UPPSALA UNIVERSITET

Uppsala Faculty of Law
Working Paper 2015:2

Tax policy, economic efficiency and the principle of neutrality from a legal and economic perspective

Lena Hiort af Ornäs Leijon

Abstract

Different tax systems are often, to a greater or lesser extent, designed according to the economist Adam Smith's maxims regarding good taxes. One of these maxims could be described as economic efficiency. This paper discusses the criteria of economic efficiency and evaluates the possible interaction between economic efficiency and the fiscal principle of neutrality. The criteria of economic efficiency are assessed from a legal and economic perspective. Economic efficiency can be defined as creating possibilities for the parties to act towards the most efficient and mutually beneficial outcome. The neutrality principle ought to be defined as a principle derived from economic theory. Tax policy based on the neutrality principle is non-distortive and thus economically efficient. An indication of non-neutrality is when the tax payers adjust their behaviour regarding investments, financing, consumption, work or leisure, in response to the tax rules. Obviously the aim for non-distortive taxes is not applicable to Pigeouvian taxes since these taxes have as an objective to affect behaviour and balance an inefficient market outcome. Certain examples of differences in non-Pigeouvian tax treatment, presumably affecting behaviour, are further discussed.

Working paper 2015:2

Tax policy, economic efficiency and the principle of neutrality from a legal and economic perspective

Lena Hiort af Ornäs Leijon
Doctoral Candidate in Tax Law
Uppsala University

Faculty of Law

Box 512
SE 751 20 Uppsala
lena_hiort_af_ornas_leijon@jur.uu.se

Available at http://uu.diva-portal.org

Contents

1 Introduction

Tax policy attracts attention from policy makers, media and the public. A tax policy expressed in legislation that form a tax system should enable the government to determine the amount of tax revenue that is likely to be collected and at what time. Different tax systems are often, to a greater or lesser extent, designed according to Adam Smith's maximis regarding good taxes.[1] *One of these maxims could be described as a criteria for economic efficiency. The goal of this study on tax policy is to define if and how economic efficiency in fiscal law can be defined and evaluated. The assessment also identifies and measures the connection between the fiscal principle of neutrality and the application of economic analysis of law giving an "efficiency" perspective to the evaluation of legal rules.*[2]

The primary purpose of any tax policy is to raise the revenue needed to pay for government spending. Tax policy should therefore enable the government to determine the amount of tax revenue that is likely to be collected thus enabling the government spending, possibly aimed for redistribution. A point of departure for the following discussion is that the primary purpose of tax systems is to raise revenue, not to change behaviour.[3] It is obvious that taxation might affect behaviour and that tax systems are in some cases constructed to balance an inefficient market outcome. Taxes intended to balance negative externalities are namned Pigouvian taxes.[4]

According to Martin Feldstein the effect of taxes on economic behaviour is important for three distinct reasons. "The effect of

[1] Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, 1776, The Electronic Classics Series, The Pennsylvania State University, 2005, p. 676.
[2] Hans-Bernd Schäfer and Claus Ott, The Economica Analysis of Civil Law, Edward Elgar, Cheltenham, UK, Northampton MA, USA, 2004, p. 3. Kaplow, Louis & Shavell, Steven, 2002. Economic analysis of law, Handbook of Public Economics, in: A. J. Auerbach & M. Feldstein (ed.), Handbook of Public Economics, edition 1, volume 3, chapter 25, pages 1661–1784 Elsevier.
[3] Ingemar Hansson and Erik Norman, Skatter i teori och praktik, SNS Förlag, 1996, p. 95. Feldstein, Martin. 2008. Effects of taxes on economic behaviour. National tax journal 61(1): 131–139.
[4] Harold M. Groves, Tax Philosophers, Two hundred years of Thought in Great Britain and the United States, Edited by Donald J. Carran, The University of Wisconsin Press, 1974, p. 64–73, A.C. Pigou. (1920). The Economics of Welfare. London: Macmillan, p. 305 and chapter II, The effects of the Fact of Taxation and Chapter III, Taxes on Windfalls.

taxes on economic behaviour is important for three distinct reasons. First, the behavioral response of taxpayers affects the revenue consequences of changes in tax rates and tax rules. Second, the effects on economic efficiencyor deadweight loss depend on taxpayers' compensated behavioral responses, i.e., on the behavioral effects excluding pure income effects. And, third, behaviour is important for understanding the short–run macroeconomic consequences of tax changes on aggregate demand and employment."[5] The effect of the tax law on a taxpayers' decisions concerning a particular transaction or whether or not to engage in a transaction should be kept at an as low level as possible in order to be non-distortive. The concept is to strive for a neutral tax system. Taxpayers are supposed to act as if taxes do not at all affect their behaviour, thus the goal for the government and the policy makers is to create a tax system that does not influence taxpayers' behaviour, for example by working less, saving less, selling or buying less, than they would have otherwise. Designing the tax system that does not create any bias for certain choices, is the core of the principle of neutrality.[6]

Tax policy has to be imposed by law in Sweden.[7] Thus general principles of justice are to be added to the list of applicable principles.[8] Another important principle is the principle of equality, which has been very important for the development of civilization.[9] What I see as a close interplay between the different principles, for example the principle of efficiency, the principle of fairness and the principle of uniformity and equality, makes it less clear what are the actual charateristics of each principle. Unclear conditions are unsatisfactory, especially in a judicial context. The impact of any principle depends upon the government's choice of

[5] Martin Feldstein, Effects of taxes on economic behaviour, National tax journal, 2008, 61(1) p. 131–140.

