hints, when a tax measure targeted at the promotion of R&D may be regarded discriminatory.

In 1999 the CoJ ruled on a French levy targeted at the exploitation of proprietary medicinal products in the case *Société Baxter*.⁶⁶ *Société Baxter*, a French company, exploited proprietary medicinal products and was therefore subject to a special levy. The levy was assessed on the basis of the pre-tax turnover created by the use of the respective proprietary medicinal product in France. In addition costs connected to expenditures on scientific and technical research carried out in France could be deducted from the assessment base of the levy. When calculating the assessment base *Société Baxter* wanted to deduct expenses that incurred in its European subsidiaries in addition to its own French expenses, which was rejected by the French authorities. The CoJ held that the denial of foreign expenses by the French authorities constitutes a discrimination in the light of the Freedom of Establishment as it puts undertakings carrying out research in other Member States into a less favourable situation compared to undertakings that are carrying out research in France. Basically the CoJ followed AG Saggio's Opinion who pointed out that two subsidiaries established in France and distributing comparable medicinal products are treated differently depending on whether the parent company, where normally the main research is carried out, is established in France or not.⁶⁷ This clearly constitutes indirect discrimination in the light of the Freedom of Establishment. In addition the CoJ found that the rejection of foreign expenses could not be justified to ensure the effectiveness of fiscal supervision as the French government put forward. The Court stated that the measure at hand does not leave the taxpayer with any possibility to prove that the foreign research expenses are genuine and implies prima facie a non-deductibility.

In *Commission v. Spain*⁶⁸ the CoJ held that it contravenes the Freedom of Establishment, when the granting of a tax credit requires the promoted research activity being carried out in the Member State that grants the tax credit. In addition the requirement of an official recognition of entities providing R&D services by the Spanish authorities and the requirement that

⁶⁶ Case C-254/97 *Baxter and Others* [1999] ECR I-4809 Case C-254/97 *Baxter and Others*.

⁶⁷ Opinion of the Advocate General in *Case C-254/97 Baxter and Others* para. 10.

⁶⁸ Case C-248/06 *Commission v Spain* [2008] ECR I-0047.

the qualifying entity has to be established in Spain are contravening the Freedom of Establishment.

In 2005 the Court ruled again upon the denial of expenses in the case *Laboratoires Fournier*.⁶⁹ Fournier manufactures and sells pharmaceuticals and subcontracted several research centres across Member States. In 1995 and 1996 Fournier took into account expenditures connected to the subcontracts to calculate a tax credit provided by the French authorities. In 1998 the French tax authorities refused to acknowledge the expenses connected to the subcontracts. The reasoning was based on the fact that the respective research was not carried out by French companies, but was carried out by foreign undertakings. Based on Article 56 TFEU the CoJ came to the conclusion that the limitation of eligible expenditure for calculating the base of the tax credit cannot be restricted to expenditures connected to contracts with undertakings carrying out research in France. Therefore the French legislation contravened the Freedom to provide Services. As there is no direct link between corporate income tax and the tax credit for part of the research expenditure incurred by a company, the CoJ held that the rejection by the French authorities could not be justified in the light of maintaining the coherence of the tax system. Additionally, the CoJ rejected the argument put forward by the French Government claiming that the measure at hand promotes R&D. Although the promotion of R&D can be an overriding reason related to public interests, in this case the measure contravenes the objective of the Community policy on R&D stated in Art. 179 (1) TFEU, which obviously overrides the interest of a Member State. In contrast to the case *Société Baxter* this case was considered in the light of the Freedom to provide Services, because the measure at hand puts services provided by research centres in other Member States into a less favourable situation as services provided by domestic research centres as AG Jacobs points out in his Opinion.

In *Commission v Republic of Austria*⁷⁰ the Court held that it contravenes the Free Movement of Capital, when donations to research and teaching institutions can only be deducted from the tax base, when the donation is given to an institution whose seat is in Austria. The CoJ found that the possibility of a tax advantage has a significant influence on the donor's intention and therefore a denial of deduction of donations discourages donors. Furthermore the Court rejected Austria's argument that institutions established in another Member State are not objectively comparable to Austrian institutions. The Court followed AG Kokott's Opinion, who pointed out that the sole ground whether a deduction is granted or not is the place of establishment of the institution, which cannot be a valid criterion for assessing the objective comparability.

The concept to abandon territorial restrictions on tax advantages was not only put forward by the Court in case law regarding R&D, but also in other cases.

In 2008 the Court found that it contravenes the Freedom to provide Services if a tax advantage on assets is only available if the assets are used domestically.⁷¹ The Austrian under-

⁶⁹ Case C-39/04 *Laboratoires Fournier* [2005] ECR I-2057.

⁷⁰ Case C-10/10 *Commission v Republic of Austria*, to be published.

⁷¹ Case C-330/07 *Jobra Vermögensverwaltungs-Gesellschaft mbH* [2008] ECR I-9099.

taking *Jobra* was therefore put into a less favourable situation, when renting their lorries to its German subsidiary, as they could not make use of the tax advantage Austria was providing for.

In *STEKO Industriemontage GmbH* the CoJ condemned a German tax advantage in the form of a partial write-down in the value of shares as incompatible with the Free Movement of Capital if the legislation differentiates between domestic and non-domestic shares.⁷²

To sum up tax incentives that are putting a taxpayer into a less favourable situation when carrying out research in another Member State either directly through subsidiaries or branches or indirectly through subcontracts are contravening European Union Law. Additionally it runs afoul of European Union Law when the Member State reserves the discretion whether a tax advantage is granted or not.

This however does not mean that any kind of territorial restrictions in the design of a tax incentive can be seen as incompatible with the Fundamental Freedoms.

In 2007 Belgium introduced a “patent deduction” under which Belgian companies as well as branches of foreign companies could deduct 80 % of their gross income arising from patents from their tax base.⁷³ Patent income is only deductible to the extent it is attributable to the Belgian tax base, which means in turn that patent income arising from foreign PEs, which income is exempt under a double tax treaty, cannot be deducted from the tax base. Furthermore the patent deduction is not granted to Belgian establishments of foreign undertakings if the patent income is attributable to its foreign parent company.⁷⁴

This territorial restriction is however just a reflection of the territorial tax sovereignty of Belgium and cannot be seen as incompatible with the Fundamental Freedoms⁷⁵ as it does not contain a discriminatory element like the tax regimes outlined beforehand.

