LUND UNIVERSITY

Equal taxation as a basis for classifying financial instruments as debt or equity - a Swedish case study

Hilling, Axel; Vilhelmsson, Anders

[Link to publication](#)

CONTENTS

Atax
UNSW

eJournal of Tax Research

eJournal of Tax Research

EDITORS' NOTE

The *eJournal of Tax Research* is a refereed journal that publishes original, scholarly works on all aspects of taxation. It aims to promote timely dissemination of research and public discussion of tax-related issues, from both theoretical and practical perspectives. It provides a channel for academics, researchers, practitioners, administrators, judges and policy makers to enhance their understanding and knowledge of taxation. The journal emphasises the interdisciplinary nature of taxation.

SUBMISSION OF ORIGINAL MATERIAL

Submission of original contributions on any topic of tax interest is welcomed, and should be sent as an email attachment (Microsoft Word format) to the Production Editor at <ejtr@unsw.edu.au>. Submission of a manuscript is taken to imply that it is an unpublished work and has not already been submitted for publication elsewhere. Potential authors are requested to follow the "Notes to Authors", which is available from the journal's website.

WEBPAGE

Current and past issues of the *eJournal of Tax Research* are available via the journal's website: https://www.business.unsw.edu.au/research/research-journals/atax-journal.

Equal taxation as a basis for classifying financial instruments as debt or equity—a Swedish case study

Axel Hilling[1] and Anders Vilhelmsson[2]

Abstract

This article examines the way in which classification of financial instruments as debt or equity has developed in the Swedish income taxation system over the past 25 years. Although the structure of the tax system is based on the assumption that debt instruments are financial instruments with low risk, legal developments have not shared that assumption, resulting in several types of high-risk derivative instruments being covered by the definition of legal debt. This article illustrates how those developments, which can be recognised in most income-tax systems within OECD countries, seriously threatens the fundament of the tax system: equal taxation for capital income and income from labour. The article concludes by illustrating how the standard solution to the problem of classifying financial instruments as debt and equity—by treating them alike—does not fulfill the challenged principle of equal taxation, but actually intensifies the development towards unequal taxation.

Keywords: *Debt, equity, derivatives, income tax, flat tax, financial theory, Swedish tax law, horizontal equity*

---

1.   INTRODUCTION

1.1   Equal or effective income taxation?

Although the history of tax planning with intercompany interest deductions dates back at least 30 years in Sweden, it was not until 2009[3] that it was considered such a serious threat to the tax base that Sweden introduced legislation to prevent it.[4] These provisions were introduced when tax audits on Swedish multinational enterprises indicated an annual base erosion of approximately SEK 25 billion.[5] Two additional investigations by the Tax Agency revealed inefficiency in the 2009 limitation rules, resulting in the launch of second-generation limitation rules on interest deductions in 2013.[6]

Since first introduced in 2009, the anti-avoidance rules have been heavily criticised for their vagueness, and even for being in conflict with the the Treaty on the Functioning of the European Union.[7] Consequently, the Swedish Committee on Corporate Taxation (*Företagsskattekommittén*) was given the assignment of presenting new regulations that could replace the criticised rules. In June 2014, the Committee proposed a new corporate income tax system that involved extensive limitation rules on interest deductions.[8]

Outside Sweden, *base erosion and profit shifting (BEPS)*—the process of moving profits to a lower-tax jurisdiction—have been addressed by the Organisation of Economic Co-operation and Development (OECD) and the European Commission. In these high-profile projects, the main purpose of which is to facilitate the drafting of tax law that makes it possible for member countries to tax income generated within their borders, anti-avoidance rules on companies' interest deductions are essential.[9]

In national and international efforts to find methods that make it possible to tax production where it is conducted, the focus is on corporate income taxation. The theoretical basis for such new tax models as the comprehensive business income tax (CBIT) and allowance for corporate equity (ACE) are based predominantly on economic research focusing on the way different tax rules affect the behaviour of multinational enterprises.[10] New models to meet the challenges of base erosion and profit shifting involve equal treatment of debt and equity to the highest possible extent. According to relevant theory, such treatment will make the corporate income tax systems more effective, compared to a situation in which debt and equity are treated differently.[11]

The theories encouraging equal treatment of debt and equity are far from new—a noteworthy fact in the OECD's ongoing BEPS project. The most fundamental of

---

[3] Prop. 2008/09:65.

[4] Hilling, A 2012 p. 313–315.

[5] Swedish Tax Agency, 2008.

[6] Swedish Tax Agency, 2009 and 2011; Prop. 2012/13:1. See also Swedish Tax Agency, 2014.

[7] See Section 5.3.1.

[8] SOU 2014:40. For a presentation of the proposal, see Lodin, 2014.

[9] OECD, 2013a/b and COM, 2012, 722 final.

[10] See especially Auerbach et al., 2010 and de Mooij & Devereux, 2011. The dominance of economic literature, in relation to legal ditto, is conspicuous in the proposal of the Swedish Committee on Corporate Taxation, see SOU 2014:40, pp. 85–120.

[11] de Mooij, 2011, pp. 9–12.

these principles can be traced back many decades.[12] Thus the financial/economic theories on which new tax systems are founded are generally much older than most tax systems, such as the Swedish system of 1990, which are now subject to major makeovers. This idiosyncrasy raises the following question: why did the tax legislators not rely on these theories when today's tax system was designed? More specifically, why did the tax legislators not treat debt and equity alike when designing the tax systems that are now being overhauled?

When the current Swedish income tax system was designed, the corporate income tax system was expressly perceived as an integrated part of the taxation of individual earnings from capital investments.[13] Consequently, the perspective of the system differed from the current one, focusing as it did on the taxation of company owners rather than companies. Goals for effective corporate income taxation thus had to be balanced against other goals of the income tax system—for example, equal taxation of individuals.

As for the Swedish taxation of income from capital, the preparatory works to the 1990 tax reform required horizontal equity: not only should capital income be taxed the same as income from labour but equal tax should apply to the various types of capital income.[14] The principle of horizontal equity had a strong status at the time the income tax system was drafted and has seriously influenced the structure of the system.[15] As a result, Swedish corporate income taxation was initially structured as an integrated part of the entire income tax system, the overall goal of which was to tax income equally at the individual level.

Because of the foundation of today's tax system in the principle of horizontal equity and because corporate income taxation is structured as an integrated part of a system, tax legislators' arguments in favour of new corporate income taxation are open to criticism. Treating corporate income taxation in isolation from the rest of the tax system clearly challenges the objective of horizontal equity, which is a fundamental element of the system and triggers the question of whether tax legislators now find it more important to support effective corporate income taxation than to support equal income taxation for individuals. It also triggers the question of whether it is possible to maintain equal taxation and still defend the corporate tax base from international tax planning.

We have found no evidence that the Swedish tax legislators have announced a shift in preference of their tax law policy from equal taxation to effective corporate income taxation. Furthermore, debt and equity financing and multinational enterprises existed prior 1990, and were apparently not considered an insoluble obstacle for equal taxation when the 1990 tax system was constructed. Consequently, there must be another reason for shifting the focus from equal to effective taxation.

We argue in this article that it is the tax legislators' inability to classify new financial instrument as debt or equity properly that has forced them to abandon equal taxation. More specifically, it is the legal distinction between debt instruments and derivative instruments that constitutes the seemingly irresolvable classification issue.

---

[12] See Seligman, 1925, pp. 271–315; Modigliani & Miller, 1958.

[13] SOU 1989:34, part I, pp. 207–215, and Prop. 1989/90:110, pp. 514–519.

[14] Prop. 1989/90:110, pp. 296, 304–305, 388 and SOU 1989:33, part I pp. 60–72.

[15] SOU 1989:33, part I pp. 49–56. About horizontal equity, see Holmes, 2001, pp. 19–21.

1.2   Purpose

The legal distinction between debt and equity has been subject to extensive doctrinal discussions in Europe and North America.[16] In most cases, the international challenge—the challenge for open economies to collect revenue in a globalised world—forms the basis for the discussion.[17] Thus, much of the discussion focuses on the impact on corporate behaviour (efficiency and neutrality) of different solutions for classifying debt and equity and/or how these solutions relate to states' tax revenues.[18] Accordingly, the theoretical basis is primarily financial theory and theories of public economy.[19] Knowing, however, that a fundamental basis for all tax systems is that the taxpayer—eventually the individuals within the taxing jurisdiction—perceives the tax system as fair, we consider equal taxation merely as a relevant basis for evaluating legal classification within a tax system.[20] Thus, this article takes a somewhat different perspective on a subject that has already been heavily debated. Its explicit purpose is to present tax equality (horizontal equity) as a reason for treating income from debt and equity differently, and to demonstrate how the general trend in corporate income taxation (treating debt and equity alike) challenges horizontal equity. We use the Swedish income tax system in our presentation, illustrating its development from equal income taxation to unequal but (deemed) effective corporate income taxation.

1.3   The Swedish tax system—an overview

The Swedish income tax system differs from most other income tax systems as it is a dual income tax system. The content of this difference is presented in more detail in sections four and five below. To facilitate a general understanding of this system, however, and thus make the article easier to follow right from the beginning, this section provides a very short overview of relevant parts of the system, and how they relate to the general problems dealt with in the article.

The Swedish dual income tax system taxes personal income through two separate income tax schedules: capital income and wages. Capital income is taxed at a flat rate while wages are taxed at a progressive rate. The flat tax on income from all kinds of different assets is a challenge in terms of horizontal equity in taxation of real capital income. The effective tax on the real income from a capital investment will differ according to the investment's appreciation in value over time—its risk. Assets with a greater appreciation over time will be subject to a lower effective income tax on the real income when compared to assets with a low appreciation over time. In order to deal with this challenge, and thus maintain horizontal equity, financial instruments with a potential for great appreciation over time—equity instruments—are subject to economic double taxation whereas financial instruments with limited potential for value appreciation over time—debt—are not.

This article focuses on this risk-based taxation of debt and equity, and how hybrid financial instruments can be used to circumvent the system by exploiting weaknesses in the legal classification of these instruments. The use of hybrid instruments results

---

[16] See Pratt, 2000; Schoen, 2009; Brown, 2012; Marres & Weber, 2012.

[17] See Bundgaard, 2014; Eberhartinger & Six 2009. See also Folkvord & Riis Jacobsen, 2014 regarding the international challenge and its impact on the Nordic countries.

[18] See Bärsch, 2012, pp. 44–52; Marres & Weber, 2012.

[19] See generally Blessing, 2012.

[20] See Avi-Yonah, 2006; Alley & Bentley, 2005.

in the avoidance of economic double taxation on income from assets with potential for significant appreciation over time, and is thus an effective tax on the real income from these instruments that is substantially lower than the effective tax on income from assets with the same financial risk.

1.4   Outline

The remainder of this article is organised in three parts, the first of which—Section 2: *Taxing financial instruments* and Section 3: *Distinguishing between debt and derivatives*—presents the general structure of the Swedish tax system and the basics of financial engineering. The purpose of these sections is to present the conditions which have eventually motivated the Swedish tax law maker to abandon equal taxation. The second part of the article—Section 4: *Taxation of capital income* and Section 5: *The problem and how it is handled*—presents legal developments within the relevant areas, why these developments were found to be unsatisfactory, and how they were dealt with in new legislation. Section 6: *Unequal taxation* and Section 7: *Conclusions* illustrate the effects that the new regulations have had, and will have, on capital taxation, as well as the extent to which these effects are in accordance with the fundamental principle of equal taxation. Finally, this section summarises the article and offers some concluding remarks.

2.   TAXING FINANCIAL INSTRUMENTS

2.1   General characteristics

Our key conclusion is that derivatives cause insoluble classification issues that severely challenge the traditional tax system, in which the treatment of financial instruments is based on their legal form.[21] Knowing that derivatives and other financial instruments are often perceived as a relatively challenging area within tax law, the following sections present some general information on the characteristics of derivatives and other financial instruments, and how they generate income.