[6] Ingemar Hansson and Erik Norman, Skatter i teori och praktik, SNS Förlag, 1996, p. 95.

[7] The Swedish Constitution, Regeringsformen (1974:152) 8 kap. 3 §. Anders Hultqvist, Legalitetsprincipen vid inkomstbeskattningen, Juristförlaget, Stockholm, 1995 och Jacob Graff Nielsen Thomson, Legalitetskravet ved beskatning, GadJura 2003.

[8] Robert Påhlsson, Likhet inför skattelag, Iustus förlag, 2007, p. 215.

[9] Jonathan Wolf, Equality on the history if political philosophy, The oxford Handbook of Political Philosophy, p. 610–621. Dworking Ronald, What is Equality, part 2: Equality of resources, Philosophy and Public Affairs, 10, p. 281–345.

objectives.[10] Unclearness and hence insufficient knowledge about the principles thus makes it difficult to reach the objectives of fiscal legislation. A deeper and clearer understanding of the principle of neutrality would strengthen the possibilities for fiscal policy makers to reach their objectives, ensuring that present and upcoming legislation accrue to the principles mentioned above.

This paper focuses on an assessment of how legal criteria in tax legislation may influence economic decisions, influences that play a central role in the tax policy debate and are refered to as witholding economic efficiency or the neutrality principle, or being distortive and undesirable. Below, the criteria of economic efficiency are assessed from a legal and economic perspective and the assessment identifies and measures the connection between the principle of neutrality as a tax policy principle and efficiency maximization. The actors are asssumed to be rational, utility and wealth maximising.

There are four general concerns for legal analysis:[11] the rational of legal decisions, the determination of legal decisions, the effects of legal decisions and finally the evaluation of legal decisions. The aim of this study is to have a normative approach and therefore it investigates the last of these four concerns: The other three areas of legal analysis are not included in this study. The study aims at identifying criterias of economic efficiency and evaluating the possible interaction between the concept of economic efficiency and the fiscal principle of neutrality. The criterias of economic efficiency are assessed from a legal and economic perspective.

[10] A.T. Peacock and G.K. Shaw, The Economic theory of fiscal policy, George Allen and Unwin LTD, London, 1971, p. 22.
[11] Niel Kommensar, In search of a general approach to a legal analysis: a comparative institutional alternative, Michigan Law Review, Vol. 79, p. 1350, 1981, Univ. of Wisconsin Legal Studies Research Paper Archival Collection.

2 Economic analysis of law

2.1 Economics and economic efficiency

2.1.1 Economics and economic analysis of law

Economics is divided into two main branches: microeconomics and macroeconomics.[12] Microeconomics studies the behaviour of individual economic units. Microeconomics explains why these units function in the economy and why they make their economic decisions.[13] Macroeconomics on the other hand deals with the level of growth rate of national output, interest rates, unemployment and corporate bonds, as well as aggregate markets for goods and services.[14] This paper deals with the behaviour of individual economic units, thus the area of microeconomics. However, taxes will effect macroeconomics such as labour supply, savings, choice of education, investments etc.[15] This paper deals with economic efficiency and the fiscal principle of neutrality. Issues foremost related to macroeconomics like tax effects on labour supply will therefore not be included.

How, and based on what preferences, consumers with a limited income make their decisions to save their money or spend them, which goods or services to buy and thereby whether to negotiate about property rights to reach the best outcome is though a core issue in economics.[16] A central problem in economics is thus how the society most efficiently can make use of its scarce resources to achieve the best possible satisfaction of wants.[17] Even though taxes, as a means to finance public spending, can be seen as part of the macroeconomic area, this paper is limited to the microeconom-

[12] Robert S. Pindyck and Daniel L. Rubinfield, Microeconomics. Seventh Edition, Pearsson Educational International, 2009, p. 1.
[13] Ibid.
[14] Ibid.
[15] Anders Björklund, Peter Englund, Lars Hultkrantz, och Mats Persson, Skatter och offentlig sektor, SNS förlag, p. 63. Klas Eklund, Vår Ekonomi, En introduktion till samhällsekonomin, Norstedts akademiska förslag, Elfte upplagan, 2007, p. 295–297.
[16] Anders Björklund, Peter Englund, Lars Hultkrantz, och Mats Persson, Skatter och offentlig sektor, SNS förlag, p. 67.
[17] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 3.

ic area, as the principle of neutrality and the relation between the principle and the concept of economic efficiency are the subject of the paper.

Economic analysis of law aims at answering two basic questions about legal rules. The first question is: what are the effects of legal rules on the behaviour of relevant actors? The second question is: what effects of legal rules are socially desirable?[18] The field of economic analysis of law can be said to have started with the findings of Bentham.[19] Bentham's writings consist of analysis of criminal law and law enforcement, some analysis of property law, and the legal process. The area of law and economics was left undeveloped until the 1960:s[20] when economic analysis of law was stimulated by four important contributions: Coase's article on externalities and legal liability[21], Becker's article on crime and law enforcement[22], Calabresi and A. D. Melamed's article on property rules [23], and Posner's general textbook on economic analysis of law as well as his establishment of the Journal of Legal Studies.[24] As this investigation indicates, research in economic analysis of law has been performed since the 1970 and is now accelerating.[25] The methods used in law and economics can be said to consist of four parts:[26]

1) The nature and origin of the existing legal system and its distribution of rights.