⁷² Case C-377/07 *STEKO Industriemontage GmbH* [2009] ECR I-0299.

⁷³ Patrick L. Kelley Pieter Van Den Berghe, ‘New Patent Deduction in Belgium: A Powerful Incentive’ [2008] *Bulletin for International Taxation* 374, 374.

⁷⁴ Pieter Van Den Berghe 2008 378.

⁷⁵ Pieter Van Den Berghe 2008 383.

4 ANALYSIS

4.1 LEGAL ANALYSIS

In the following the previous outlined legal framework is categorized firstly into provisions that are universally applicable to tax incentives and special provisions that are targeted at tax incentives to promote research and development. Consequently the deviation of special provisions to general provisions can be assessed in the end. Furthermore each legal construct is critically assessed whether it is connected to a risk to violate European Union Law when designing a tax incentive to promote R&D or if it provides for an opportunity to pass legislation.

The risk to violate European Union Law consists of three factors: firstly the nature of the specific provision regarding its degree of legal certainty, the provision's scope of application and the nature of the tax incentive. The applied benchmark is therefore built on the principle of legal certainty and legitimate expectation. Additionally legal certainty requires Community measures being clear and predictable,⁷⁶ thus it serves as a suitable frame for an assessment of the specific provision as well. If the provision contains legal uncertainty it is also connected to a risk when designing a tax incentive to promote R&D.

The legal scope of the respective provision is assessed additionally. A narrow scope of a provision, for example, could counterbalance a legally uncertain provision by minimizing the likelihood of application. On the other hand a broad scope of application contributes to the level of risk to run into a pitfall when designing a R&D tax incentive.

If the European Union Law provision contains a risk to run easily into a pitfall as a legislator, the analysis tries to determine how to lower the risk in the design of a R&D tax incentive. Thus it can be assessed to which extent a tax provision targeted to promote R&D is most likely to be in line with European Union Law under the respective provision.

In the end the single assessments are connected to draw a picture in the whole context of European Union Law.

4.1.1 GENERAL LEGAL SCHEME OF TAX INCENTIVES

European Union Primary Law that has to be considered whether it is a tax incentive targeted at R&D or not, is the TFEU in its core including the abovementioned State aid provision (Art. 107 TFEU) and the Fundamental Freedoms (Art. 49, 56 TFEU). Having a closer look at the State aid provision it comes to mind that the legal construct of selectivity has to be critically assessed as well as the connected possibility for a justification of a public measure. Both constructs apply whether the tax incentive is targeted at the promotion of R&D or not. Furthermore secondary law has to be considered represented by Regulations and Directives. In a

⁷⁶ Tridimas 244.

general setting especially the *de minimis* Regulation has to be assessed as a possible legal construct to get back to when considering tax incentives in general.

Additionally case law shall be considered while assessing to what extent a tax incentive in general is compatible with European Union Law. Furthermore scholars are giving more hints at a very specific topic that may be taken into account when critically assessing a legal construct.

As already pointed out it is the assessment of a possible selective advantage, which plays the key role, when assessing a tax incentive in the light of the State aid provision. Therefore the legal construct of selectivity is firstly assessed.

Selectivity as a legal construct has been under constant development over the last decade as regards direct taxation.⁷⁷ The Commission and the CoJ did not point out a criterion yet where to draw a line, when determining a relevant reference framework to assess the public measure. This results in a situation where there is no possibility to distinguish formally between general and selective advantages.⁷⁸ In addition the Commission contributes to the confusion, when stating that it does not necessarily constitute State aid when some undertakings or sectors are benefitting more than others from a tax measure.⁷⁹ It is not only the Commission that contributes to the matter of selectivity, but also the CoJ and the CFI, which case law cannot be called completely consistent and coherent.⁸⁰ Scholars as well as Advocate General have therefore criticized the blurry concept of selectivity.⁸¹ Possible enhancements of the concept put forward by scholars ranged from a “rule of reason”-test⁸², a “substance over form”-test⁸³ to the notion of “indirect selectivity”⁸⁴. All in all the Commission and the Court is still applying a case-by-case examination in the field of selectivity⁸⁵, which means that there is almost no possibility to deduce generic rules up to which point a public measure is general or selective.

Thus it seems adequate to valuate the provision of selectivity in the field of the State aid provision as legally uncertain. The general wording of Art. 107 (1) TFEU as well as the case law is far from being clear and precise, which results in a situation that is not foreseeable or predictable as regards the applicability. This however is required as a general principle of EU law.⁸⁶

⁷⁷ Quigley 2012 112.

⁷⁸ López 2010 819.

⁷⁹ Commission notice on the application of the State aid rules para. 14.

⁸⁰ José Luís da Cruz Vilaça, ‘Material and Geographic Selectivity in State Aid – Recent Developments’ [2009] European State Aid Law Quarterly 443, 443.

⁸¹ Bartosch 2010 732.

⁸² Hancher, ‘Towards a new definition of a State aid under European Law: Is there a new concept of State aid emerging?’ [2003] European State Aid Law Quarterly 365.

⁸³ Michael Honore, ‘Selectivity and Taxation – Reflections in the Light of Case C-487/06 P, British Aggregates Association’ [2009] European State Aid Law Quarterly 527.

⁸⁴ Rossi-Maccanico 2009.

⁸⁵ Michael Sánchez Rydelski, ‘Distinction between State Aid and General Tax Measures’ [2010] EC Tax Review 149

⁸⁶ Tridimas 244.

To assess the level of risk connected to the implementation of a R&D tax incentive it is furthermore necessary to evaluate the selectivity provision's scope of application. A narrow scope could lead to a low level of risk as it counterbalances the legal uncertainty. However this is not the case in the light of the concept of selectivity to cut a long story short. The scope of application applied by both the Commission and the CoJ is extremely broad.⁸⁷

Furthermore the nature of a tax incentive to promote R&D has to be considered when trying to evaluate the level of risk to fall into the scope of Art. 107 (1) TFEU. It is clear that a R&D tax incentive has by definition a specific purpose, which delimits it from a normal tax incentive. This being so the risk of selectivity is inherent in a R&D tax incentive, although there are cases which were considered as being a general measure as shown above.