2.2   Derivatives

Throughout this article, we refer to plain vanilla derivatives, forwards and options, which are explained in greater detail in Section 3.2. At this point, however, it is worth noting that *derivatives are financial instruments that provide returns directly related to the returns of the instrument that underlies them*—for example, corporate stock. There is a difference between investing in a corporate stock and investing in its derivative: the derivative investment demands less capital, yet the possible return can be the same. Thus, in relation to an investment in corporate stock, an equity derivative provides a much higher return and is often referred to as a *leveraged instrument*.

---

[21] See Section 7.

2.3   Three subcategories of financial instruments

A *financial instrument* can broadly be defined as:

> any evidence of the legal relationship arising from the provision of money, property, or a promise to pay money or property by one person to another in consideration for a promise by the other person to provide money or property at some future time or times, or upon the occurrence or non-occurrence of some future event or events.[22]

In Swedish income taxation, it has been found necessary to divide these instruments into at least three subcategories: *debt, equity,* and *derivatives on assets other than debt and equity*. In the corporate income taxation system, the distinction between debt and derivatives has been of limited importance because the returns from either kind are treated alike. Because the return from equity is treated differently, however, the distinction between debt and equity has been a major issue in corporate income taxation. Furthermore, because debt is treated favourably to equity and to derivatives on other assets when held by individuals, Swedish taxation of individual capital income includes classification issues between debt and equity and between debt and derivatives.

2.4   Return from financial instruments

2.4.1   *Two kinds of income*

In analysing the income taxation of financial instruments, it is important to understand that these instruments provide two types of income: *income from production* and *windfall gains (speculation income)*. The holder of a financial instrument may, in many situations, choose whether the income shall be distributed as current income or as capital gains. Thus, the following sections briefly outline the general differences between these two types of income and how it may be distributed.

2.4.2   *Income from production*

The extensive concept of income used in Swedish income taxation includes income from production and from windfall gains.[23] Income from production generally equals Sweden's net domestic product (NDP), which leads to the conclusion that NDP never exceeds the investor's total income. This conclusion is challenged, however, if those who invested in Swedish production have large debts to, or claims in, foreign countries. In cases where investors have large debts to foreign countries, their net income will be reduced, and will therefore become smaller than their production output.[24] If an investor has large claims in foreign countries, the opposite occurs.

If capital is invested in production, the return from the investment will be distributed as interest, dividends or capital gains. The legal contents of these concepts are further discussed in Section 4. In order to facilitate the understanding of these legal concepts, however, it is necessary to stress that a capital investor may, in many situations, be able to choose whether the value of the production is distributed as dividends and/or

---

[22] Edgar, 2000, pp. 4–5.

[23] The concept of income generally corresponds to what is commonly referred to as the Schanz-Haig-Simons concept of income; see for example Holmes, 2001, pp. 55–57.

[24] Within income taxation, this is generally referred to as *base erosion*.

interest or even as capital gains. If the owner of a company decides that no dividends shall be paid, the value of the owner's shares will increase correspondingly with the value of the forgone dividends and will be distributed as capital gains when the shares are disposed of. Equally, if the holder of a bond disposes of it before maturity, the bond holder's capital gain will correspond with the value of accrued interest. It is therefore necessary to treat current income and capital gains and losses from the same kind of financial instruments equally in the tax legislation in order to avoid *tax arbitrages: profiting from tax shelters or differences in the way income or capital gains are taxed*.[25]

2.4.3   *Income from speculation—windfall gains*

As mentioned in the previous section, Swedish income taxation does not merely cover income from production, it also taxes several kinds of windfall gains. The main difference between these two kinds of income is that income from production equals the value added in society, whereas a windfall gain is income that does not correspond to any value added in society. Thus, a windfall gain always corresponds to a windfall loss. A *forward contract*—whereby one party agrees to buy and another agrees to sell an asset in the future to a price agreed upon today—is a typical example of a capital investment that results in windfall gains and losses. Such a derivative contract has no initial value and eventually involves one of the contracting parties paying money to the other party without getting anything in return. Thus, it is a zero-sum game, resulting in no value added to society. Just like gains from investments in production, however, windfall gains on financial instruments are classified as capital gains in Swedish income taxation.

2.5   **Financial income**

From what has been argued in Section 2.4, it is possible to conclude that financial income—interest, dividends and capital gains—is the sum of a tax subject's return from capital investments in production and windfall gains. Because it is possible to speculate about the success of future production in a company, the return from equity derivatives and the actual equity instrument—the underlying corporate stock—are related. This means that it is possible to replicate the return from a company stock (production) by the use of derivatives (speculation).[26] Consequently, it is rational, in terms of income tax equality, to treat the return from derivatives equally to the return of underlying assets.[27]

We argue that financial instruments that typically produce windfall gains and losses (derivatives) can be merged with financial instruments that typically produce income from production (equity and debt). Because, in many situations, the investor in equity and debt can choose if the return from the investment is distributed as capital gains or interest/dividends (see Section 2.4.2), situations may occur in which the periodic return from debt (interest) is, in substance, a windfall gain. It is the failure to take this

---

[25] For example, the Swedish income exemption on dividends from substantial holdings applies also to capital gains and losses on those holdings; Ch. 24 and 25a ITA.

[26] See Section 3.3.

[27] See, for example, Hilling, 2007, pp. 82–83.

transformation properly into account that really makes a mess of capital income taxation.[28]

2.6   A risk-based tax system aimed at horizontal equity among sources of personal income

In Section 4, we present the purpose of today's tax system. Before that analysis, however, we comment on the structure of the system in order to explain the perspective of the tax legislator, particularly how they view the characteristics for certain capital investments: debt and equity.

A general purpose of the Swedish income tax reform of 1990 was to create horizontal equity for produced income—among different types of capital income and income from labour.[29] This aim indicates that the tax system is based on the assumption that personal income is the relevant perspective, making corporate income taxation an integrated part of personal income taxation rather than an autonomous tax system.

When the Swedish income tax system was launched in the early 1990s, the effective tax rate on income from labour was, for the majority of Swedish labourers, approximately 60%, including payroll tax. To achieve horizontal equity in the taxation of income from labour and real capital income, Sweden uses a classical system. Table 1 shows how the tax system is constructed to achieve horizontal equity between real income from debt and equity:

Table 1: Equal taxation of real income from debt and equity[30]

Investment	Income	Corporate income tax	Tax on capital income	Effecive tax	Inflation	Nomial income	Real income	Tax on real income
Equity	Dividends	30.00%	30.00%	51.00%	2.00%	12.00%	9.80%	62.42%
Debt	Interest		30.00%	30.00%	2.00%	4.00%	1.96%	61.20%

Note: In order to target the effective tax rate of wages at approximately 60%, dividends are subject to double taxation and interest is not. Relevant tax rates from 1990 are used in this table. Source: authors.

Table 1 illustrates that the design of the tax system is based on the assumption that debt is an investment that generally provides lower return than equity. It also shows that interest is assumed to be a return that does not greatly exceed inflation. Under these circumstances—a risk-based tax system—the taxation of capital investments adheres to the goals of horizontal equity.[31] It is noteworthy that the structure of the tax system is based on the assumption that equal taxation can only be fulfilled if debt and equity are treated differently. Consequently, their altered characteristics in regard to financial risk must have been considered, by the legislator, to be too great to meet the general purpose of horizontal equity without treating debt and equity differently.

---

[28] See Section 5.

[29] See Section 4.1

[30] The components in the columns has been calculated as follow: **Effective tax**: 1*30% [CIT] + (1-(1*30% [CIT]))*30% [Tax on capital income];   **Real Income**: (1+12% [Nominal Income]) / (1+2% [Inflation])-1; **Tax on real Income**: (100*12% [Nominal Income] * 51% [Effective tax]) / (100*9.8% [Real Income]). The figures in the columns **Corporate Income Tax**, **Inflation** and **Nominal Income** are picked to illustrate the estimations on which the legislation was designed.

[31] For a discussion about taxation with a risk-based classification of debt and equity see Ceryak, 1990 and Politio, 1998.

2.7 Summary

Taxable income can be divided into income from production and windfall gains (speculation income). Capital income from production is classified as dividends, interest or capital gains. Capital income from windfall gains is classified as capital gains. This makes it possible to conclude that a capital gain may result from an investment in production or speculation, but that dividends and interest always represent income from production. In the next section, however, we argue that, in many situations, it can be difficult to define whether a capital investment is, in substance, an investment in production (debt) or an investment in speculation (derivative). An unsuccessful classification may lead to the return from an investment in production (debt), being treated in substance as a return from an investment in speculation (derivative), although the return is legally classified as interest when distributed to the investor. Because the structure of the tax system requires debt to be a financial instrument with low risk, classifying speculative activities as debt may severely challenge the functioning of the tax system.

3. DISTINGUISHING BETWEEN DEBT AND DERIVATIVES

3.1 Financial engineering

Financial engineering may be generally defined as the development and creative application of innovative financial technology.[32] The decade before the financial crisis in 2008 saw massive growth in financial engineering, heavily increasing the pace and complexity in the development of new financial products. Consequently, the financial landscape is fundamentally different today compared to the time when the current income tax system was designed and drafted. In this section, we illustrate how basic financial engineering challenges the concepts of debt and equity, as perceived in the income tax system. In particular, financial engineering challenges the conception that debt is always a financial instrument with low financial risk.

3.2 Arbitrage and replication

3.2.1 No arbitrage assumption

The basis for financial engineering is a relatively straightforward exercise: *asset pricing*. The price of any financial asset is the discounted future cash flows of that asset, which implies that the discount rate and the required rate of return are the same. This is true for stocks, bonds, options, credit default swaps and all other securities. It is difficult, however, to find the correct future cash flows and the correct discount rate. Asset pricing is primarily concerned with finding discount rates, whereas forecasting future cash flows for a company, for example, is the domain of analysts.

A standard assumption in asset pricing is the *principle of no arbitrage*, where arbitrage is 'a portfolio that guarantees net cash inflows without any net cash outflows'.[33] From the no-arbitrage assumption, it follows that assets with identical cash flows must have identical prices. This idea is used extensively when pricing derivatives through *replication*: finding assets or portfolios of assets with known prices that have exactly

---

[32] Beder, 2011, p. 3.
[33] Sundaram & Das, 2011, p. 60.

the same cash flows as an asset with an unknown price. Thus, from the no-arbitrage principle, the asset with an unknown price must have the same price as the portfolio that replicates its cash flows.

3.2.2 Bonds

For some instruments, such as bonds, the future cash flows are known at the time of purchase. When the cash flows are known and a market price is observed, the discount factor, which is also called the expected or required return of the asset, can be directly calculated without any model assumptions. Using a simple example, we take a zero-coupon bond with exactly one year to maturity with a nominal value of N. The price (P) is observable if the bond is traded on a market and theoretically given by:

$$P = \frac{N}{1 + y}$$

where y is the required rate of return on the bond. To get the discount rate, we use the fact that P and N are known, and solve for y. Thus, we get

$$y = \frac{N}{P} - 1$$

When the time to maturity differs from one year or when the bond has coupon payments, the mathematics are more complicated, although the principle is the same. So the required rate of return can be inferred for any traded bond.

3.2.3 Forwards

To expand upon a previous definition, a forward contract is an obligation for one party to buy and for another party to sell an asset (the spot asset) to a price agreed upon today, called the forward price. The spot asset is delivered at an agreed-upon future date called the maturity date.