[18] Louis Kaplow and Steven Shavell, Economic Analysis of Law, Harvard Law School John M. Olin Center for Law, Economics and Business Discussion Paper Series, 2-7-1999, p. 4.

[19]Jeremy Bentham, An introduction to the Principles of Morals and Legislation (New York: Hafner Publishing, Co. 1948).

[20] Louis Kaplow and Steven Shavell, Economic Analysis of Law, Harvard Law School John M. Olin Center for Law, Economics and Business Discussion Paper Series, 2-7-1999, p. 4.

[21] R.H. Coase, The Problem of Social Cost, Journal of Law and Economics, 1960 p. 1–44. R.H. Coase, The Nature of the Firm, 1937, Volume 4, Economica 386–405.

[22] G. S. Becker, Crime and Punishment: An Economic Approach, Essays in the Economics of Crime and Punishment, National Bureau of Economic Research, 1974, p. 1–54.

[23] G. Calabresi and A. D. Melamed, Property Rules, Liability Rules and Inalienability: One view of the Cathedral, Harward Law Review, Volume 85, April 1972, Number 6 p. 1 089–1 128.

[24] R.A. Posener, Economic Analysis of Law, Aspen Publishers Inc.,U.S. 2010.

[25] http://www.law.uchicago.edu/alumni/magazine/fall11/lawandecon2-0, retrieved 10 March 2014.

[26] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 11–12.

2) The effect of the legal structure on the allocative efficiency
3) The necessary conditions for the development and emergence of efficient legal structures and
4) How an efficient legal structure can be implemented.[27]

2.1.2 Introduction to economic efficiency

Economic efficiency is a core term in economics and in the area of law and economics. According to Schäfer and Ott the meaning of efficiency used in economics has nothing to do with the common usage of the word.[28] "A society is considered efficient if , and only if, under given endowment it is no longer possible to improve welfare of any individual and at the same time no individual has been made worse of."[29] The allocation of the resources in society has thus reached the highest possible level of utility. The basic idea in economics is built on the theory of the economic man and how that person always acts in a rational way. An assumtion made is that all rational actors are maximizing their utility or wellbeing. The objective of the legal system is viewed to maximize social utility, i.e. works towards utility and welfare. A frequent criticism of economic analysis of law concerns its complete focus on efficiency, neglecting the idea of the redistribution of income. [30]

The term efficiency defines a situation where it is no longer possible to improve the welfare of any person while no other individual is worse off.[31] An important part of classical microeconomics is therefore analysing how and when optimal allocation efficiency is obtained. These theories can be derived from classical economic theories about the best way of allocating scarce resources and the rationality of humans in situations where scarce resources are to be distributed. [32] The underlying supposition is that jurispru-

[27] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 11–12.
[28] Ibid, p. 8.
[29] Ibid.
[30] Louis Kaplow and Steven Shavell, Economic Analysis of Law, Harvard Law School John M. Olin Center for Law, Economics and Business Discussion Paper Series, 2-7-1999, p. 78−79.
[31] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 8.
[32] Several economic theories deal with the allocation of resources such as the Pareto principle and the Kaldor–Hicks theory. These two principles represent the same thing,

dence ought to make economic considerations and evaluate legal rules and norms, taking into account whether the rules contribute to or hinder the efficient use of resources.[33] The economic analysis of law is an application of the efficiency of each respective legal rule.[34] Critics of law and economic analysis often claim that individuals and firms do not always respond to legal rules as rational maximizers of their well-being.[35] Although the foundations of the law of economic analysis has been questioned, it will, in the present study, be assumed that the concepts of legal and economic analysis form the rationale for behaviour. The objective to achive economic efficiency is interacting with other revenue objectives such as the distribution of public resources[36] and other policy objectives such as uniformity.[37] However, only the objective to achive economic efficiency is included in the scope of this study.

3 The economics of tax policy

3.1 Taxation

The word Taxation can be understood in two ways. In a stricter sense it can be understood as the taxes a certain person or company pay and in a wider sense it can mean the fiscal policy, i.e. the tax policy, of a certain government. I will use the word taxation in the latter sense. The tax system should therefore enable the government to determine the estimated tax revenue. There are different policy variables e.g. growth (increased BNP) and economic stablity (savings, investment and full employment) for

---

but in Kaldor–Hicks the possibility to compensate the "losing" party is taken into account.

[33] Bouckaert, Boudewijn and De Geest, Gerrit (eds.), Encyclopedia of Law and Economics, Volume IV. The Economics of Public and Tax Law, Cheltenham, Edward Elgar, 2000, p. 365.

[34] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 3

[35] Louis Kaplow and Steven Shavell, Economic Analysis of Law, Harvard Law School John M. Olin Center for Law, Economics and Business Discussion Paper Series, 2-7-1999, p. 78−79.

[36] Richard. A Musgrave and Peggy. B. Musgrave. Public Finance in theory and Practice, McGeaw-Hill Book Company, 1989, p. 60.