Based on the foregoing the concept of selectivity can be declared as very risky, when it comes to tax incentives for R&D. This is mainly because the concept of selectivity connects both legal uncertainty as well as a very broad scope of application. Additionally the nature of a R&D tax incentive adds up to the level of risk to fall within the scope of Art. 107 (1) TFEU.

Nonetheless there have been cases as shown above, which were considered not being State aid mainly because the measure was held being general. The next question that arises is which common features have to be fulfilled in order to circumvent the concept of selectivity being applied. It is trivial to say that a tax provision has to be as general applicable as possible to be compatible with the concept of selectivity. From the cases presented in 3.1 it follows that a tax rate reduction regarding a certain type of income or expense that arises mainly in R&D intensive undertakings, but also in every other undertaking is assessed as being general. In this case the Commission accepts that some undertakings benefit more than others. Additionally the Belgian patent income deduction (3.2) was held being general. Given these points a general non-selective tax measure applies at the very heart of the tax system by reducing a tax rate or increasing allowances. Furthermore the incentive is preferably not connected to any direct criteria at all to delimit its scope from the general tax scheme in order to specifically address R&D intensive undertakings. A delimitation to create an intensive effect can be either implemented indirectly by targeting the provision at certain types of income that are primarily generated by R&D intensive undertakings, but nonetheless can be potentially generated by any undertaking. Income that comes into consideration may be income arising from the exploitation or transferral of patents or intellectual property. This concept was already successfully introduced by Belgium ("patent deduction") as well as the Netherlands ("innovation box").

If a tax incentive, whether it is targeted to promote R&D or not, eventually does fall into the scope of selectivity, it may however be justified in the light of 'the nature or general scheme' of the tax system.⁸⁸ In its 1998 Notice the Commission shed some light on the possible grounds for justification by giving detailed examples (para. 24-25), but also explaining the basic concept behind the legal construct (para. 26).

⁸⁷ López 2010 816.

⁸⁸ Commission notice on the application of the State aid rules para. 12.

Considering the nature of a R&D tax incentive two important features can be assessed. Firstly a R&D tax incentive is likely to break the principle of neutrality of a tax system and secondly it has a clear objective, namely the growth of economy, which can be considered as an overriding reason of public interest. Whereas the first feature clearly falls out of the nature of a tax system, the latter feature has to be assessed more carefully. The question that arises is whether a R&D tax incentive that pursues the goal of economical growth is an objective that can be considered as inherent in the tax system like a progressive tax scale that is justified by the redistributive purpose. A redistributive purpose however is a mere reflection of the principle of equality a tax system is striving for and can be considered as a bedrock principle, besides for example the principle of neutrality or efficiency. A R&D tax incentive on the other hand aims at an economical goal. This however is an external objective depending on fiscal policy. Intrinsic, fundamental goals of a tax system are not influenced by actual policy.

This leads to ambiguity, when additionally taking into account possible methods of implementation. A R&D tax incentive could, for example, be implemented as an additional depreciation system, which normally serves as a tool to safeguard the basic intrinsic principles of a tax system. In this regard, the Commission considered in its Decision of 13 March 1996⁸⁹ a special system of depreciation introduced by Germany as being State aid, because it only applied to commercial aircrafts registered in Germany. The depreciation system existed besides the two general systems of depreciation providing for a linear and accelerated depreciation. Furthermore the measure could not be justified in the light of the general scheme of the tax system.

Taking into account the scope of the provision, there are only a handful of decisions in which the Commission recognised a preferential treatment as justified by the nature of the tax system.⁹⁰ Thus it can be reasoned that the possibility of a justification has a very narrow scope and additionally provides for legal certainty, when taking into account the Commission's Notice and case law. Furthermore the non-neutral nature of a R&D tax incentive does not raise the likelihood to successfully justify a selective R&D tax measure in the light of the inherent scheme of the tax system.

It seems legitimate to say that this fallback option is unlikely to be raised in connection to general tax provisions due to its very narrow scope and even more unlikely when considering R&D tax incentives due to their characteristic nature of non-neutrality and the attributed external goal.

If the general public measure is held as being State aid and cannot be justified it is still eligible to fall within the scope of the *de minimis* Regulation and thus declared being compatible with the Common market. The Regulation applies for general as well as R&D tax incentives. The Regulation is relatively short and straightforward in its content. Firstly the scope is outlined clearly in Article 1, which is followed by a definition up to which limit aid is compatible with the internal market in Article 2. Accordingly the cap of EUR 200,000 over a period

⁸⁹ Commission Decision of 13 March 1996 concerning fiscal aid given to German airlines in the form of a depreciation facility (96/369/EC) [1996] OJ L 146/42.

⁹⁰ Rossi-Maccanico 2009 168.

of three years applies irrespective of the form or the objective of the given aid. If the aid exceeds the cap, it is automatically incompatible with the internal market.

The scope of the Regulation is fairly broad and applies in general to every aid granted to an undertaking except some peculiar undertakings of the fishery, agricultural and coal sector.

Therefore the *de minimis* Regulation can be classified as a safe zone when passing legislation on R&D tax incentives as it applies universally and is foreseeable.

A question that is left open is in how far a tax incentive to promote R&D is most likely to be in line with the *de minimis* Regulation. Firstly the R&D tax incentive has to fall within the scope of Art. 107 (1) TFEU, which is in case of a R&D tax incentive very likely, as already shown. Furthermore the tax incentive has to be designed in a way that it is capped at a tax advantage of EUR 200,000 per three years per undertaking. If this criterion however is met the tax incentive can be designed in any way possible, as there are no other restrictions connected to it. Regardless of this freedom it has to be kept in mind that the Regulation exceeds its validity by the end of 2013.

The next legal provision that has to be considered no matter of what kind of tax incentive are the Fundamental Freedoms. In the case of tax incentives regarding R&D they apply especially in the form of the Freedom of Establishment (Art. 49 TFEU) as well as the Freedom to provide Services (Art. 56 TFEU). In general the Fundamental Freedoms come with an extensive bundle of case law providing for more and more legal certainty. In the case of R&D tax incentives the case law is coherent and consistent as shown in 3.2 and the outlined case law was exhaustive regarding R&D tax incentives. In each case a territorial restriction of carried out research in connection with the eligibility of a R&D tax incentive was condemned by the CoJ. Additionally in non-R&D cases territorial restrictions were condemned.