The forward price is set so that the contract has a price of zero; no cash flows are exchanged between the buyer and the seller at the contract date. At the delivery date, the seller delivers the product and the buyer pays the forward price. This is how a forward contract can be replicated by the spot asset and a zero-coupon bond.[34]

Holding a forward contract will provide one unit of the underlying asset at the time of maturity. To replicate this holding, one can simply buy the spot asset instead and hold it until maturity. Because both these transactions provide the same asset, both must have the same cost. The cost of buying the spot asset using the forward contract is the forward price (F), which is paid at delivery, so the price today is the present value of the forward price, which we denote PV(F). The cost of buying the spot asset is the current spot price today, plus such other possible costs as storage and insurance, depending on the nature of the spot asset. (For simplicity's sake, we ignore these extra costs here.) By setting the costs equal, we must then have $PV(F) = S$ or expressed differently, $F = S(1 + r)$ with r being the discount rate. Following is an example of creating an arbitrage profit when the relationship described in this paragraph is not true.

---

[34] Sundaram & Das, 2011, pp. 61–62.

Example: Assume that the spot price of gold is $300, the forward price is $311 for delivery of gold one year from now, and the rate of interest is 2%. The theoretical spot price should then be $300(1 + 0.02) = 306$. Because the market price of the forward contract is too high, we sell the forward contract and buy the spot asset today, which requires us to borrow $300 at an interest rate of 2%. After one year, we deliver the spot asset and get our $311. Repaying our loan with interest will cost us 1.02 x $300 = $306, resulting in a riskless profit of $5.

Note that in order to replicate a short position in a forward contract, one must borrow money (sell a zero-coupon bond). To replicate a long position in a forward contract, one must deposit money (buy a zero-coupon bond), which means that any forward contract can be seen as a combination of the spot asset and a zero-coupon bond.

3.2.4 Options

A European call option gives the buyer of the contract the option to buy the spot asset (the underlying asset) at a pre-specified price, called the strike or exercise price (X), at a pre-specified future date (T), called the maturity date. The seller of the call option contract has a binding obligation to sell the spot asset if the buyer chooses to use the option. An American call option can be used at any time at or before the maturity date. (The terms 'European' and 'American' do not refer to the location where the contracts are geographically traded.) A put option gives the buyer the right to sell the spot asset, and consequently the seller of the put option has the obligation to buy the spot asset.

An option can be replicated by owning (or selling short) a fraction of the underlying asset, while simultaneously having a short or long position in a bond (borrowing or lending money). To replicate one call option, for example, one must own less than one unit of the spot asset and borrow some money. The call option is therefore equivalent to a leveraged position in the spot asset. The exact quantities—the fractional quantity of the spot asset owned—can be calculated if one is willing to assume a particular option-pricing model; the quantities will depend on the relationship between the spot price and the strike price and on the volatility of the spot asset.

We now introduce the option-pricing model that is still, after 40 years, the one most widely used: the Black and Scholes option pricing model,[35] which gives the price of a call option C as:

$$C = S \cdot N(d_1) - X \cdot N(d_2)e^{-r(T-t)}$$

where $d_1 = \frac{\ln\left(\frac{S}{X}\right) + (r + 0.5\sigma^2)(T-t)}{\sigma\sqrt{T-t}}$ and $d_2 = d_1 - \sigma\sqrt{T-t}$. S is the price of the spot asset, N is the cumulative distribution function of the standard normal distribution, X is the exercise or strike price, e is the mathematical constant $e \approx 2.72$, r is the risk-free rate of return, T-t is the time to maturity of the option, and σ^2 is the return variance of the spot asset. All quantities are expressed on a yearly basis. The interpretation of $N(d_1)$ and $N(d_2)$ is, loosely speaking, the probability that the option will be exercised at maturity.

---

[35] The model was developed in Black & Scholes, 1973 and Merton, 1971.

The mathematics may look uninviting, but the intuition behind the formula is straightforward. The formula simply states that the price of the call option is equal to what one would expect to get (the spot asset with probability $N(d_1)$) minus the present value of what one would expect to pay ($X \cdot N(d_2)$).

Because the moneyness of an option measures the probability that the option will be exercised, moneyness increases for a call option when S/X increases. Because X is fixed for a given option contract, moneyness increases when S increases—when the spot asset increases in value. An option with high moneyness (S>X for call and S<X for a put) is said to be in the money, when S is much larger than X (smaller for a put) the option is said to be deep in the money. A deep-in-the-money option behaves more and more like a spot asset; when the spot price tends to infinity, a call option behaves like the spot asset. We show this formally by calculating the call option price, C, in the limit when S tends to infinity:

$$
\lim_{S \to \infty} S \cdot N\left(\frac{\ln\left(\frac{S}{X}\right) + (r + 0.5\sigma^2)(T-t)}{\sigma\sqrt{T-t}} \right) - X \cdot N\left(d_1 - \sigma\sqrt{T-t}\right)e^{-r(T-t)}
$$

$$
= S \cdot N(\ln(\infty)) - X \cdot N(\infty)e^{-r(T-t)} = S - Xe^{-r(T-t)} \approx S
$$

The second equality follows from using $\lim_{x \to \infty} N(x) = 1$, and the approximate equality follows—simply because S is much larger than X.

3.3 Hybrid instruments

3.3.1 Legal classification

To this point we have illustrated that the return from derivatives—forwards and options—can be fully replicated by means of a bond and (a fraction of) the underlying of the derivative. From an income tax point of view, this means that it is possible to replicate a derivative on a company stock by means of financial instruments with the legal classification of debt (a bond) and equity (stock). Thus, when it comes to returns—income—an equity derivative is a hybrid between debt and equity.[36] Because the tax treatment of debt and equity differ, the hybrid character presents a potential classification problem. To solve this problem, it seems necessary to find a way to distinguish between the debt part and the derivative part of the hybrid contracts. *To tear a financial instrument into its component parts and treat them as building blocks is generally referred to as bifurcation.* Bifurcation is not an option, however, because like most other tax systems, the Swedish income tax system treats financial instruments as indivisible contracts when classified as debt or equity.[37] Thus, the *hybrid instrument must be classified as either an equity derivative or a debt—a classification generally referred to as the all-or-nothing approach.*[38]

The classification of a financial instrument as debt or derivative will be relatively challenging in many situations, however, because the character of the derivative is

---

[36] In addition to the meaning of the term hybrid instrument, as used in this article, the term is sometimes also used to describe financial instruments that are classified as debt in one country but as equity in another, or as debt at one time, but as equity at a later occasion. We do not refer to hybrid instruments in the latter sense.

[37] RÅ 1994 ref. 26.

[38] See generally Madison, 1986.

continuously shifting in proportion to the instruments it replicates: a bond and the underlying. Thus to classify a financial instrument as debt or a derivative of a certain underlying may be an impractical exercise, as illustrated in the next sections.

3.3.2 *The shifting character of an option*

In Section 3.2.4, we illustrate that the return from an option can be replicated by a bond and a fraction of the underlying. An option in equity is thus a replica of what is legally classified as debt and equity. To calculate the debt fraction of an option, we can again use the Black and Scholes model, which shows that a call option is replicated by $C = S\Delta_c - B_c$ where $\Delta_c = N(d_1)$ and $B_c = X \cdot N(d_2)e^{-r(T-t)}$. The interpretation is that B_c, the amount of money one must borrow and $S\Delta_c$ that provides the fraction of the spot asset to buy (Δ_c is never larger than one). If we assume that the underlying asset is a stock, we can then see that an option is a combination of debt and equity, and the proportion that is equity depends on the moneyness of the option through $N(d_1)$ and $N(d_2)$. As calculated above, for a very deep in-the-money call option, we get $N(d_1) = N(d_2)=1$. So we get:

$$C = S - Xe^{-r(T-t)}$$

The option is equal to the stock value plus borrowing the present value of the strike price, so in this case the option is almost pure equity. We define the commodity fraction to be $S\Delta_c/C$ and calculate the equity fraction for a hypothetical call option with a volatility of 15%, a time to maturity of 1 month, a risk-free rate of interest of 2%, an exercise price of \$100 and a spot price ranging from \$100 to \$400.[39] The equity fraction ranges from 50.8% to 80.0%, and by using ever-higher spot prices, the fraction would eventually approach 100%. Note that this result not only reveals that different option contracts can have very different equity/debt proportions, but that the same option contract can have vastly different equity/debt proportions over time, due to changes in the price of the underlying asset.

---

[39] The results are not sensitive to the choice of volatility, risk-free rate and time to maturity.

Figure 1: Equity fraction form a replicated call option

Equity fraction from a replicated call option
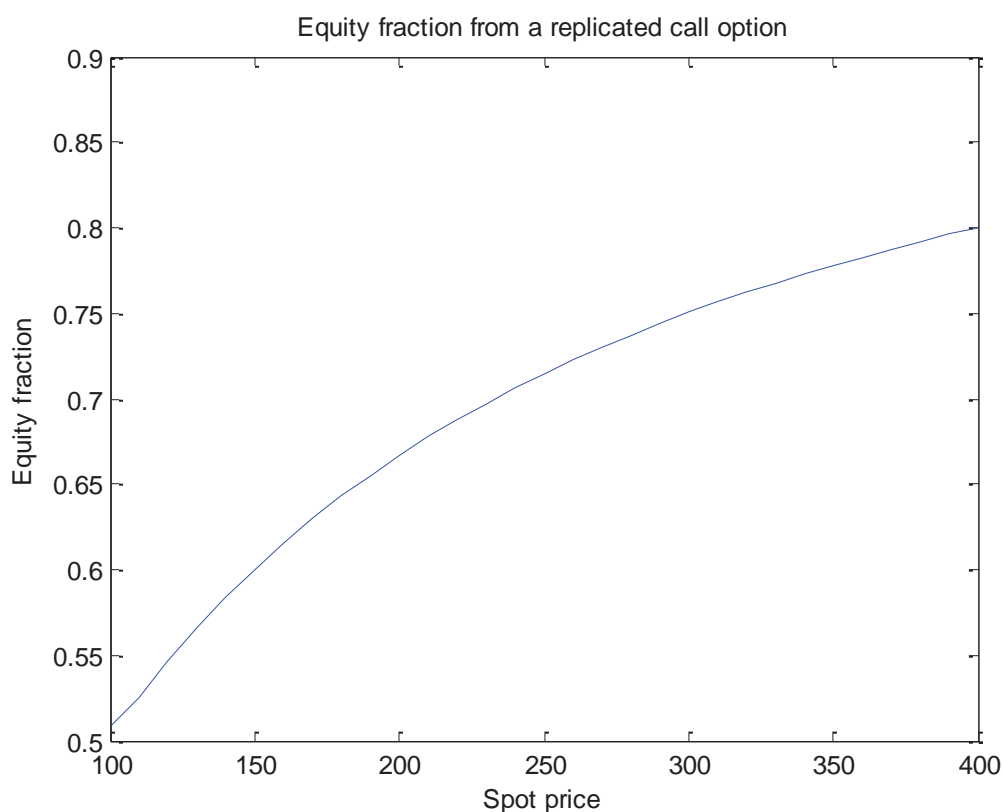
Note: This figure shows the equity fraction from a call option replicated by the spot asset and a bond. Source: authors.

3.3.3   Prepaid forwards

A prepaid forward contract is identical to a forward contract, with the single difference that the forward price is paid when the agreement is entered upon and not when the spot asset is delivered.[40] This difference creates slight changes to the replication strategy. The cost of buying the spot asset using the forward contract is still the forward price (F), which is paid at today's price, so the price today changes from PV(F) to simply F. If we once again ignore costs of storage, insurance and possible dividends, the prepaid forward price is simply equal to the spot price F = S, because the cost of buying the spot asset on the spot market and using the prepaid forward contract is the same. If we add storage costs (m) expressed as a fraction of the spot price, we get F = S(1+m), and there is now a difference between the prepaid forward price and the spot price. When we use the prepaid forward contract rather than buying the asset on the spot market, we avoid paying storage costs.