[37] J.H. Bowman, Taxation of Business Property, Is Uniformity still a Valid Norm? Praeger's National Tax Association, 1995.

which the tax system might be used as an ex ante tool.[38] It is a question of whether the maximation of the utility for an individual economic unit (individual and business) could be analogus with the maximation of the utility for the society as a whole. The economic theory of fiscal policy could be described, as has been done by Peacock and Shaw, by a model with different variables.[39] There are independent variables such as policy objectives, and dependent variables such as fiscal policy instruments and government expenditure. In an investigation of the tax systems in the United States, the United Kingdom and Sweden it has been empirically observed that different political systems influence the existing tax policies.[40]

3.2 Maxims of good taxation

The great economist Adam Smith devoted a large part of his book "An Inquiry into the Nature and Causes of the Wealth of Nations" to the discussion on government revenue and how it may be best collected, and in the most efficient way, including new taxes.[41] Smith also developed four maxims for a good tax. According to Adam Smith all nations try to construct their tax systems in order to make *their taxes*

1) *as equal* as possible; the subject of every state ought to contribute to the support of the government, as closely as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively earn under the protection of the state.[42]

2) *as certain* as they could, the amount of tax which each individual is to pay, ought to be certain and not arbitrary. The time

[38] A.T. Peacock and G.K. Shaw, The Economic theory of fiscal policy, George Allen and Unwin LTD, London, 1971, p. 23.
[39] Ibid, p. 24.
[40] S. Steinmo, Taxation and Democracy, Yale University press, 1993.
[41] Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, 1776, The Electronic Classics Series, The Pennsylvania State University, 2005. In the same book the concept "invisible hand" was set out. Each individual strives to become wealthy "intending only his own gain" but to this end he must exchange what he owns or produces with others who sufficiently value what he has to offer; in this way, by division of labour and a free market, public interest is advanced.
[42] Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, 1776, The Electronic Classics Series, The Pennsylvania State University, 2005, p. 676.

of payment, the manner of payment, the quantity to be paid, ought all to be clear and understandable to the contributor, and to every other person.[43]

3) *as convenient* to the contributor as possible both concerning the time and the mode of payment: A tax on the rent of land or buildings, is levied at the time when it is most likely to be convenient for the contributor .[44]

4) *as little burdensome* to the citizens as possible. Every tax ought to be constructed in a way that it both takes out and to keep out as little as possible of the pockets of the people, apart from what it brings into the public treasury of the state.[45]

Many recent reseachers on public finance have attempted to revise or supplement Smith's maxims. One among these is Bernard Saladine,[46] and according to him two more maxims could be added: 1) Taxes must *adapt to economic fluctations* by acting as automatic stabliliziers.[47] 2) *Tax incidence should be clear* in order for taxpayers to know who in fact pays the taxes.[48]

3.3 Tax Law and more on economic efficiency

3.3.1 Efficiency maximation

According to the prevailing view in law and economics, designers of legal rules should focus on efficiency maximization.[49] The homo economicus, or economic man, is an economic theory concept of humans as rational and narrowly self-interested actors who want to maximize utility as consumers and economic profit as producers.[50]

Hence, most of the arguments in the field of general law and economics build on the connection between a perfectly efficient systems described by Coase (strictly concering property rights) and

[43] Ibid.
[44] Ibid, p. 677.
[45] Ibid.
[46] Bernard. Saladine, The Economics of taxation, The MIT Press, Cambridge, Massachusetts, London, England, 2002, p. 59.
[47] Ibid.
[48] Ibid.
[49] Alex Raskolnivok, Accepting the Limits of Tax Law and Economics, 99 Cornell L. Rev. 523 (2013), p. 545.
[50] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 51.

Pareto (strictly concering fiscal policy) as an example tax policy and the legal rules and sanctions as they have been defined earlier. Economic efficiency does not have to be equivalent to fairness or equality, two possible effects of the legal principles. The fundamental conclusion that the optimal tax is a progressive, nonlinear tax on *labour income* is as widely accepted in public economics as any other. [51]

Efficiency is the ultimate satisfaction and as it does not involve the consideration of moral rights, so a truly efficient society might be unjust and not accure to the principles of justice and fairness. By that it ought to be noted that economic efficiency is merely one of the maxims of Adam Smith. Efficiency occurs when we can obtain the ultimate satisfaction from a given amount of resources. Hence, economic efficiency for our economy is achieved when we cannot increase our satisfaction of wants and needs by producing more of one good and less of another. There are several ways to allocate resources in order to make a tax consistent to the priciples of justice and fairness. These goals can be achieved by using different tools such as: the adminitrative and bureaucratic process, the political decision making process and finally in bargaining situations.[52] Accordingly, defining a tax rule as "inefficient" can only mean that it is distortive.[53] Economics thereby deals with the question of how to use resources in the most efficient way to satisfy the consumer interests in the best way. [54] It thereby needs to be assessed whether a goal which is to contribute to a system that is non-distortive, and by that efficient, could also make the system accrue to the neutrality principle, and what criteria would then need to be met. Neutrality thus leads to efficiency and non-distortion.

[51] There are numerous articles on the issue of optimal taxation, see Encyclopedia of Law and Economics, Volume IV, The economics of Public and Tax Law, Edited by B. Bouckhart and G. De Geest, Edward Elgard, Cheltehan, Norrh Hampton 2000, Bibliography collected on subject Optimal taxation: General, p. 1–10 with references.
[52] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 11–12.
[53]Alex Rashkolnoikov, Accepting the limits of tax law and economics, Cornell Law review, Vol. 98:523, p. 528.
[54] Richard. A Musgrave and Peggy. B. Musgrave. Public Finance in theory and Practice, McGeaw-Hill Book Company, 1989, p. 60.