Therefore it seems logical to declare the CoJ's case law regarding R&D tax incentives as providing for legal certainty as it is clear, precise and foreseeable.

Compared to the State aid provision the scope is narrower as the Fundamental Freedoms only apply in a cross-border situation after the tax incentive has already been introduced. Furthermore the Commission is already testing the tax incentive to be introduced for territorial restrictions, when assessing the provision in the light of the State aid provision.

Nonetheless the Fundamental Freedoms play a key role and must not be excluded from consideration.

4.1.2 SPECIFIC LEGAL SCHEME OF TAX INCENTIVES FOR RESEARCH & DEVELOPMENT

In the following provisions are outlined and assessed that are specifically addressed to research and development within the legal framework.

The first construct to be assessed is the General Block Exemption Regulation (GBER)⁹¹, although it is not exclusively targeted at aid for research and development, but also at other cat-

⁹¹ Commission Regulation (EC) No 800/2008 (General block exemption Regulation).

egories of aid as pointed out in Article 1. However as the scope of the Regulation is defined exhaustively in Article 1 by a list of categories, it is legitimate to refer to the Regulation as specifically applicable and not generally.

The GBER specifies the application of Art. 107 (3) TFEU. The scope of the Regulation is clearly outlined in Article 1 and gives detailed general conditions for the exemption under Article 107 (3) TFEU. As regards R&D the Regulation points out specific criteria, when an aid scheme falls within the scope of the Regulation and therefore can be declared as compatible with the Common market. The required categories of fundamental research, industrial research and experimental development are clearly defined. Furthermore the intensity caps for aid are outlined as well as eligible costs a R&D incentive has to address in order to be exempt under Article 107 (3) TFEU. In short, the Regulation is clear and precise in its wording. This can be traced back to mainly two aims the Commission followed, when drafting the Regulation. The Commission's first intention was a simplification of the already established Block exemption regulations at that time.⁹² Additionally the Commission had to ensure that the wording of the Regulation is clear and precise as it has "direct effect".⁹³ Thus it can be said that the Regulation provides for legal certainty, because it is clear and precise in its wording giving detailed conditions regarding the scope and application.

The scope of the Regulation is fairly broad as it addresses R&D aid in the form of the traditional categories, but also specific measures such as aid for young innovative enterprises or aid for innovation support services. However it still connects the exemption under Art. 107 (3) TFEU to certain conditions and does not simply exempt every kind of R&D aid no matter how the measure is designed.

It has to be added that R&D tax incentive regimes normally contain the required components in their legislation, especially a range of the qualifying costs that are eligible for a tax credit or allowance.⁹⁴ Nevertheless this reminds of the question of the chicken and the egg – which was first?

Under these circumstances the GBER provides for an opportunity to successfully introduce R&D tax incentives by providing a foreseeable and clear legal construct that can be effectively used when drafting legislation. The risk to fall outside the scope of the Regulation is minimal as both the wording is clear and precise and R&D tax incentives allow for a design to meet the required criteria.

Therefore Member States can specifically connect tax incentives to certain sectors by requiring the aided project falling within the definition of research. Furthermore the design of the incentive is only restricted to few criteria. The aid is not allowed to exceed a certain intensity cap and has to be connected to eligible expenses on R&D as outlined in the Regulation.

⁹² Kristyna Deiberova and Harold Nyssens, 'The new General Block Exemption Regulation (GBER): What changed?' [2009] *European State Aid Law Quarterly* 27.

⁹³ Deiberova and Nyssens 2009 28.

⁹⁴ Eynatten 2008 503.

Besides the GBER the R&D Framework exists as a legal source applied by the Commission. As the name suggests the Framework is specifically addressed at the needs of research and development in State aid matters.

In its core the R&D Framework contains the same requirements as the GBER, namely the research categories, the limit of the aid intensity and the eligible costs open for R&D incentives. However it contains additionally specific examples on how to assess the aid intensity especially in the field of fiscal measures. Furthermore it specifically lays down the Commission's practice when assessing an aid scheme targeted to promote R&D.

As already outlined the scope of the Framework is fairly the same as the GBER, but gives additional possibilities to target an incentive to practical fields of application such as innovation clusters.

At first this seems to add up to the legal certainty the GBER is providing, but the R&D Framework provides for more requirements in the end. As Section 5 provides State aid for research and development is only compatible with the internal market within the meaning of Art. 107 (3) (c) TFEU if it leads to increased R&D activities without adversely affecting trading conditions. This is assessed on the basis of a special balancing test laid down in the Framework's beginning. On the other hand the GBER does not contain such a requirement.

This is somewhat confusing as both the R&D Framework and the GBER are existing side by side and aid schemes are likely to fall within the scope of both the GBER and the Framework. This leaves the legislator with the question, which provision to apply: the more detailed one (R&D Framework) or the one that was introduced later (GBER). The Commission however assessed the cases mentioned in 3.1 in the light of the R&D Framework.

Nonetheless the Framework leaves the legislator with a broad scope of application and possibilities as well as high legal certainty when drafting a R&D tax incentive.

4.1.3 RESULTS

The foregoing analysis offers some important results regarding the question which legal framework to apply for tax incentives especially in the case of R&D.

Additionally the deviation of the specialised framework from the normal one can be assessed. The State aid provision plays the key role in the field of applicable legal sources.

The provision of Art. 107 (1) TFEU and its connected *de minimis* Regulation applies in general to all kind of tax incentives no matter if they are targeted at R&D or not. It follows that Art. 107 (1) TFEU is not broadened by any kind of legal provision targeted especially at R&D tax incentives. Therefore every R&D tax incentive is treated equally compared to other forms of aid in the application of Art. 107 (1) TFEU. Only the possibility of justification is especially addressed to tax provisions, but is very unlikely to be raised in the field of R&D tax incentives due to their characteristic nature.

Whereas Art. 107 (1) TFEU applies in its core no matter of the type of the tax incentive, it is the possibility for exemption under Art. 107 (3) TFEU that highly deviates from the basic

legal framework and is specifically addressed to research and development. Especially the GBER and the R&D Framework are providing for legally certain provisions in the field of R&D.