We now know that a prepaid forward price is identical to the price of the underlying asset: F = S. We also know, however, that it is possible to replicate the underlying (asset) by a portfolio with a regular forward contract and a bond.[41] Consequently, a

---

[40] See Section 3.2.3.
[41] See Section 3.2.3.

prepaid forward contract is, in substance, a portfolio with a regular forward contract and a bond. Because financial instruments are generally treated as indivisible contracts, a possible solution is to classify these contracts as derivatives, thereby dealing with tax arbitrage possibilities.[42]

The other possible way of dealing with prepaid forward contracts for income tax purposes is to classify them as debt instruments, because of the initially large debt fraction in the contract. This line of reasoning opens up possibilities for creating extremely risky debt instruments. If a prepaid forward contract with equity as an underlying is classified as debt, for example, the debt instrument will have the same financial risk as the underlying asset. Consequently, prepaid forward contracts may facilitate the taxpayer's ability to invest in a certain asset by a direct purchase of the asset, or through the use of a debt instrument. When the underlying is corporate assets (equity), it may be advantageous for the taxpayer to make the investment by a prepaid forward contract—a debt.[43]

3.4   Ever-changing characteristics

We have now illustrated how options and forwards work, and how they can be used to replicate a portfolio with a bond and the underlying derivative. As the moneyness of the derivative increases, the equity fraction of the derivative also increases, at the expense of the size of the derivative's debt fraction. For the issuer of such a derivative the opposite occurs. Consequently, the issuance of deep-in-the-money options and prepaid forward contracts, have many characteristics similar to the issuance of ordinary debt instruments. Unlike ordinary debt instruments, however, the debt characteristics of a derivative may decrease or even disappear over the duration of the instrument. Because of the ever-changing characteristics of derivatives in relation to the legal definitions of the instrument in its replica portfolio, the classification of financial instruments as debt or derivatives will always be uncertain.

Fixing the time at which a financial instrument shall be legally classified as debt or a derivative is a standard way of dealing with uncertainty caused by the shifting character of hybrid financial instruments.[44] Swedish case law has determined the relevant time to be the point at which the instrument is issued.[45] In principle, this fixed-time approach increases legal certainty, which is good, but does not deal with the actual problem caused by hybrid financial instruments: high-risk debt instruments. In fact, it can be argued that using the time at which it is issued as the basis for classifying a financial instrument creates the possibility that high-risk derivatives can be classified as debt instruments as long as they are issued deep in the money.

Bifurcation has been described in the literature as the most effective way of dealing with income-tax problems of high-risk debt instruments—hybrids.[46] As mentioned previously, however, bifurcation—treating the financial building blocks of a financial instrument separately for tax purposes—is not an option in Swedish income taxation

---

[42] Such treatment can be criticized because the relatively large debt fraction of the contract is treated differently from regular debt, see Edgar, 2000, 246–sequent.

[43] See Section 4.3.

[44] See Polito, 1998, pp. 803–805.

[45] RÅ 2008 ref. 3.

[46] See e.g. Madison, 1986; Politio, 1998; Edgar, 2000; Hilling, A, 2007.

because the Supreme Administrative Court (SAC) has identified its opposite, the 'all-or-nothing' approach, as the prevailing rule.[47]

3.5   Summary

In this section, we have explained that derivatives with large moneyness are similar to ordinary debt instruments. It may be challenging, therefore, to find ways to distinguish legally between debt and certain derivative contracts—hybrid instruments. As a result, when hybrid instruments (derivatives with large moneyness) are legally classified as debt instruments, the perception of debt as low-risk financial instruments is severely challenged. Tax systems, Sweden's included, which have preferential treatment for debt income, expose themselves to serious tax-arbitrage schemes, such as tax planning with inter-company interest deductions.

In the next section we illustrate how this 'insoluble' classification issue challenged the Swedish income tax system and how the traditional classifications of financial instruments as debt and equity were eventually abandoned.

4.   TAXATION OF CAPITAL INCOME

4.1   Purpose of the law

4.1.1   Preparatory works

In this section, we briefly present the purpose of the relevant tax law, based on what is set out in relevant legal preparatory works. The Swedish tradition of extensive preparation of legislation involves several types of preparatory works [48] For interpretation of tax law, the key types are government bills (*propositioner, Prop.*) and Ministry of Finance Committee Reports (*Statens offentliga utredningar, SOU*).

4.1.2   Equal taxation

With direct reference to the ability-to-pay principle and the constitutional principle of equality, an explicit purpose of the Swedish tax reform of 1990 was to attain equal taxation: 'that persons with equal income, wealth etcetera are taxed alike'. [49] In the context of a dual-income tax system, which was introduced in Sweden by this tax reform, it was decided that any return from any type of asset was to be taxed equally in the income tax schedule—capital income.[50] This is generally referred to as a flat-rate tax on capital income, but must not be mistaken for the flat tax on savings and investments, which is described in Section 5.2.1.[51] Theoretically the flat tax on capital income involves a relatively complex taxation of income on an accrual basis.[52] For reasons of simplicity and taxpayers' ability to pay, however, accrual taxation was dismissed in favour of the cash basis and the realisation principle (revenue can be

---

[47] See Section 3.3.1.

[48] For a discussion of the different kinds of preparatory works, see, for example, Melz, 2007, p. 137.

[49] SOU 1989:33 part I, p. 52, see also Prop. 1989/90.:110, part I, p. 388. This and all other translations from Swedish to English have been done by the authors.

[50] SOU 1989:33 part I, p. 63–64, SOU 1989:33 part II, p. 14.

[51] See Birch Sorensen, 1994.

[52] SOU 1989:33 part I, pp. 56–57. About accrual taxation, see Shakow, 1986.

recognised only after the goods or services have been delivered).[53] As a result, current investment income, such as interest and dividends, is taxed in the same period that the taxpayer has access to the return. Other returns—capital gains and losses—are taxed when the asset is disposed of.

In summary, the equality, certainty and simplicity of the legislation is satisfied when all returns on capital—current income as well as capital gains and losses—are taxed in the same income tax schedule and in the same way, independent of the type of income-generating asset. Equality does give way to certainty and simplicity, however, when accrual income recognition is dismissed in favour of cash basis and realisation. The primary inequality this deviation may create is that the real income classified as capital gains will be reduced over time due to inflation, and may therefore be taxed somewhat higher than interest and dividends because of the nominal calculation of taxable income.[54] In relation to investments in financial assets, this is really not a big issue, particularly because inflation has been relatively moderate since the launch of the relevant tax legislation.

4.1.3   Limitation of potential, unwanted tax credits

Although the use of a different principle for the periodisation of income does not severely challenge equal taxation of the positive return from financial investments, the use of the realisation principle causes some difficulties. This situation exists because the realisation principle facilitates the creation of tax credits, which would have been impossible through consistently applied accrual income recognition.[55] A tax credit[56] is, in effect, an interest-free loan from the government to the taxpayer, and it typically occurs when a taxpayer knowingly brings forward the realisation of a loss position and pushes the realisation of gain positions into the future.[57] Because the possibility of generating tax credits is clearly in conflict with a goal of equal taxation, measures have been taken to limit the taxpayer's ability to enhance such credits. These measures have taken the form of general deduction limitations of 70% of capital losses. Deduction limitations for capital losses are, however, significant exceptions to the goal of equal treatment of current returns and capital gains and losses within the income tax schedule, Capital Income. This is so because interest expenses are usually fully deductible against any kind of capital income, as further explained in next section.

4.1.4   Interest expenses favored to capital losses

Deductibility for interest expenses is not limited the same way that capital losses are, a situation motivated primarily by housing policy. It was decided that interest expenses on private homes should be fully deductible against wages. Because the dual income tax system treats capital income and income from labour separately, however, the

---

[53] SOU 1989:33 part II, pp. 32–37, Prop. 1989/90:110, part I, p. 396–399.

[54] In addition there are also the benefits in the continuous compounding of the capital in long term investments. On the down side is the lock in-effects related to realisation taxation of capital investments.

[55] Shakow, 1986, p. 1117.

[56] The term tax credit must not be mistaken for the same term used in international taxation. While a foreign tax credit (see e.g. Article 23B OECD MC) provides credits equal to taxes paid in foreign states, the tax credits we refer to in this article provide credits equal to losses realised for the primary purpose of deferring the taxation of capital income.

[57] SOU 1989:33 part II, p. 41. See also Hilling, A. (2007) pp. 56–57.

technical solution is a tax credit of 30% of the deficit in the income schedule capital, which is fully deductible against wages, with an effective tax rate of 30%.[58] The difference in the deductibility of capital losses and interest expenses were not entirely consistent, however. Capital losses on interest-paying financial instruments are treated as interest; there is no restriction or quota on interest cost deductions for those instruments as there are for other types of capital losses. This inconsistency exists partly to avoid demarcation problems in classifying returns as interest or as capital gains or losses. Furthermore, it was considered that a deduction limitation for these capital losses would be unduly restrictive, because potential tax credits would still be relatively small with respect to the limited durations and moderate rate variations of these instruments.[59] For control reasons, only publicly traded instruments were exempted from quota. Here again, it becomes evident that the tax-law maker contemplated debt a financial instrument with low risk.[60]

4.1.5   Effective taxation of corporate investments

Finally, the tax reform of 1990 highlights the need for effective tax legislation regarding investment in corporations. A general purpose of the legislation was therefore to ensure that it would never be more advantageous to invest in a corporation by means other than an ordinary corporate share. Thus, any investment for which the return is connected in one way or another to the return of a corporation is to be treated for tax purposes as equal to corporate shares.[61]

4.1.6   Classifying capital investments

From what is stated in the preparatory works of the relevant tax legislation, it is obvious that return-from-capital investments should generally be taxed equally. There are three additional and superior purposes, however, in the taxation of capital investments:

1. Limitation of potential tax credits

2. Elimination of classification issues between interest and capital gains and losses

3. Effective taxation of corporate investments

In principle, the three additional purposes do not threaten the general purpose of equal taxation. If *all* capital investments were subject to limited deductibility of capital losses, equal taxation would remain. Because interest is fully deductible from capital income, however, the purpose of eliminating classification issues between interest and capital gains and losses involves the treatment of these gains and losses as equal to interest if the relevant instrument is an interest-paying one.[62] It seems necessary, therefore, to classify capital investments in at least two different categories, one of which is not subject to limited deductibility for capital losses. It can be argued, however, that it is impossible to isolate interest-paying instruments from other

---

[58] See Prop. 1989/90:110, part I, pp. 402–404, Prop. 1990/91:54, pp. 215–216, Prop. 1991/92:60, pp. 77–80.

[59] SOU 1989:33 part I p. 128, part II p. 162, Prop. 1989/90:110, part I, pp. 402–404.

[60] See Section 2.6 above.

[61] Prop. 1989/90:110, pp. 430–434. This is also stated in the relevant legislation: Ch. 48 § 2 IL.

[62] See Section 2.4.

financial instruments, because all financial instruments can have returns in the form of interest—for example, if they are purchased at a discount. Consequently, it seems unmanageable to find a classification norm that isolates interest-paying instruments from other financial instruments. Instead, in order to separate financial instruments with low risk or debt, the classification must focus on financial instruments with potential returns similar to a benchmark interest rate.

If it were possible to find a legal classification that captures all financial instruments with potential returns similar to a benchmark interest, everything would be fine. Such a classification would fulfill the purpose of eliminating classification issues between interest and capital gains and losses, and would also correspond with the purpose of limiting potential tax credits, because the moderate return from these instruments make them insufficient for such tax planning. The only weakness in this classification would be the potential challenge to an effective taxation of corporate investments; if it includes financial instruments with returns related or similar to a corporate share. Consequently, there must be a tradeoff between the purpose of eliminating classification issues and the purpose of effective taxation of corporate investments. A discussion of whether or not this suggested classification is mirrored in the relevant tax law is presented in the next section.