Economics has laid down the rules needed for a solution to be considered efficient.[55] There are basically two observed critera of economic efficency in economics. The first is called Pareto optimality[56] and the second called Kaldor-Hicks efficiency[57]. The former could be defined as: "A social state where the improvement of the situation for one person always leads to a situation where at least one other person is made worse off."[58] The latter could be defined as : "A social state X is distuinguished form a social state Y in that at least one citizen prefers Y to X. A decision should be made in favour of X if it is possible to compensate those who are worse off in X from the negative effects of thedecision if those who preffered X still have an advantage from the decision."[59]

In a pareto optimal world you have made the allocation of resources optimal by preventing resources from being allocated in a way that one person can be better off without somebody else becoming worse off. On the other hand, if one person can be better off without somebody else becoming worse off, pareto optimality is not yet obtained.[60] In a Pareto efficient world social justice is not taken into consideration.

3.3.2 Conditons for economic efficieny

Efficiency can be described as determing how resources are used most efficiently. Musgrave, in a book on public finance, defines efficiency if certain conditions are met.[61]

The first condition deals with *production efficiency*. Efficiency in an economy with two consumers A and B and two products X and Y is met if the production of X is performed in a way that permits the largest amount of Y to be produced at the same time, and vice ver-sa. To give an example: if one production permits 100 units of X and 80 units of Y and another production permits 100 units of X

[55] Richard. A Musgrave and Peggy. B. Musgrave. Public Finance in theory and Practice. , McGeaw-Hill Book Company, 1989, p. 61.
[56] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 23–28.
[57] Ibid, p. 28–34.
[58] Ibid, p. 23.
[59] Ibid, p. 28–34.
[60] Ibid.
[61] Richard. A Musgrave and Peggy. B. Musgrave. Public Finance in theory and Practice, McGeaw-Hill Book Company, 1989, p. 61.

and 50 units of Y the former method of production is preferred.[62] In my opinion it is possible to create a situation where the bias for one production method could be counteracted by tax rules. This could be the case if one production method is supported by the tax system, for example by more favourable depreciation rules for certain fixed assets used for production.

The second condition defines *consumption efficiency*. The marginal rate between the goods X and Y must be the same for customer A and B. The lowest rate at which A and B are willing to trade the last unit of X for an additional unit of Y should be the same for both actors. If A is willing to trade one unit of X for three units of Y and B is willing to give four units of Y in order to get one unit of X, they will exchange and a negotiation will occur as both parties gain by exchanging.

The third condition defines the interaction between productions an consumption, consumption – production efficiency.[63] The third condition is designed to apply in an ideal world where the production and consumption interact to the most efficient tax system. The marginal rate for substitution of X for Y in consumption should be the same as the marginal rate of transformation in production that is how many extra units of X can be produced if one unit of Y is produced. If the marginal rate for consumption is 3 X for 2 Y but the marginal rate for production is 3 X for 2 Y it will be desirable to increase the output X and reduce Y until the ratio is equalised.[64]

3.3.3 Obtacles to economic efficiecy

There are severeal obstacles that might affect the economic efficieny, for example a transaction cost.[65] The first task in an transaction is to search information about and find a contact partner. If this is a severe problems in finding a partner there are intermediators such as brookers in order to decrease the obstacles. But an intermediation service also introduces a calculable

[62] Ibid.
[63] Ibid.
[64] Ibid.
[65] O. Williamsson, Transaction cost economics: the governance of contractual relations, The journal of law and economics, 1979, p. 233–261.

transaction cost. There are transaction costs in bargaining about the goods or servics of the transaction. Questions like: who ought to bear the risk, what is the value of the asset etc. will be raised. There might also be policy and enforcement costs such as supervision by administrative authorities, autonomus collective organisations, or supervision agencys.

There are three factors that influence the transaction costs; transaction frequency, the degree of asset specificity, and uncertainty about future demand and supply.[66] Frequency in a contract in addition to asset specificity will increase the contracting costs. Less uncertainty in the contract will give lower transaction costs. In an economic efficient outcome the tax treatment of the transaction costs may be relevant as they could be deductible or not, and in the latter case must be capitalised and thus have a larger impact on the economic outcome. However there are different views on whether transaction costs ought to be included in a model of an efficient economic transaction. An economically efficient outcome is described in the Coase theorem. As I interpret the Nobel Prize winner, Coases theorem parties act on a completely competitive market without transaction costs and will naturally move towards the most efficient and mutually beneficial outcome.[67]

The criteria of economic efficiency therefore take a starting point in the theorem formulated by the Nobel Price Winner Ronald Coase, who has written one of the most cited articles of all times in the area, which formulated the base for the Coase theorem. Even though the theroem deal with property rights, it is relevant. According to the Coases theorem, parties on a completely competitive market, without transaction costs, will naturally gravitate toward the most efficient and mutually beneficial outcome.

[66] O. Williamsson, Transaction cost economics: the governance of contractual relations, The journal of law and economics, 1979, p. 233–261.

[67] Ronald Coase, The problem of Social, Cost Journal of Law and Economics, Vol. 3 (Oct., 1960), p. 1–44. This article is actually the most cited Law Review article of all time, se Fred R. Shapiro and Michelle Pearse's essay The Most-Cited Law Review Articles of All Time, 110 Mich. L. Rev. 1483 (2012).