In contrast to the State aid provision, the Fundamental Freedoms today have an ancillary position as the Commission checks the incentive for territorial restrictions within the State aid procedure *ex ante*. Nonetheless they added an important contribution to the legal framework targeted at R&D tax incentives by abolishing territorial restrictions of carried out research. The Fundamental Freedoms apply in the same form as established by case law without any special provisions targeted at the promotion of R&D.

Secondly the analysis provides for an answer if the legal framework targeted to promote R&D leaves a broader scope for the legislator. Whereas the core provision of the State aid framework was not broadened, the possibilities of exemption under Art. 107 (3) TFEU plays a major role. This general provision served as a fallback option for the Commission to broaden the legal framework of State aid prohibition in order to give the Member States more possibilities to foster research and development. However the incentives are still being assessed in the light of Art. 107 (1) TFEU. In addition the Commission added legal certainty to the exemption under Art. 107 (3) TFEU by publishing the GBER and R&D Framework. All this leaves the Member States not only with more possibilities to foster R&D by tax incentives, but also with a higher incentive to initially introduce incentives as legal certainty was added to the framework.

The last question that can be answered is to what extent tax incentives for research and development are compatible with European Union Law.

Member States basically have three possibilities to successfully introduce tax incentives targeted at R&D that are compatible with European Union Law provided there are no territorial restrictions.

Firstly the tax incentive is not declared as being State aid at all and thus it is not falling within the scope of Art. 107 (1) TFEU. As shown such type of incentive applies in the very core of a tax system and is very general in its nature.

Secondly, the tax incentive is declared as being State aid in the light of Art. 107 (1) TFEU, but successfully falls within the scope of Art. 107 (3) TFEU. This kind of incentives are not as general as the previous mentioned tax incentives, but are connected to certain requirements put forward by the Commission such as a limit of aid intensity or a restriction of eligible costs and carried out projects stemming from the R&D Framework.

Thirdly, the tax incentive is declared being State aid, but falls within the scope of the *de minimis* Regulation. The R&D tax incentive can be freely designed and thus can have any form, but is restricted to a financial cap of EUR 200,000 per three years and undertaking.

All three types of possibilities differ in their degree of legal certainty and freedom of design. Whereas the first option is highly legally uncertain and leaves the legislator with a very limited freedom of design, the second and third option is legally certain and offers more options regarding the specificity of the design. On the other hand, the more specific and financially

powerful the tax incentive is designed, the higher is the risk to run counter European Union Law.

This leaves us with the question which type of incentive is the best to apply from an economically point of view as regards investment behaviour of undertakings. Furthermore it raises the question if the broadening of the State aid provision to foster R&D had any effect on the Commission's decisions and therefore reflects the intention in reality. This question is analysed in the next part.

4.2 EMPIRICAL ANALYSIS

4.2.1 FORMATION OF HYPOTHESES

To effectively approach the question whether the broadening of the State aid provision leads to more possibilities for Member States to foster R&D in reality, several hypothesis have to be formed based on the foregoing results. These are tested against the outcome of the Commission's State aid decisions.

As shown the State aid framework regarding R&D measures was broadened compared to other general measures. This leads to the following general hypothesis.

H₁: State aid decisions in the field of R&D raise relatively fewer objections by the Commission than in other objective fields.

The State aid provision was not broadened in the application of Art. 107 (1) TFEU, but offers now more possibilities for exemption under Art. 107 (3) TFEU regarding R&D measures, which results in the following hypothesis.

H₂: R&D measures that do not raise objections are more often exempt under Art. 107 (3) TFEU than considered not being State aid at all und thus falling outside the scope of Art. 107 (1) TFEU.

As the broadening of Art. 107 (3) TFEU is, besides other specific objective fields, specifically addressed to R&D measures this leads to the following hypothesis.

H₃: R&D measures that do not raise objections are relatively more often exempt under Art. 107 (3) TFEU than decisions without objection in other objective fields.

Furthermore the R&D Framework was introduced in 2006 as well as the GBER Regulation in 2008, which leads to more legal certainty and possibilities for Member States to effectively apply R&D incentives. However as outlined Member States have the possibility to introduce tax incentives based on the *de minimis* Regulation or tax incentives that are so general in their nature that they fall out of the scope of the State aid provision.

H₄: The R&D Framework is used more often as a secondary legal source as the GBER or the *de minimis* Regulation.

4.2.2 DATASET AND METHODOLOGY

Art. 108 (3) TFEU obliges Member States to notify the Commission about the possible introductions of aid in order to give the Commission the possibility to assess the measure in the light of Art. 107 TFEU *ex ante*. Furthermore Art. 108 (1) TFEU obliges the Commission and the Member States to keep public measures under constant review. This results in a huge body of State aid decisions, which can be found in the State aid decision database provided by the Commission.

The dataset distinguishes between the objective fields of the public measure, whether the Commission raised objections or not as well as the primary legal ground and the secondary legal ground. Decisions that raised objections by the Commission are public measures being condemned as prohibited State aid on ground of Art. 7 (5) of Council Regulation No 659/1999.⁹⁵ Decisions that do not raise objections on the other hand can be measures that are not declared as being State aid or measures that were considered as State aid, but fall within the scope of the exemption under Art. 107 (2) or (3) TFEU.

Table 1 breaks down the State aid decisions from 2000 till 2012 by their field of objections and whether they raised objections or not in general without regard of the legal ground.

Table 2 shows the distribution of decisions in the field of R&D that did not raise objectives according to their primary legal ground. To put differently, the table shows how many R&D measures were found being in line with European Union Law, because they were not State aid at all or being considered as State aid, but exempt under Art. 107 (3) TFEU.

Table 3 shows how many decisions without objections were based on Art. 107 (3) TFEU or another legal source (such as Art. 107 (2)) according to their field of objective.

Table 4 presents in turn the distribution of applied secondary law (e.g. *de minimis* Regulation, GBER) within the field of R&D.

Unfortunately the Commission only started to record whether a decision was exempt according to Art. 107 (2) (3) TFEU in 2007, which limits the number of cases to be analysed. This is why an analysis of the development in time of Art. 107 (3) TFEU in the field of R&D is unfortunately not possible for a representative period of time.

The aforementioned data is not a sample, but represents the whole result the database provided. Therefore significance testing is not undertaken and the analysis is based on univariate descriptive statistical methods by showing mainly the relative distribution.