4.2   The law

4.2.1   Interpreting the law

The income tax law relevant to the taxation of capital investments originates in the tax reform of 1990. A general tendency in the statutory style of that time was to avoid enumerations in the law, and instead to formulate more abstract rules giving the courts the opportunity of dealing with new types of transactions and placing them in proper legal categories.[63] Regarding capital investments, financial instruments are divided into four categories, one of which involves the exceptional treatment of full deductibility of capital losses: debt.[64] Of the additional three categories, one captures financial instruments, with returns related to or similar to corporate shares: equity.[65] In what follows, only debt and equity will be examined.[66]

During the decade since the tax reform, several precedent-setting court decisions regarding the classification of unconventional financial instruments have been decided.[67] As a basis for these decisions, the law has been interpreted in the light of the preparatory works to the legislation, which is in line with general tax law interpretation in Sweden.[68] As illustrated in the previous section, preparatory works set out the general principles for the tax system, and thereby facilitate the interpretation of the law. It is noteworthy, however, that preparatory works can never justify an interpretation of a statute contrary to its literal meaning.[69] Thus, the challenge for the law-making authority is to find a wording of the law that facilitates,

---

[63] See Melz, 2007, p. 138.

[64] *Fordringsrätt*, Section 48, section 3 ITA.

[65] *Delägarrätt*, Section 48, section 2 ITA.

[66] For information on the two additional categories—foreign debt and other income—see Hilling, 2008, pp. 702–707.

[67] See footnotes 72, 74 & 75.

[68] Melz, 2007, p. 138.

[69] See Bergström, 2003, pp. 2–13 and Melz, 2007, p. 138.

in every possible case, the law being applied in concordance with the principles set out in its preparatory work (see Section 4.1.6). In the following section, we analyse the definition of debt and equity in relation to relevant court decisions. Our goal is to consult all relevant precedence court decisions since the relevant legislation was presented in 1990.

4.2.2   The legal concepts of debt and equity

The legal term 'equity' explicitly includes corporate shares and any other financial instrument giving its holder a residual interest in the assets of a company after deducting all its liabilities, such as warrants. In addition, contracts with returns that are related to the return from equity instruments are to be treated as equity for income tax purposes; options serve as one example. Consequently, *equity can be said to cover any capital investment that gives the investor the right to share in the result of the production.* To fulfil the purpose of effective taxation of corporate investments and to hinder potential tax arbitrages, speculative instruments in a corporation's production shall be treated as equity.[70]

The legal term 'debt' is defined as a claim of a certain amount of currency—a bond, for example. In addition, contracts with returns related to a debt instrument—a forward interest-rate agreement, for example—are to be treated as debt. Finally, it is explicitly stated that a financial instrument covered by the equity definition cannot be classified as debt. Thus, the trade-off between the purpose to eliminate classification issues regarding interest and capital gains and losses on the one hand, and the purpose of effective taxation of corporate shares on the other hand, is to the advantage of effective corporate share taxation.[71]

Analysing relevant case law on the classification of unconventional financial instruments, it appears that any financial instrument that gives a legal right to the invested capital is classified as a debt instrument, unless the instrument is related to equity in one way or another. Thus case law dealing with contingent debt instrument on equity and structured equity instruments classified as equity, is in line with expectations.[72] In the first of the referred cases, RÅ 1994 ref. 26, the Supreme Administrative Court (SAC) established a significant principle: that a contractually indivisible financial instrument was to be treated as a single, unique instrument for income tax purposes. Thus, the composition of a structured product is of no importance for income tax purposes.[73]

After the 1990 tax reform, the first unconventional financial instrument that SAC classified as a debt instrument was a real zero-coupon bond.[74] The fact that the potential return from this instrument was low and steady rather than volatile, and that its return was not related to equity, led to the conclusion that a classification of debt was perfectly in line with the purpose of the legislation. The same conclusion cannot be reached, however, in relation to the subsequent decision on the classification of a

---

[70] See Section 2.4.2.

[71] See Section 4.1.6.

[72] RÅ 1994 ref. 26 (contingent debt), RÅ 2000 not. 8 ('equity basket') RÅ 2001 ref. 21 (reverse convertible bond), RÅ 2001 not. 160 (swap), RÅ 2002 not 51 ('equity basket'), RÅ 2003 ref. 48 (contingent debt), RÅ 2007 ref. 3 (swap).

[73] See Section 3.4.

[74] RÅ 1995 ref. 71.

contingent debt instrument on foreign currencies.[75] In this decision, the SAC argued that because the instrument represents a claim in Swedish currency, it was a debt instrument; and because its return was not related to equity, it should remain classified as debt.

In this case, a literal interpretation of the law provided two possible classifications for the financial instrument. Besides its classification as debt, it would have been possible to classify it as a *forward contract (termin)*, which is defined as:

> a contract, suited for public trading, concerning
>
> the purchase of shares, bonds, or other assets at a certain future date at a fixed price or
>
> a future settlement, the amount of which is decided upon the basis of the value of the underlying asset, an exchange index, or similar.[76]

It would definitely have been possible to classify the contingent debt instrument on foreign currency as a forward contract, based on a literal interpretation of the second section of the definition. This classification would involve an income tax treatment equal to the instrument's underlying asset: foreign currency. Given the purpose and the structure of the law, it would probably have been better to exclude these instruments from the debt concept and classify them instead as derivatives. The same criticism can be leveled at the SAC's decision on a contingent debt instrument, the return of which was decided on the basis of which of three indexes had the most favourable development over the duration of the instrument.[77] Although the potential return of the contingent debt instrument was relatively volatile, it was classified as debt because its relationship to equity was not strong enough. The case law analysed indicates that the legal concept of debt generally includes all types of financial instruments that are not classified as equity and that are not derivatives with low moneyness.[78]

It can be argued, of course, that the classification of contingent-debt instruments as debt does not threaten the purposes of the tax system; because these debt instruments guarantee nominal value, they will not give rise to any capital losses. Thus, tax credits or classification issues in relation to interest will never be an issue with these instruments.   It is crucial, however, to remember that financial instruments are indivisible contracts in Swedish tax law. By allowing financial instruments with risk (other than the interest-rate risk) to be classified as debt instruments raises the possibility of speculative instruments—hybrid instruments—to be classified as debt instruments. Therefore, the legal challenges are not only to isolate debt from equity, but also to include any attempt to isolate debt from several types of derivatives:

---

[75] RÅ 1999 ref. 69.

[76] Ch. 44, section 11 ITA.

[77] RÅ 2008 ref. 3.

[78] See Section 3.3.

Figure 2: Legal challenges in the classification of financial instruments as debt

Legal classification

EQUITY   DEBT   **DERIVATIVES on e.g currency and commodities**

Related to the return from equity | *Not* related to the return from equity | *Not* volatile | Volatile

Required characteristics
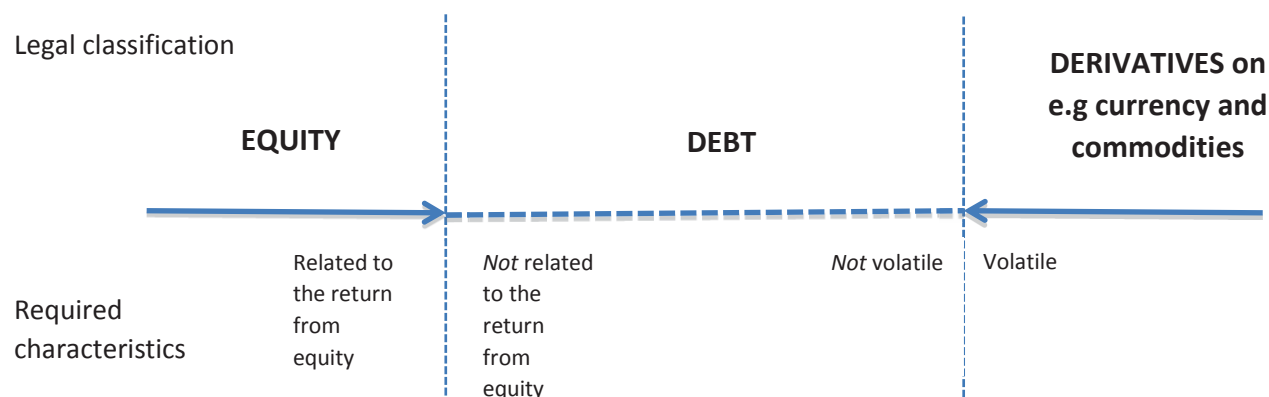
Note: This figure shows required characteristics of financial instruments based on the purposes and structure of the law and classified as equity, debt, and derivatives on currency and commodities. Source: authors.

4.2.3   The debt–equity conundrum—financial risk

From the presentation of the legal concept of debt and equity and the presented court decisions, it is possible to conclude that equity and debt are broadly defined and that they sometimes comprise the same instruments—for example, convertible bonds. In such cases, the classification is based on the risk of the instrument rather than its legal form. Because the relevant financial risk is well defined—the risk of a corporate stock—the classification of equity is seemingly certain and efficient. It is noteworthy, however, that in many situations, a financial instrument classified as equity carries risks other than those of a corporate share. This is evident in the case of contingent debt instruments and exchange traded notes (ETNs), for example, which affected several equity investors when Lehman Brothers defaulted in 2008. Consequently, the legal concept of equity can be summarised as covering financial instruments of any kind, the potential return of which depends to a great extent on the risk of corporate stock.

4.2.4   The debt–derivative conundrum—legal form

Unlike the debt versus equity distinction, whereby the financial risk is found to be the decisive criterion for classification, the debt versus derivative distinction does not relate to financial risk. Here, the decisive criterion is legal form. Thus structured financial instruments, carrying the risks of currency or commodities, have been classified as debt according to Swedish income tax legislation.[79] The decisive criterion for a financial instrument to be classified as debt is that it should provide a claim for the investor to get the invested money in return at some future date.[80] The definition of debt does not include any requirement that the investment be risky. A literal interpretation of the concept of debt, as used in Swedish income taxation, does

---

[79] RÅ 1999 ref. 69 and RÅ 2008 ref. 3, see Section 4.2.2.
[80] See Section 4.2.2.

not exclude risky financial investments in commodities or currency or financial investments in bad debt—debt with large credit risks. This type of financial investment is classified as debt, therefore, unless there is another legal classification that suits the situation better. In the context of financial instruments, the only other legal classification is 'derivative'.[81]

Based on a traditional perception of the concepts of debt and derivative, where debt represents a bank deposit and a derivative is a plain vanilla forward contract with no initial value, it may seem surprising that it is sometimes difficult to separate the two types of instruments. Because the legal concepts of these instruments do not require any premises regarding financial risk or the amount of initial deposit in relation to possible return, however, the classification issue becomes problematic. There are, for example, uncertainties about the risk associated with a financial instrument before it disqualifies from the legal concept of debt, and how large an initial investment it is possible to transact in a financial instrument before it ceases to be classified as a derivative. These imprecise definitions make it possible to construct derivative-like financial instruments classified as debt. The potential high return from these instruments challenges the purpose of the legislation. The hybrids of debt and derivatives (high-risk debt instruments) constitute a key problem in classifying financial instruments. This issue is presented in Section 5 as the cause of excising the concepts of debt and equity from the Swedish income tax system.

4.2.5   Summary

An overall purpose of the Swedish income tax system is horizontal equity among different kinds of capital income—for example, interest and dividends. In the quest to achieve equal taxation, the structure of the tax system is based on the view that debt instruments are low-risk investments. For various reasons, presented in previous sections of this article, debt instruments must be separated from equity instruments and from financial instruments with other risks—for example, commodity and currency. The methods for making these distinctions when applying the law have developed differently. The distinction between debt and equity is based on financial risk. Any financial instrument with financial risk linked to equity is taxed as equity. To a great extent, this classification norm excludes risky equity instruments from the definition of legal debt. Thus, within capital income taxation, hybrid equity instruments are seldom classified as debt when the classification is based on financial risk.