3.4 The concept of Neutrality in Tax Policy

3.4.1 Is it possible to define and evaluate neutrality?

The assessment made in this study identifies and measures the connection between the fiscal principle of neutrality and efficiency maximization – the ultimate goal of law and economics. The principle of neutrality implies that tax systems ought not to affect individuals' behaviour and thus lead to a tax-adapted behaviour. The economic criterion for neutral taxation is in principle that taxation should be designed in such a way that taxpayers act in the same way as if there were no taxes.[68]

The tax system and thereby tax liability are determined by two factors, the tax base and the tax rates. One of the central results of economic theory is that tax systems should *not prevent production efficiency.*[69] Production efficiency holds if all activities generate the same rate of return at the margin.[70] If savers invest in alternative assets or activities and the pre-tax marginal could be affected by different taxes, for example a

- comprehensive income tax
- expenditure tax[71]
- taxes that internalise externalities (i.e. aiming to balance results of market failures. Such taxes evokes a discussion of corrective taxes that equals to expected harm versus regulation taxes), called Pigouvian taxes[72]
- negative income tax[73]
- excess profits taxes, also called Windfall taxes[74]

[68] Kristina Ståhl, Aktiebeskattning och fria kapitalrörelser, Iustus förlag, 1996, p. 89.
[69] Richard. A Musgrave and Peggy. B. Musgrave. Public Finance in theory and Practice., McGeaw-Hill Book Company, 1989, p. 61.
[70] P.A. Diamond and J. A. Mirrlees (1971) Optimal taxation and public production I, Production efficiency and II: Tax Rules, American Economic Review 61, p. 8–27 and 261–278.
[71] N. Kaldor, (1955) An Expenditure Tax, London, Alen & Unwin.
[72] A.C. Pigou (1920) The Economics of Welfare, London Maximilian. (The Economics of Welfare. (4th edn.) Macmillan, London (1948).
[73] Tobin, J., Pechman, J. A., and Mieszkowski, P. M. Is a Negative Income Tax Practical? Yale Law Journal, November 1967, 1–27.
[74] Harold M. Groves, Tax Philosophers, Two hundred years of Thought in Great Britain and the United States, Edited by Donald J. Carran, The University of Wisconsin Press, 1974, p. 72.

Arbitrary tax base rules or different tax rates in the tax system will affect the post-tax result and thereby influence the decisions that the investor is about to make.[75] At first sight it seems obvious that an expenditure tax will be the most economically efficient tax as a tax on savings could make people save less and consumption patterns will be affected.[76] A tax which does not distort any economic activities would be optimal.[77] But presumably there exist distortions in all tax systems as the systems in themselves usually is aiming at redistribution.[78] We must therefore consider a system where tax- induced distortions exist, but we ought to aim for tax systems which minimise distortions. If such a system was obtained, it could become an optimal tax system. There exists a theory of an optimal taxation, as initiated by Mirrlees.[79] According the interpreters of the theory an optimal neutral tax is a theoretical tax which avoids distortion and inefficiency completely.[80] As I understand the theory, optimal taxation is non-applicable if a tax-payer that must choose between two mutually exclusive economic projects that have the same pre-tax risk and returns, but one of the projects has lower tax and by that higher post-tax return - and the latter project will be preferred by the economic man.

Even though there are authors advocating the difficulties to apply the methods of law and economics on tax policy, e.g. due to the redistribution problem,[81] I have chosen the methods used in law and economics as a starting point. As previously mentioned, an analysis can be said to consist of four parts. Thus, as this study is aiming at a legal and economic perspective the study ought to asses and, if possible, evaluate[82]

[75] Michael. P. Devereux, The Economics of Tax Policy, Oxford university Press, 1996, p. 12.
[76] Ibid.
[77] Ibid.
[78] Ibid.
[79] Diamond, P. A. and Mirrlees, J., 1971, "Optimal taxation and public production I–II," American Economic Review, p. 61, 8–27, 261–278.
[80] Murray Rothbard, Man, Economy, and State with Power and Market, The Ludwig von Mises Institute, West Magnolia Avenue, Auburn, Alabama 2009, p. 970 and forward and F. P. Ramsey (1927) "A Contribution to the Theory of Taxation," The Economic Journal, 37, no. 145, (March 1927), 47–61.
[81] Alex Raskolnivok, Accepting the Limits of Tax Law and Economics, 99 Cornell L. Rev. 523 (2013), p. 545.
[82] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 11–12.

- The nature and origin of the existing legal system and its distribution of rights.
- The effect of the legal structure on the allocative efficiency
- The necessary conditions for the development and emergence of efficient legal structures and
- How an efficient legal structure can be implemented.[83]

To make an assessment of the *nature and origin of the existing legal system and its distribution of rights* is out of scope of this study, as only economic efficiency is interacting with the objectives of the distribution of public resources and uniformity. However, some prominent goals of the Swedish tax system could be identified. The Swedish tax reform of 1991 is said to be the most far-reaching reform in any industrialized country in the post-war period.[84] It represents a thorough application of a strategy of rate cuts and base broadening, and it is said to have affected a myriad of economic incentives in a more or less substantial way.[85] Pre reform many Swedish economists argued, as did many of their colleagues in the United States, that the lack of a level playing field created substantial efficiency losses.[86] The Swedish Government expressed that the overall goal of the tax reform was to achieve an economically efficient taxation with distributional effects.[87] In economic terms it is said to aim increasing economic efficiency [88] and thereby decreasing deadweight losses.[89] First of all, there must be a definition of income to

[83] Hans-Bernard Schäfer and Claus Ott, The Economic analysis of civil law, Edward Elgar, Cheltenham UK, 2004 p. 11–12.

[84] Jonas Agell, Peter Englund and Jan Södersten, Tax Reform of the Century – The Swedish Experiment, National Tax Journal Volume 49 no. 4 (December 1996) p. 644.