⁹⁵ Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty [1999] OJ L 83/1.

4.2.3 RESULTS

In the following the established hypotheses are assessed one by one based on the provided dataset.

The following illustration shows the distribution of the results of the State aid decisions according to their objective field. It simply shows if an objection was raised or not and does not differentiate between the legal ground when no objection was raised. Furthermore objective fields with less than 50 decisions were excluded due to representativity.

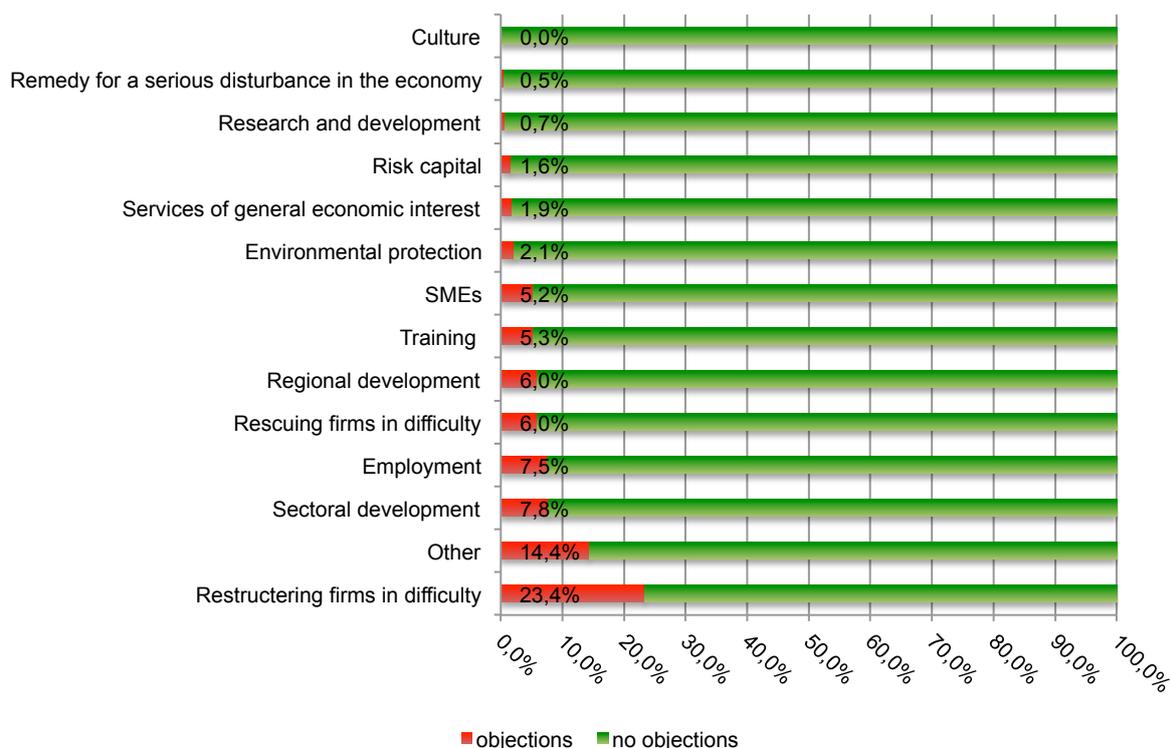


ILLUSTRATION 1: DISTRIBUTION OF RESULTS OF STATE AID DECISIONS FROM 2000 TILL 2012 ACCORDING TO THEIR OBJECTIVE FIELD.

In general State aid decisions raise relatively few objections except for the objective fields of “Restructuring firms in difficulty” and “Other”. However the objective field “research and development” ranked as one of the objectives with the least raised objections in general by the Commission from 2000 till 2012. With an objection rate of 0.7 % research and development ranked as the third objective with the least raised objections after “Remedy for a serious disturbance in the economy“ and „Culture“. The average rate of raised objections across all sectors totals in 5.9 % with a median of 5.3 %. Therefore State aid decisions in the field of R&D raise significantly less objections than in other sectors. Hypothesis 1 can be accepted.

The next illustration shows the relative distribution of decisions without objection in the field of R&D according to the legal ground. Either public measures do not fall within the scope of Art. 107 (1) TFEU or they fall within the exemption of Art. 107 (3) TFEU. In both cases the Commission does not raise objections.

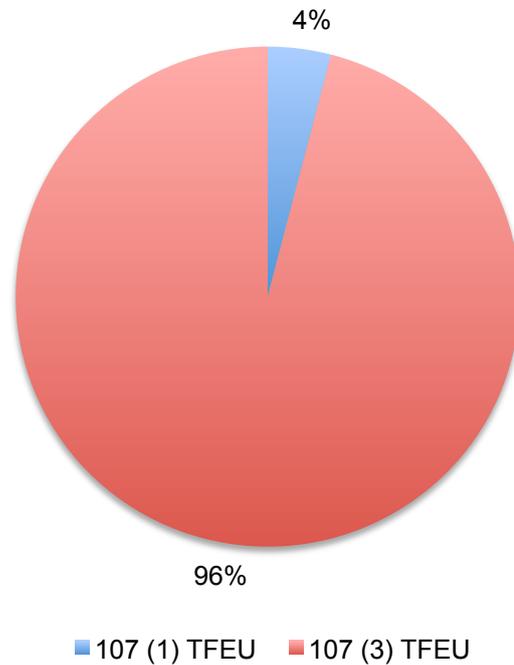


ILLUSTRATION 2: DISTRIBUTION OF DECISIONS WITHOUT OBJECTION IN THE FIELD OF R&D ACCORDING TO THE PRIMARY LEGAL GROUND

The illustration shows that almost all public measures in the field of R&D without objections were constituted State aid, but exempted under Art. 107 (3) TFEU and therefore compatible with the common market. Hypothesis 2 can therefore be accepted. This in turn shows that the broadening of Art. 107 (3) TFEU indeed has the wished effect in reality.

The next illustration shows the distribution of State aid decisions without objection according to their primary legal ground. It only shows fields of objectives with more than 50 decisions in the years of 2007 till 2012.