The method of distinguishing between debt and hybrid instruments with the financial risk of commodities and currency, for example, is based on legal form. Given the broad legal definition of debt, it includes hybrid instruments—derivatives with large moneyness. Including these financial instruments in the definition of debt creates the possibility for arbitrage, because debt instruments are no longer necessarily low-risk investments—the assumption upon which the tax legislator designed the system.

To conclude, in a situation in which debt is treated more favourably than other financial instruments, it appears that the debt must be distinguished from these other financial instruments based on the financial risk of the instruments rather than on their legal form. Unfortunately, this is not how it works in Swedish corporate income taxation, which is presented in next section.

---

[81] Forward (*termin*) or Option, Ch. 44 sections 11 and 12 ITA. See Section 3.2.2.

4.3   Corporate income taxation

4.3.1   *Distinguishing between debt and equity derivatives*

So far we have presented the Swedish income taxation of individuals earning income from capital investment. In this context, we have recognised that the conventional tax system makes a distinction between debt and equity. Because the equity definition is based on financial risk, it is possible to classify untraditional financial instruments as debt or equity with some certainty. There are great uncertainties, however, in the classification of untraditional financial instruments as debt or derivatives because of the ever-changing characteristics of derivatives[82] and because the comprehensive definition of debt is based on legal form.[83]

The classification issues related to individuals are also relevant to corporations that make capital investments on the secondary market—for example, as part of their cash management. Unlike individuals, corporations may be subject to investments by issuing shares in their corporate assets. As is commonly known, these shares can be classified only as debt or equity.

The legal concepts of debt and equity in Swedish corporate income taxation are not identical to those used in the capital taxation of individuals, however. A key difference is that the concepts are based solely on legal form. Thus the difficulties in distinguishing between debt and derivatives in currency and commodities, as presented in relation to the taxation of individuals, are also relevant in relation to equity derivatives in corporate income taxation. Thus, equity derivatives may be classified as debt when issued by a corporation on the primary market. A regular convertible debt instrument, for example, is, in substance, a contingent debt instrument in equity; it is classified as debt rather than equity by the issuing company. More unconventional equity-linked instruments, such as Preferred Equity Certificates (PEC) and Convertible Preferred Equity Certificates (CPEC), are also considered debt according to Swedish corporate income taxation.[84] In a recent decision from the SAC, however, a mandatory convertible debt instrument was considered equity.[85] By that decision, the SAC changed the appealed advanced ruling from the Swedish Tax Board, which considered the instrument as debt.[86] Although the Board relied on private law (Swedish company law) in its classification of the instrument, the SAC based its decision on relevant classification rules in international accounting standards (IAS 32).[87] The discord between the Board and the SAC in this case illustrates the uncertainty inherent in the classification of financial instruments as debt or equity.

The importance of the classification of financial instruments as debt or equity comes down to the fact that expenses related to equity (dividends) cannot be deducted, whereas expenses in relation to debt (interest) are deductible for the issuing company. The preferred tax treatment of expenses related to debt instruments creates inducements for issuing debt instruments rather than equity.

---

[82] See Section 3.4.

[83] See Section 4.2.2.

[84] See Swedish Tax Agency, 2012, pp. 88–93.

[85] HFD 2014 ref. 10.

[86] Advance ruling decided 2013-06-19 (dnr. 4-12/D).

[87] See Olsson, 2014 and Bjuvberg, 2014 for comments on this court decision.

As illustrated in Section 3.2, the return from an asset can be replicated by a bond and a derivative. Furthermore, there are few, if any, differences between a portfolio with a bond and a derivative, on the one hand, and a derivative that is a deep-in-the money option, or a prepaid forward, on the other hand.[88] Thus in order to raise capital, a company may as well issue an equity derivative with large moneyness rather than traditional corporate stock. In a case in which such a derivative is classified as debt, its issuance is more favorable when compared to the issuance of regular corporate stocks, although the value of the options are more or less equal.

To conclude, the hybrid financial instruments with characteristics of debt and equity are, in substance, derivatives with large moneyness. In Section 3.4, we have argued that these kinds of derivatives are almost impossible to classify as debt or derivative (equity) in a predictable way. The legal uncertainty will remain as long as the legal definitions do.

4.3.2   Converting capital losses into interest expenses

It can be argued, of course, that a hybrid debt instrument cannot be a derivative, because derivatives, unlike hybrid debt instruments, pay no interest—merely capital gains or losses. The issuer of the derivative may recurrently pay accrued capital losses on the derivative, however, and in that way make it appear as interest expenses.[89] Because these 'interest expenses' are, in substance, capital losses on derivatives, the rate of that 'interest' is equal to the required rate of return of the underlying asset: the issuing company's equity. Thus the rate of return on hybrid debt instruments are generally far above what can be expected from ordinary debt instruments. Swedish case law offers several examples wherein it has been considered in line with the law to deduct 'interest' at levels equal to or above what can be expected as a return on ordinary equity investments.[90]

4.3.3   Related-party debt strategies

The opportunity to issue derivatives that are legally classified as debt and to convert accrued capital losses into recurrently payable interest expenses constitutes a tool for international tax planning. When a productive company issues these derivatives (hybrid debt instruments) to a related party, such as a parent company, the deduction of the 'interest expenses' may be used to shift income between the residence countries of the related parties. If the income is produced in a high-tax regime, and the parent company is resident in a low-tax regime, the total tax for the company group will decrease. These related-party debt strategies for profit shifting have been recognised as a severe problem in international taxation and are currently being dealt with within the OECD BEPS project.[91]

4.3.4   Summary

Like several other OECD member countries, Sweden is struggling with the erosion of its corporate income tax base through extensive international tax planning with related-party debt strategies. These harmful tax strategies are the result of a legal

---

[88] See Section 3.3.

[89] See Section 2.5.

[90] See Swedish Administrative Court of Appeal in Stockholm, Decision No. 6953-6957-11 (2012-11-13); and Swedish Administrative Court of Appeal in Gothenburg, Decision No. 1262-1264-13 (2014-04-02).

[91] See OECD, 2013b, p. 17.

definition of debt that covers not only traditional debt instruments, but also derivatives with large moneyness. Because the characteristics of these derivatives are ever-changing between the characteristics of ordinary debt and the characteristics of the underlying (equity), the legal classification of these derivatives as debt or equity can never be carried out in a predictable way. Consequently, the classification problem related to debt and equity in Swedish corporate income taxation is, in principle, the same as the classification problem related to debt and derivatives in Swedish taxation of individuals' capital investments. In principle, the problem appears to be that legal form is used to classify financial instruments, the primary characteristic of which, according to the structure of the tax system, is their different financial risk.

5.   THE PROBLEM AND HOW IT IS HANDLED

5.1   The lack of distinction between debt and derivatives

In the previous sections, we have illustrated how difficult it is to separate derivatives and debt in a predictable way when legal form is the decisive criterion. This lack of a true distinction between debt and derivative is not only problematic in relation to the taxation of individual income from capital investments, but is also a fundamental problem in Swedish corporate income taxation. How this problem threatens these two areas of Swedish income taxation and how this threat is handled by the tax legislator is presented in detail in this section.

5.2   Taxation of capital income

5.2.1   Flat tax on savings and investments

There is substantial legal uncertainty regarding the income tax treatment of capital losses from capital investments in structured 'debt instruments' with a high credit risk or a risk related to commodities. This uncertainty is also evident in relation to derivative instruments on the same underlying asset—like a *contract for differences (CFD), wherein the seller pays the buyer the difference between current value of an asset and its value at contract time (or the buyer pays the seller if the difference is negative).* As a complement to the conventional taxation as presented in this article, a new optional type of taxation of capital investments was introduced in Sweden in 2012: flat tax on savings and investments—*Investeringssparkonto*.[92] In order to avoid confusion, we must stress that this flat tax differs from the tax on capital income in the Swedish dual-income tax system, which is often referred to as a flat rate tax (30%) on capital income.[93]

The flat tax on savings and investments diverges significantly from traditional income taxation. Instead of calculating the tax object as income, the flat tax is levied on the market value of the tax subject's financial instruments.[94] It is reminiscent of the Netherlands' Box 3 income taxation system, and has many similarities, as well, with conventional wealth taxation, which was abolished in Sweden in 2007.[95] The flat tax

---

[92] Prop. 2011/12:1 pp. 277–388 and Prop. 2012/13:24.

[93] See Section 4.1.2.

[94] For information on the calculation of the market value, see e.g. the Swedish Tax Agency, opinion Dnr/målnr/löpnr: 131 204738-14/111.

[95] See e.g. Lodin, 2009, pp. 114–121. About Swedish wealth taxation, see Henrekson & Du Rietz, 2014.

can be described as accrual taxation of savings and investments, which has already been discussed as a possible system in relation to the tax reform of 1990.[96]

The primary reason for introducing the flat tax on savings and investments was the large number of incorrect tax assessments caused by the complex tax regulations on capital investment. Adverse locked-in effects of the realisation principle were another reason for the new regulation. Legal uncertainty in the classification of debt, equity and derivatives was not, however, presented as a reason for the new legislation.

5.2.2   Classification issues

In order for flat tax to be applied to a financial instrument, it must be possible to establish its market value in a predictable way. Without a reliable, realistic value on the financial instrument, it remains in the conventional taxation system for capital income.[97] To secure this reliable value, the flat tax applies only on financial instruments that are traded on a regulated market or a multilateral trading facility (MTF), or are a share in an investment fund governed by Swedish regulations.[98] These premises for classification directly refer to terminology in relevant EU Directives.[99]

Because existence of a reliable market value is the decisive criterion for being an object for flat taxation, there are no legal differences among equity, debt and derivatives in this context. Thus, the classification issues mentioned previously do not exist in this system. In relation to the classification problems we analysed in this article, the flat tax is therefore found to be successful. In the following section, it is argued, however, that this success comes at a relatively high price in regard to the underlying purposes of the income tax system.

5.2.3   Purposes of the tax system

As noted in Section 5.2.1, the purpose of the flat tax on savings and investments was to facilitate capital investments for individuals,[100] but the preparatory works do not specify any other purposes served by the flat tax. Thus, the flat tax appears to be a special case in the income tax system, which is, in itself, reason for criticism, because such legislation eventually leads to fragmentation of the system. In the referral for comments that preceded the law, that criticism was addressed in the following way: 'flat tax is incomprehensible, because it is based not on a general principle such as equal taxation, but is a special case of the taxation of income in this particular area'.[101] The Swedish Government has not dealt with this criticism; nor has it considered similar opinions from several special interest groups. By introducing an alternative, optional taxation of capital investment, the general underlying purpose of the capital income taxation—equal taxation—was eventually eliminated. The taxation of income

---

[96] See Section 4.1.2.

[97] The valuation problem in accrual taxation is thoroughly discussed in Shakow, D. (1986) pp. 1118–1168.

[98] Section 6, Lag (2011:1268) om investeringssparkonto, and Prop. 2011/12 pp. 288–296.

[99] The Markets in Financial Instruments Directive 2004/39/EC (MiFID), and The Undertakings for Collective Investment in Transferable Securities, Directive 2001/107/EC and 2001/108/EC (UCITS).

[100] Prop. 2011/12:1 p. 277.

[101] Prop. 2011/12:1 p. 278.

differs, depending on which of the two systems are applied to the return from a financial instrument.[102]

In the preparatory works to the conventional capital taxation, it is explicitly stated that the effective taxation of corporate investments is a highly prioritised purpose of the tax system.[103] Thus the conventional taxation of financial instruments treats returns related to corporate shares alike. By introducing the flat rate taxation, however, the government introduced inefficiency in the taxation of corporate investments. An explicit exclusion of certain corporate holdings from the flat tax fragments the taxation of corporate holdings.[104] This fragmented taxation of traditional equities and several other kinds of financial instruments—those not traded on regulated markets or MTFs, for example—provides competitive disadvantages for brokers of financial instruments who are disqualified from the flat tax. This deprived group includes brokers of CFD and *financial spread betting (leveraged trading)*. Whether or not the introduction of the flat tax has had effects on corporate investments is, to our knowledge, yet to be analysed.