[85] Ibid, p. 643–64. According the article as early as 1978, Nobel Laureate Gunnar Myrdal complained that high marginal tax rates had turned Sweden into a "nation of wanglers." According to Myrdal (1978), the progressive income tax had created such strong incentives for high-income individuals to exploit various tax avoidance schemes (including outright tax fraud) that the Swedish tax system no longer redistributed income.

[86] Jonas Agell, Peter Englund and Jan Södersten, Tax Reform of the Century – The Swedish Experiment, National Tax Journal Volume 49 no. 4 (December 1996) p. 644.

[87] Prop. 1989/90:110, Om reformerad inkomst- och företagsbeskattning p. 294.

[88] Bo Södersten, Carl-Gustav Fernlund, Cecilia Gunne, Ingemar Hansson och Anders Kristoffersson, Den stora reformen, Handbok om de nya skatterna, SNS Förlag 1991, p. 13 and 33.

[89] R Musgrave & P Musgrave, Public Finance in Theory and Practice, Fifth edition, McGraw-Hill Book Company, 1989, p. 216 (part B. Requirements for a "good" Tax Structure. Interference with economic decisions in otherwise effective markets causes

evaluate whether there is a level playing field. Once the distribution of income is measured, the effects of various proposed policy changes to income distribution can be analysed. Because tax policy is intimately connected to income distribution, analyses routinely quantify the effects of proposed tax changes to the distribution of income, but the same method can be used for proposals in any other area of public policy. The concept of income is also used in the social sciences, for example when studying how income affects behaviour. Irving Fisher settled a definition stating that capital gains, appreciation, and savings are not true incomes.[90] Haig defines personal income as "The money value of the net accretion to one's economic power between two points of time". This definition thus includes consumption.[91] Simon's definition however expresses that personal income is the algebraic sum of 1) the market value of rights exercised in consumption and 2) the change in the value of the store of property rights between the beginning and the end of the period in question.[92]

It seems to me that neutrality and uniformity are difficult both to determine and to measure. A way of measuring neutrality in the tax system is to measure the cost of tax distortions, and thereby the efficiency costs.[93] A way to achieve uniformity is to broaden tax bases, identify and assess tax expenditures and decreases tax rates.[94] The *effect of the legal structure on the allocative efficiency* was, when it comes to the tax reform, said to be aiming at the elimination of

”excess burdens” which should be minimized.) ”If the excess burden apply burden applies the consumers expenditure pattern has been distorted by the tax and each suffers a burden which is greater than that which would have applied if he or she paid the same amount as a flat charge. Because of this, the overall burden suffered by the private sector tends to exceed the amount of revenue obtained. An addition burden - referred to by economists as excess burden or deadweight loss - results” p. 236.

[90] Irving Fisher, Income in Theory and Income Taxation in Practice, Econometrica, Vol. 5, No. 1, Jan., 1937. Harold M. Groves, Tax Philosophers, Two hundred years of Thought in Great Britain and the United States, Edited by Donald J. Carran, The University of Wisconsin Press, 1974, p. 108.

[91] Robert Murray Haig, "The Concept of Income – Economic and Legal Aspects," in R.M. Haig, The Federal Income Tax, New York: Columbia University Press, 1921) p. 27.

[92] Henry C. Simons, Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy, (Chicago: University of Chicago Press, 1938), p. 50.

[93] Don Fullerton and Andrew B. Lyon Tax Neutrality and Intangible Capital, Tax Policy and the Economy, Volume 2 (1988), MIT Press p. 74.

[94] Bo Södersten, Carl-Gustav Fernlund, Cecilia Gunne, Ingemar Hansson och Anders Kristoffersson, Den stora reformen, Handbok om de nya skatterna, SNS förlag 1991, p. 29–44.

substantial efficiency losses and dead-weight losses. According to my opinion the necessary conditions for the development and emergence of efficient legal structures were to create a level playing field by broadening tax bases and decreasing tax rates, as in the tax reform. Such an efficient legal structure can then be implemented in accordance with the four maxims for good taxation.[95]

How an efficient legal structure can be implemented is difficult to answer, but to apply the *neutrality principle* that calls for an efficient outcome together with objectives that have not been addressed in this paper, such as the *principle of fairness*[96] and the *principle of equality*[97] seems to apply for at least the first three of the four good taxation maxims of Adam Smith i.e. a tax that is 1) as equal 2) as certain 3) as little burdensome to the citizens as possible and finally 4) as convenient as possible to the contributor.

4 Conclusions

In this paper I aim to identify criteria of economic efficiency and evaluate the possible interaction between economic efficiency and the fiscal principle of neutrality. The criteria of economic efficiency are assessed from a legal and economic perspective.

It seems important to initially note that the concept of a good tax policy calls for other objectives besides economic efficiency. These other objectives such as the principles of fairness and equality, have not been addressed in this paper. A tax policy which, besides economic efficiency, also adresses other principles will thus be more in line with the maxims of good taxation as formulated by Adam Smith.