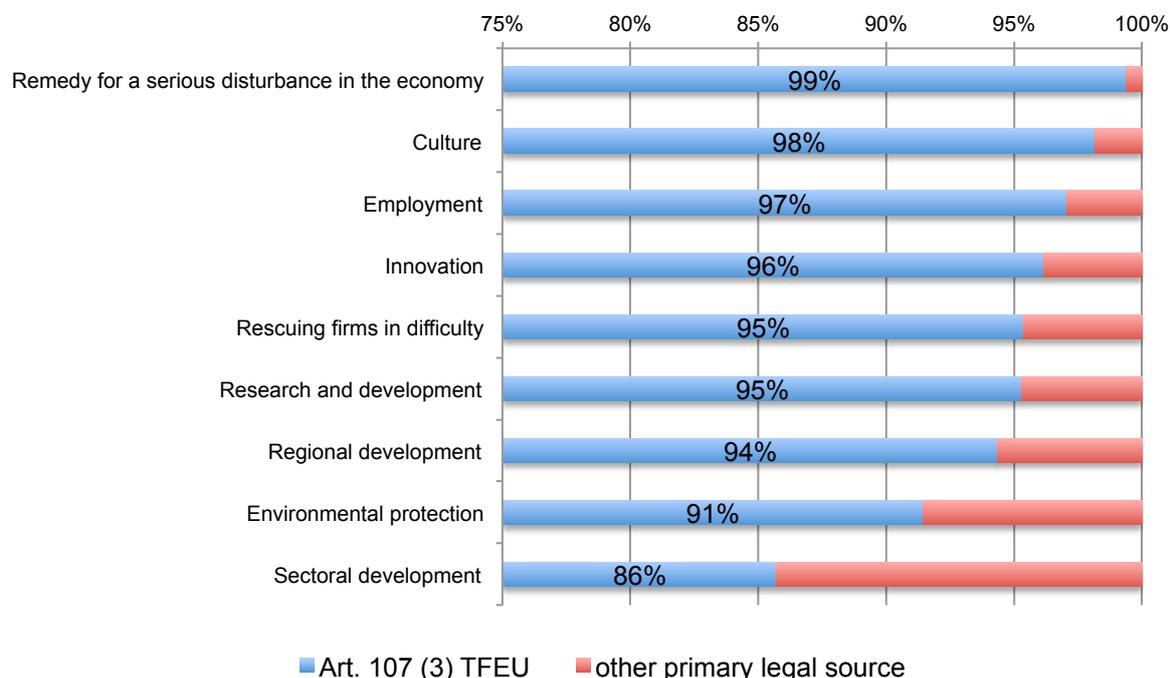


ILLUSTRATION 3: DISTRIBUTION OF DECISIONS WITHOUT OBJECTION ACCORDING TO PRIMARY LEGAL SOURCE AND FIELD OF OBJECTIVE.

In general it attracts attention that Art. 107 (3) TFEU is raised predominantly across all sectors when a decision did not raise objections. The distribution across all sectors is fairly equal. This being so decisions in “research and development” are not significantly more decided on ground of Art. 107 (3) TFEU than in other sectors. Hypothesis 3 can therefore be rejected.

Illustration 4 shows the distribution of decisions without objection in the field of R&D according to their secondary legal ground. The distribution perfectly represents the hierarchy of the three previous elaborated options Member States have at disposal within the legal framework targeted at R&D measures. Accordingly the exemption under Art. 107 (3) TFEU plays the first fiddle on ground of the R&D framework as accompanying secondary legal source.

What is surprising is that only one decision was made out of 227 in total on ground of the GBER. This shows that the aforementioned conflict between the GBER and the R&D framework does not exist in reality. Only 4 % of the measures without objection were not considered as being State aid at all and only 2.2 % were being held compatible with the common market on ground of the *de minimis* Regulation.

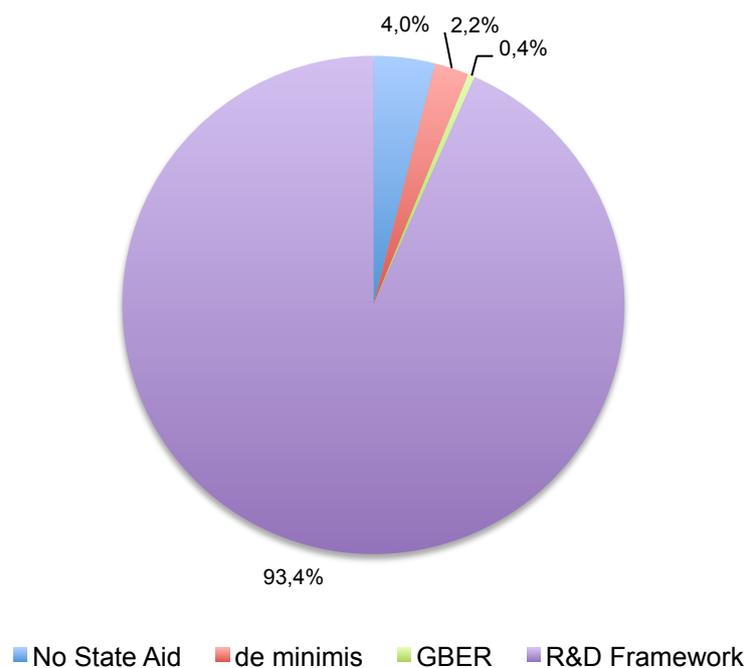


ILLUSTRATION 4: DISTRIBUTION OF DECISIONS WITHOUT OBJECTION IN THE FIELD OF R&D ACCORDING TO THEIR SECONDARY LEGAL GROUND

The empirical analysis showed that State aid decisions in the field of R&D raise extremely few objections by the Commission and are most likely to be exempt under Art. 107 (3) TFEU. This could be attributed to firstly the general broadening of the scope of Art. 107 (3) TFEU regarding R&D, but also the additional legal certainty the R&D Framework is providing. This is backed up by the fact that the R&D Framework is used in almost 94 % of all decisions without any objections as a secondary legal source. On ground of the last hypothesis a hierarchy of the possibilities a tax incentive is in line with European Union Law can be established. Accordingly, relatively few R&D measures are not being constituted State aid at all and even fewer (2.2 %) are compatible with European Union Law based on the *de minimis* Regulation.