Subsequent purposes of the conventional tax system were to limit potential tax credits and to eliminate classification issues between interest and capital gains and losses.[105] Because the flat-tax system uses accrual recognition of all income, in principle, tax credits due to insufficient timing principles do not exist within the system. Likewise, because there is only one kind of income recognised within the system—income from savings and investments—the classification is a non-issue. Thus, in isolation, the flat-tax system handles these two purposes well. It was also considered a strong alternative to the realisation-based taxation in the tax reform of 1990.[106] The flat tax does not exist in isolation, however, and the presence of the conventional taxation of capital income must be taken into account. Under these circumstances, it is likely that classification issues and tax arbitrage opportunities will exist, not within the two systems as such, but as a result of the existence of two optional systems, with different tax treatment of financial instruments.[107] An analysis of the situations and circumstances under which these potential legal nuisances exist is, however, not within the scope of this article.

Finally it is worth mentioning that there will always be financial instruments with low and predictable returns: traditional debt instruments. By taxing the nominal return from these instruments in the same way as nominal returns from high-risk instruments, like equity derivatives, the effective tax on the real return will be unequal and in favour of the more risky instrument.[108] Thus, to treat all financial instruments alike, the tax legislators must eventually abandon the goal of horizontal equity on real income.

---

[102] See Starberg & Gunne, 2012, p. 151. See also Section 6 below.

[103] See Section 4.1.5.

[104] See Section 6.6.

[105] See Section 4.1.

[106] See Section 4.1.3.

[107] See Shakow, 1986, pp. 1166–1167.

[108] See Sections 6.4 and 6.5.

5.2.4   Summary

The flat tax on savings and investments is alien to the conventional income taxation of capital investments. There is no stated ambition that this tax will contribute to the fulfillment of the general purposes of capital income taxation systems, like equal taxation. And it does not. It does facilitate investments in financial instruments for individuals, however.

The design of the flat tax, in which no legal distinction is made between debt and equity, involves a new legal perception of financial instruments. In comparison to the conventional tax system, this unconventional view is more in line with the way these instruments are perceived in a pure financial context, as presented in Section 3. As a result, legal issues regarding the classification of financial instruments will likely decrease as legal certainty increases. Thus, within the flat tax system, none of the cases referred to in the presentation of the conventional tax system are relevant and would never occur in the flat-tax context. The weakness of the flat-tax system is that it requires a tax object with an objective, reliable value. Thus, several over-the-counter, non-exchange-traded instruments must be excluded. This means that there will still be taxation of financial instruments in which the distinction between debt and equity is necessary. If the flat tax system becomes as popular as the Swedish Government wishes, however, it is only a question of time before the classification of financial instruments as debt and equity is an exception to the general rule whereby all financial instruments are treated alike. This development involves the ultimate abolishing of horizontal equity and tax incentives for risky investment in exchange-traded instruments.

5.3   The taxation of corporate income

5.3.1   Specific anti-avoidance rules

As an explicit response to the aggressive tax planning with related-party interest deductions, Sweden has introduced specific anti-avoidance regulations in two steps—in 2009 and 2013.[109] Unlike most other specific anti-avoidance rules (SAAR) with the purpose of hindering this kind of aggressive tax planning (the earning-stripping rules in Germany, Norway, and Finland, for example), the Swedish rules classify interest payments as legal or illegal and tax them based on that classification.[110] They have been criticised for their vagueness and for being in conflict with EU law—the fundamental freedom of establishment.[111] As a result, a large number of advanced rulings and precedent-setting court decisions on the application of these rules have been presented.[112]

The classification of financial instruments as debt and equity is a legal problem that must be handled in order to deal effectively with the types of tax planning mentioned in this article.[113] Furthermore, the tax system is drafted and designed based on the

---

[109] 24 Ch. 10a-10f §§ IL.

[110] See Kleist, 2014.

[111] See Hilling, M, 2012 and Ohlsson, 2014.

[112] See e.g. HFD 2011 ref. 90 I-V, and more than ten advanced rulings presented by the Board in 2014.

[113] See Section 4.3.3.

perspectives of personal income and a view that debt is a low-risk financial instrument.[114] These premises lead to the following considerations:

1. A systematic interpretation of corporate income taxation must be conducted from the perspective of the owner (an individual) of the company, because corporate income taxation is an integrated part in individual's taxation of capital income.

2. Taxation of individuals is based on the principle of horizontal equity.

3. The tax system is structured on the assumption that debt is a low-risk financial instrument.

To deal with the legal problem based on these considerations could lead to the following argumentation: in order to achieve horizontal equity at the individual level, the return from high-risk investments must be taxed at the corporate level. Therefore, only returns from low-risk investments can be deducted at the corporate level. In practice, this leads to a risk-based classification of debt and equity in the corporate sector, which seems logical, given the structure of the system.[115]

This is not how the Swedish SAAR is constructed, however. This specific anti-avoidance rule deals with the legal problem—classification of financial instruments as debt or equity—by legitimating some debt instruments and illegitimating others, based on whether or not they have a true business purpose. Knowing that the legal problem is the result of negligence in referring to a financial instrument's financial risk when classifying it as debt or equity, it is evident that a classification norm based on business purposes could never eventually solve the problem. In fact, it appears as if it has created yet another problem.[116]

5.3.2 New corporate income taxation

To meet this criticism directed at the SAAR and to improve the corporate income tax system in general, the Swedish Government appointed a committee in 2011 to present an income tax system wherein the taxation of debt and equity in limited companies is equal. On 12 June 2014, the Swedish Committee on Corporate Taxation (*Företagsskattekommittén*) presented a proposal for new corporate income taxation.[117] The general purpose of the proposed tax system is to increase financial robustness in Swedish corporations and to prevent the Swedish corporate tax base from eroding through MNE's use of aggressive debt push-down strategies.[118] To achieve these purposes, the new tax system is designed to eliminate any difference in tax treatment based on corporate financing by debt or equity. Thus, there shall be economic neutrality between debt and equity within the corporate income tax.

To achieve economic neutrality, the Committee suggested that corporations not be allowed to deduct financial net expenses. Thus, interest expenses that have

---

[114] See Section 2.6.

[115] The suggestion of such a solution is presented in Hilling, A, 2012. See also Ceryak, 1990 and Politio, 1998.

[116] See footnote 111.

[117] SOU 2014:40 Neutral bolagsskatt – för ökad effektivitet och stabilitet. See Lodin, 2014 for a general presentation of the proposal.

[118] The members of the Swedish Corporate Tax Commission in DN Debatt, 2014-06-12.

historically had unlimited deductibility will only reduce the taxable result up to an amount equal to the tax subject's financial income. This mechanism, it is argued, eliminates tax incentives for economically unsound financing strategies, and removes any possibilities for eroding the Swedish corporate income tax base through the distribution of untaxed income in the form of interest expenses to foreign jurisdictions. The expected elimination of base erosion and the increase of taxable income in companies, which today are highly leveraged, enables a reduction of the corporate tax rate from 22% to 16.5%.

Unlike the SAAR, the proposal from the Committee on Corporate Taxation deals with the actual problem and solves it by treating all financial instruments equally. In relation to the underlying purpose of the tax system—equal taxation—it is only a second-best solution, however, because unlike a systematic interpretation of the legislation, the new legislation does not consider how income is taxed after it has been distributed to the individual owner of the company. Thus the proposed legislation, with a lowering of corporate income tax for most companies, actually leads to more unequal taxation, because the capital income will be taxed more favourably than labour income. Furthermore, just as in the case with the flat tax on savings and investment, by treating all financial instruments equally, horizontal equity is abolished in practice.[119]

Consequently, just as in the case of individual capital taxation, the new proposed corporate income tax system has effectively dealt with the tax loophole of a classification of financial instruments, but the solution is not related to the tax system as such. The effect, therefore, is that the fundamental principles of the tax system are not observed. Rather, the two solutions work against equal taxation, as illustrated in next section.

6.   UNEQUAL TAXATION

6.1   Horizontal equity

In Sections 2 and 4, we argue that the Swedish income tax system is founded on the principle of horizontal equity, and that this principle is satisfied when the classification of a financial instrument as debt and equity is conducted with reference to their financial risk. Furthermore, we note that horizontal equity is to be satisfied not only within the taxation of capital incomes, but also in regard to income from labour. Because the total tax on income from labour was approximately 60% when the tax system was designed, horizontal equity required capital income to be taxed at approximately 60% as well. Today the total tax on income from labour remains, for most laborus, at approximately 60%, including payroll taxes.[120] Consequently, horizontal equity between capital income and income from labour is considered fulfilled in the following examples when capital income is taxed at 60% before it can be consumed by individuals.[121]

---

[119] See Section 5.2.4.

[120] Cf. Section 2.6.

[121] In the examples, the tax incentives for wages 'earned income tax credit' (*jobbskatteavdrag*) are not taken into account.

6.2   How to tax capital income equal to income from labour

Although the tax object is always computed on its nominal value, the relevant benchmark between wages and capital income is when the latter—capital income—is presented in terms of real income. This is so because the value of a capital investment is generally never adjusted in relation to inflation; in contrast, wages are inflation-adjusted in annual negotiations, so the value of labour can be said to be in recurrent salary negotiations. Consequently, Table 2 illustrates how the tax system is designed to target approximately 60% effective tax on real capital income. Because the presumed possible returns from debt and equity differ greatly in relation to the alleged inflation (twice as much and six times as much), it is necessary to treat them separately in order to meet the overall purpose of equal taxation.

Table 2: Taxation in accordance with the structure of the income tax system[122]

Investment	Income	Corporate income tax	Tax on capital income	Effecive tax	Inflation	Nomial income	Real income	Tax on real income
Equity	Dividends	30.00%	30.00%	51.00%	2.00%	12.00%	9.80%	62.42%
Debt	Interest		30.00%	30.00%	2.00%	4.00%	1.96%	61.20%

Note: The corporate income tax and the tax on capital income was 30% of the nominal income at the time the tax system was designed. Source: authors

6.3   Taxing hybrid instruments as debt

Table 2 illustrates that high-risk return must be taxed at approximately 50% on the nominal value in order to reach the target of approximately 60% of real income. This is the reason equity income is subject to double taxation, whereas debt income is not. When the legal classification of debt comprises high-risk instruments such as derivatives with large moneyness, the effective tax on the nominal return from these instruments will remain at 30%. That results in a tax of less than 40% on real income, which is a significant departure from the target of 60%. Table 3 illustrates the consequences of the fundamental error of classifying high-risk financial instruments as debt.

Table 3: Single taxation of high-risk investments

Investment	Income	Corporate income tax	Tax on capital income	Effecive tax	Inflation	Nomial income	Real income	Tax on real income
Equity	Dividends	30.00%	30.00%	51.00%	2.00%	12.00%	9.80%	62.42%
Debt	Interest		30.00%	30.00%	2.00%	12.00%	9.80%	36.72%

Source: authors

---

[122]   The components in the columns has been calculated as follow: **Effective tax**: 1*30% [CIT] + (1-(1*30% [CIT]))*30% [Tax on capital income];   **Real Income**: (1+12% [Nominal Income]) / (1+2% [Inflation])-1; **Tax on real Income**: (100*12% [Nominal Income] * 51% [Effective tax]) / (100*9.8% [Real Income]). The figures in the columns **Corporate Income Tax**, **Inflation** and **Nominal Income** are picked to illustrate the estimations on which the legislation was designed.