The criteria of economic efficiency takes a starting point in the theorem formulated by the Nobel Price Winner Ronald Coase who, in one of the most cited articles of all times in the area,

[95] Supra, 3.2.
[96] Åsa Gunnarsson, Skatterättvisa, Iustus förlag, Uppsala 1995. George Klosko, Political Obligations, Oxford University Press, 2010, p. 86 ff. Sigrid Hemels, Fairness: A Legal Principle in EU Tax Law?, Erasmus University Rotterdam (EUR) - Erasmus School of Law, Paper for the 8th Greit Annual Conference 'Principles of Law: Function, Status & Impact in the EU Tax Law', Lund, 19–20 June 2013.
[97] Robert Påhlsson, Likhet inför skattelag, Iustus förlag 2007. Jonathan Wolff, Equality in the History of Political Philosophy, The Oxford handbook of Political Philosophy p. 611–624.

formulated the base for the Coase theorem. According to the Coases theorem, parties on a completely competitive market, without transaction costs, will naturally gravitate toward the most efficient and mutually beneficial outcome. When defining the criteria of economic efficiency and evaluating the possible interaction between the concept of economic efficiency and the fiscal principle of neutrality there is, in my opinion, also the concept of Pareto efficiency, also called Pareto optimality, to be considered due to its crucial importance concerning economic efficiency and taxes.

In a Pareto optimal world the allocation of resources has been made optimal by preventing resources from being allocated in a way that one person can be better off without somebody else becoming worse off. On the other hand, if one person can be better off without somebody else becoming worse off, Pareto optimality is not yet obtained. Assuming that parties act rationally, as in the economic man theory, economic efficiency could be considered to consist of three parts. The first part is *production efficiency*, the second part is *consumption efficiency* and the third part defines the interaction between productions and consumption, *consumption – production efficiency*.

From my point of view, economic efficiency can be defined as creating possibilities for the parties to act according to the Pareto efficiency towards the most efficient and mutually beneficial outcome. The neutrality principle is not a purely legal principle, and ought to be defined as a principle derived from economic theory. Tax policy based on the neutrality principle is non-distortive and thus economically efficient. A way to evaluate neutrality in a tax systems is to measure the amount and magnitude of tax distortion, and thereby the efficiency costs. The concepts of economic efficiency and the neutrality principle interact completely! Accordingly, reffering to a tax rule as "inefficient" can only mean that it is distortive and non-neutral, and vice versa. Tax distortion is likely to affect consumer and production behaviour and might also create changes in the tax gap. Strategies for designing and implementing non-distortive and neutral taxes are found in e.g. the theory of optimal taxation.[98] But it has to be kept in mind that the neutrality principle, and by that economic effciency for which non–

[98] P.A. Diamond and J. A. Mirrlees (1971) Optimal taxation and public production I, Production efficiency and II: Tax Rules, American Economic Review 61, p. 8 –27 and 261–278.

distortion is pivotal, is not the only objective in a good tax system. There is propably in the most political systems also a desire to allocate resources and formulate tax policy in order to keep it in line with other legal objectives, e.g. the priciples of justice and fairness. The maxims of the good tax system has to be evaluated together!

In order to decide whether a tax is distortive or not there are certain factors that have to be evaluated, such as the tax base and tax rates. It is, for example, well known that the legal definitions, such as the tax base, affect behaviour.[99] When to determine the tax base, the concept of "income" needs to be defined. All income ought to be taxed in a similar way, ceteris paribus. In order to eliminate the effects of transactions costs they ought to, as far as possible, be deductible. Any deferral of the actual tax payment creates a difference between those who need to actually pay the taxes and those who may get a deferral for the actual payment of the tax. Such differences are likely to affect behaviour and ought to be minimized. In my view distortions could also be created by more favourable depreciation rules for certain fixed assets, so far as any differences cannot be justified as actions to minimize distortions or motivated by distributional reasons. The same goes for tax expenditures.

If behaviour is affected by the tax rules, the taxes are distortive. It goes without saying that striving for non-distortive taxes is not applicable to Pigeouvian taxes, as these taxes have as an objective to affect behavior and balance an inefficient market outcome.

Taxes should not create bias for certain choices. In a full scale neutrality evaluation of non-Pigeouvian tax rules, the legal analysis could preferably be broadened. Such a broadened analysis would also deal with consumer and production behaviour and by that their responds to tax rules. An indication of non-neutrality is when the tax payers adjust their behaviour of: investment, financing, consumption, work or leisure, according to the tax rules. Such an adjustment affects the economic efficiency of production, consumption and last, but not least, consumption-–production efficiency.

[99] Erich Kirchler, Boris Maciejovisky and Fredrich Schnider, Everyday representation of tax avoidance, tax evasion and tax flight: Do legal differences matter? Humbolt University of Berlin, Economic Series Discussion paper, NO 187.

Murray Rothbard advocates that "there is no such thing as a "neutral tax" – a tax that will leave the market free and undisturbed – just as there is no such thing as neutral money."[100] I share the opinion that this could be the case, due to the complexity of the principle of neutrality. Legal engineering of taxes could, and should, have as an ambition to prevent tax bias for certain choices and thereby market distortions. Though, there are cases of justified state intervetion such as in market failures or if production is creating negative externalities, as in the case of Pigeouvian taxes. A tax policy should also, besides neutrality, adress other principles in line with the maxims of good taxation as formulated by Adam Smith.

Legal engineering are of great importance in order to *ex ante* keep the tax system in line with the principle of neutrality and the other maxims of the good tax system. It must be concluded that without empirically founded knowledge on the actual effects of taxes on people's behaviour we are in fact without guidance on what is, *ex post*, neutral taxes.

[100] Murray Rothbard, Man, Economy, and State with Power and Market, The Ludwig von Mises Institute, West Magnolia Avenue, Auburn, Alabama 2009, p. 1216. Rothbard also advocates "Why consider neutrality an ideal? The answer is that all services, all activities, can be provided in two ways only: by freedom or by coercion. Hence, the use of neutrality is a benchmark to answer the question: Why do you want the State to step in and alter market conditions in this case."