5 CONCLUSION

This thesis tried to give a jurisprudential contribution to the on-going debate about the introduction of tax incentives on research and development in Germany by evaluating up to which degree R&D tax incentives are compatible with superior European Union Law. As the debate in Germany is still in its infancy and is limited to the demand of R&D tax incentives by scholars and the economy, the thesis' results are held as generic as possible. Therefore the findings can be transferred to Member States without any indirect incentives as well and is not only limited to Germany. Nonetheless the results are very important as unlawfully introduced R&D tax incentives could result in high financial repayments of the benefitted undertakings to restore the competition conditions if the incentive is found being prohibited State aid. Furthermore Member States could face serious repayments of unduly levied taxes if the incentive is found contravening the Fundamental Freedoms.

To address the research question the legal framework, specifically the State aid provision and the Fundamental Freedoms, were outlined extensively and analysed.

The legal analysis classified the framework into provisions that are applied generally and provisions that are specifically addressed to the promotion of research and development. Accordingly it was found that the application of the State aid provision does not differentiate between the nature of the measure to be evaluated as being prohibited State aid or not. It is rather the possibility of an exemption in the light of Art. 107 (3) TFEU, which scope was broadened in order to give Member States more possibilities to legally introduce not only R&D tax incentives, but also R&D measures in general. Additionally the Commission contributed legal certainty to the exemption under Art. 107 (3) TFEU by releasing the General Block Exemption Regulation in general and the R&D Framework specifically. Therefore the possibility of declaring a R&D tax incentive as compatible with the internal market under Art. 107 (3) TFEU carries the most weight in the legal framework. This fact was also substantiated in the empirical analysis as 96 % of all R&D measures without objections raised by the Commission were declared as being compatible with the internal market under Art. 107 (3) TFEU. Only 4 % were declared as not being State aid at all.

Furthermore and most importantly the legal analysis revealed three options for Member States to successfully pass legislation on R&D tax incentives within the European Union Law framework. The three options differ in their legal certainty as well as the provided autonomy in the design of the tax incentive.

Firstly, the tax incentive does not fall in the scope of the State aid provision at all and thus is not considered as prohibited State aid. The design of such incentives has the characteristic of applying in the core of the tax system by, for example, reducing tax rates on income that is mainly generated by R&D intensive undertakings and does not have direct criteria to determine eligibility.

Secondly, the tax incentive is declared as being State aid, but is exempt under Art. 107 (3) TFEU. This option connects the design of the tax incentive to certain requirements put forward by the Commission, but still leaves a certain degree of autonomy.

Thirdly, the tax incentive is falling in the scope of the *de minimis* Regulation and is therefore financially capped at an intensity of EUR 200,000 per three years and undertaking. This option however does not have any restrictions in the design of the incentives and leaves the legislator with the greatest possible degree of autonomy.

The empirical analysis showed that the second option carries by far the most weight followed by option one and three.

Furthermore the empirical analysis revealed that very few objections are raised in the field of R&D in general, which verifies the fact that the State aid provisions regarding R&D are not only broadened on the paper, but applies also in reality. A possible factor playing part in it could be the introduction of the R&D Framework as a secondary legal source, which provided for more legal certainty.

Whereas the legal framework towards R&D tax incentives looks very restrictive on the first view, it can be concluded that the Commission and the CoJ provided for both legal certainty as well as more freedom to successfully introduce indirect R&D incentives. This being so it has to be reconsidered if direct incentives with discretion of the State, as provided nowadays in Germany, are still the way to go in the future.

Furthermore the aforementioned conclusion leaves us with the question if the hierarchy of the three possibilities to successfully pass compatible tax incentives is caused by mere legal reasons such as the provided legal certainty or if it could be attributed to economical reasons such as efficiency of the tax incentives. To put it differently, it raises the question whether a tax incentive designed in a way that it is exempted under Art. 107 (3) TFEU is the most sensible option regarding investment behaviour or if the two other options are paramount, but not considered by the legislator for reasons whatsoever.

ANNEX

	OBJECTIONS	NO OBJECTIONS	SUM
Compensation of Damages caused by natural disasters	0	24	24
Culture	0	249	249
Employment	7	86	93
Energy saving	0	19	19
Environmental protection	11	502	513
Execution of an important project of common Europe	0	5	5
Heritage conservation	0	18	18
Innovation	0	31	31
Promotion of export and internationalisation	3	19	22
Regional development	50	788	838
Remedy for a serious disturbance in the economy	2	395	397
Rescuing firms in difficulty	8	126	134
Research and development	4	610	614
Restructuring firms in difficulty	50	164	214
Risk capital	2	121	123
Sectoral development	31	369	400
Services of general economic interest	1	53	54
SMEs	7	127	134
Social support to individual consumers	1	41	42
Training	4	71	75
Other	31	185	216
SUM	212	4003	4215

TABLE 1: STATE AID DECISIONS FROM 2000 TILL 2012 ACCORDING TO FIELD OF OBJECTIVE

	Art. 107 (1) TFEU	Art. 107 (3) TFEU	Total
R&D decisions without objection	9	213	222

TABLE 2: R&D DECISIONS WITHOUT OBJECTION FROM 2007 TILL 2012 ACCORDING TO LEGAL GROUND

	Art. 107 (3) TFEU	Other EU primary legal bases	SUM
Culture	161	5	155
Employment	99	5	104
Energy saving	31	0	31
Environmental protection	171	20	191
Execution of an important project of common Europe	10	2	12
Innovation	50	2	52
Promotion of export and internationalisation	16	3	19
Regional development	201	14	215
Remedy for a serious disturbance in the economy	329	5	334
Rescuing firms in difficulty	62	3	65
Research and development	142	8	150
Risk capital	34	2	36
Sectoral development	60	13	73
Services of general economic interest	2	17	19
SMEs	8	2	10
Social support to individual consumers	1	15	16
Other	23	10	33
SUM	1400	126	1526

TABLE 3: DECISIONS WITHOUT OBJECTION FROM 2007 TILL 2012 ACCORDING TO LEGAL GROUND

	Art. 107 (1) TFEU		Art. 107 (3) TFEU	
	No State Aid	De Minimis	GBER	R&D Framework
R&D decisions	9	5	1	212

TABLE 4: R&D DECISIONS WITHOUT OBJECTION FROM 2007 TILL 2012 ACCORDING TO SECONDARY LEGAL PROVISION

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