6.4   Flat tax on capital

The flat tax on saving and investments dramatically lowered the capital tax on investments with high risk. Simple mathematics indicates that if an investment provides a better return than approximately 2%, the flat tax is more favourable for the investor when compared to the conventional capital tax of 30%. The greater the return, the lower the effective tax. Yet, because the double taxation of equity remains, the equality in taxation of capital income does as well, as long as only low-risk investments are classified as debt. Consequently, although the figures show equality between investments in debt and equity, the favourable treatment of capital income eventually brings the goal of horizontal equity between capital income and income from labour to an end.

Table 4: Flat tax on savings and investment

Investment	Income	Corporate income tax	Flat tax (ISK)	Effecive tax	Inflation	Nomial income	Real income	Tax on real income
Equity	Dividends	22.00%	5.23%	26.08%	2.00%	12.00%	9.80%	31.92%
Debt	Interest		15.68%	15.68%	2.00%	4.00%	1.96%	31.98%

Note: The flat tax is calculated on an average market value of 100,000 SEK during the tax year, thereby rendering a flat tax of 627 SEK in 2014. The corporate income tax rate is for 2014. Source: authors

6.5   New corporate income taxation

The proposal of the Swedish Committee on Corporate Taxation treats income from debt and equity alike, also involving economic double taxation for interest income. Together with the lowered corporate income tax rate, the effective tax on real debt income targets the original goal of approximately 60% tax. It is noteworthy, however, that the effective tax on real debt income is much lower in the new system, when compared to the conventional system, in pace with the return on the increase in debt. The lowered corporate income tax and the low flat tax on savings and investments have, however, dramatically lowered the tax on income from equity. The two new systems—flat tax and new corporate income tax—make the effective tax on real equity income less than half, compared to debt income and income from labour.

Table 5: Economic double taxation of debt and equity

Investment	Income	Corporate income tax	Flat tax (ISK)	Effecive tax	Inflation	Nomial income	Real income	Tax on real income
Equity	Dividends	16.50%	5.23%	20.86%	2.00%	12.00%	9.80%	25.54%
Debt	Interest	16.50%	15.68%	29.59%	2.00%	4.00%	1.96%	60.36%

Note: The flat tax is calculated on the same bases as in Table 5. Source: authors

6.6   Different kinds of equity

As illustrated in the tables, it appears that equity income will be heavily favoured in a future Swedish income tax system. Remember, however, that the favourable flat tax

on savings and investments applies only to publicly traded financial instruments.[123] This means that several kinds of equity instruments fall outside the flat-tax regime and must be taxed in accordance with the less favourable conventional capital tax. Depending on the character of the equity instrument, the capital tax on equity is today 30%, 25% or 20%.[124] Compared with the flat tax on savings and investments, even instruments subject to the most favourable capital tax, like close company equity, is much more heavily taxed. Thus, the flat tax on savings and investments has resulted in the tax incentive for close companies (20%) and unlisted companies (25%) being replaced with a tax incentive for investments in publicly traded companies (flat tax). In addition, the flat tax extends the unequal taxation within capital income.

Table 6: Unequal taxation of equity investments

Investment	Income	Corporate income tax	Individual income tax	Effecive tax	Inflation	Nomial income	Real income	Tax on real income
			Flat tax (ISK)					
Public company investment	Dividends	16.50%	5.23%	20.86%	2.00%	12.00%	9.80%	25.54%
			Captal tax					
Close company investment	Interest	16.50%	20.00%	33.20%	2.00%	12.00%	9.80%	40.64%

Source: authors

6.7 Summary

Whereas the tax on income from labour, including payroll taxes, remains at approximately 60%, the tax on real capital income will have decreased step-by-step to the all-time low of approximately 26%, if the proposed new corporate income tax rules are introduced. Given these dramatic changes, and digression from the tax system's fundament of equal taxation, it is startling how the tax-legislators avoid discussions on how the proposed legislative changes relate to equal taxation, in the preparatory works of the flat tax and in the proposal from the Committee on Corporate Taxation. We hope that such discussion will occur before additional major changes are made in the system.

7. CONCLUSIONS

The purpose of this article is to present a general trend in corporate income taxation, in Sweden and elsewhere, which aims to treat debt and equity alike, and to examine how it originates from the incapacity of previous tax-law making and its interpretation and application, to determine the legal classification of certain financial instruments. Our analysis of this issue can be summarised in the following eight points:

1. The structure of the Swedish taxation of capital income is risk-based. In this context, debt is assumed to be a financial instrument with returns that are just some percentage above inflation and equity is a financial instrument with returns that could be much greater compared to debt.

---

[123] See Section 5.2.

[124] In this example, the tax incentives on investment deductions (*investeraravdrag*) presented in SOU 2012:3 and Prop. 2012/13:34 are not taken into account.

2. By taxing low-risk financial instruments (debt) and high-risk financial instruments (equity) differently, it is possible to achieve equal taxation of real capital income, and thereby achieve horizontal equity between capital income and income from labour.

3. The legal classification of debt and equity does not refer to the risk of financial instruments, however. Rather it focuses on the legal form, which is based on contractual considerations rather than financial risk.

4. Because financial risk is not considered when financial instruments are classified as debt or equity, the definition of debt has developed to include risky instruments, with contractual characteristics in concordance with the legal debt concept. From an economic point of view, these risky debt instruments are nothing but derivatives with large moneyness—high risk instruments.

5. Because the legal concept of debt has been extended to include risky financial instruments, the preferential tax treatment of debt can no longer be justified. Thus, what was originally a justified difference in tax treatment has turned out to be unjustifiable, because of the extended scope of the debt concept.

6. The legal problem is the wide legal definition of debt in a tax system the structure of which requires a relatively narrow definition of debt, covering only low-risk financial instruments. Instead of dealing with this problem by confining the legal concept of debt to cover only low-risk instruments, however, the tax-legislators have kept the wide definition of debt and abolished the preferential tax treatment of debt.

7. To achieve the fundamental aim of equal taxation of real capital income involves a larger effective taxation of the real income from traditional debt instruments—low-risk financial instruments, compared to the effective tax on the real income from traditional equity instruments—high risk financial instruments.

8. Horizontal equity within Swedish income taxation seems to be nothing but a memory.

8.   REFERENCES

8.1   Case law

8.1.1   Swedish Supreme Administrative Court

RÅ 1994 ref. 26

RÅ 1995 ref. 71

RÅ 1999 ref. 69

RÅ 2000 not. 8

RÅ 2001 ref. 21

RÅ 2001 not. 160

RÅ 2002 not 51

RÅ 2003 ref. 48

RÅ 2007 ref. 3

HFD 2014 ref. 10

8.1.2   Swedish Administrative Court of Appeal in Stockholm

Kammarrättens mål nr. 6953-6957-11 (2012-11-13)

8.1.3   Swedish Administrative Court of Appeal in Gothenburg

Kammarättens mål nr. 1262-1264-13 (2014-04-02)

8.1.4   Swedish Tax Board

Advance ruling decided 2011-12-29 (dnr 31-10/D).

Advance ruling decided 2013-06-19 (dnr. 4-12/D)

8.2   Swedish official documents

8.2.1   Swedish Government Bills

Regeringsens proposition 1989/90:110 Reformerad inkomst – och företagsbeskattning

Regeringens proposition 1990/91:54 om kvarvarande frågor i reformeringen av inkomst och företagsbeskattningen, mm.

Regeringens proposition 1991/92:60. Skattepolitik för tillväxt

Regeringens proposition 2008/09:65 Sänkt bolagsskatt och vissa andra skatteåtgärder för företag

Regeringens proposition 2011/12:1 Budgetproposition för 2012

Regeringens proposition 2012/13:1 Budgetproposition för 2013

Regeringens proposition 2012/13:24 Ändringar i reglerna om beskattning av finansiella instrument på investeringssparkonto

Prop. 2012/13:34 Inversteraravdrag

8.2.2   Ministry of Finance Committee Reports

SOU 1989:33 Reformerad inkomstbeskattning

SOU 2012:3 Skatteincitament för riskkapital

SOU 2014:40 Neutral bolagsskatt – för ökad effektivitet och stabilitet

8.2.3   Swedish Tax Agency

Förslag om begränsningar i avdragsrätten för ränta m.m. på vissa skulder, Promemoria 2008-06-23, Dnr. 131-348803-08/113

Ränteavdrag i företagssektorn, Promemoria 2009-12-14, Dnr. 131-890752-09/113

Ränteavdrag i företagssektorn – Fortsatt kartläggning, Promemoria 2011-03-14, Dnr. 131-755479-10/113)

Hybridsituationer inom bolagssektorn. Gränsöverskridande och särskilt i samband med finansiering, Rapport 2012-04-23, Dnr. 131-183077-12/1211

Skatteplanering med ränteavdrag i företagssektorn, Externa lån och nya metoder för kringgående av 2009 års lagstiftning, Promemoria 2014-01-20, Dnr. 131 756251-13/113.

Skatteverkets ställningstaganden, Hur bestäms marknadsvärdet för ett finansiellt instrument på ett investeringssparkonto? Dnr. 131 204738-14/111

8.2.4   Literature

Alley, C & Bentley, D 2005, 'A remodeling of Adam Smith's tax design principles', *Australian Tax Forum*, vol. 20, pp. 579–624.

Auerbach, AJ, Devereux, MP & Simpson, H 2010, 'Taxing Corporate Income', in *The Mirrlees Review*, Oxford University Press, Oxford, pp. 837–913.

Avi-Yonah, RS 2006, 'The Three Goals of Taxation', *Tax Law Review*, vol. 60, no. 1, pp. 1–28.

Beder, T 2011, 'The history of financial engineering from inception to today' in Beder, TS & Marshall, CM (eds.), *Financial Engineering, The Evolution of a Profession*, The Robert W. Kolb Series in Finance, John Wiley & Sons, Inc., pp. 3–27.

Bergström, S 2003, 'Regeringsrättens lagtolkningsprinciper – nya tendenser under senare tid?', *Skattenytt*, pp. 2–13.

Birch Sorensen, P 1994, 'From the global income tax to the dual income tax: Recent tax reforms in the Nordic countries', *International Tax and Public Finance*, vol. 1, no. 1, pp. 57–79.

Birch Sorensen, P 2010, *Swedish Tax Policy: Recent Trends and Future Challenges*, Report to the Expert Group on Public Economics 4, Swedish Ministry of Finance.

Bjuvberg, J 2014, 'Skattemässig hantering av "tvingande" konvertibler – en rättsfallskommentar', *Svensk Skattetidning*, vol. 2, pp. 153–168.

Black, F & Scholes, M 1973, 'The pricing of options and corporate liabilities', *Journal of Political Economy*, vol. 81, pp. 637–654.

Blessing, PH 2012. 'The Debt-Equity Conundrum—A Prequel' in Marres, O & Weber, D (eds.), *Tax Treatment of Interest for Corporations*, IBFD, pp. 23–61.

Brown, P 2012, 'General report in the debt-equity conundrum', *Cahiers de droit fiscal international*, vol. 97b, pp. 17–43.

Bundgaard, J 2014, 'Debt-flavoured equity instruments in international tax law', *Intertax*, pp. 416–426.

Bärsch, S-E 2012, *Taxation of Hybrid Financial Instruments and the Remuneration Derived Therefrom in an International and Cross-border Context*, Springer.

Ceriyak, DV 1990. 'Using risk analysis to classify junk bonds as equity for federal income tax purposes', *Indiana Law Journal*, vol. 66, pp. 273–294.

de Mooij, RA 2011, 'Tax Biases to Debt Finance: Assessing the Problem, Finding Solutions', IMF Staff Discussion Note, May 3, SDN/11/11.

de Mooij, RA & Devereux MP 2011, 'An Applied Analysis of ACE and CBIT Reforms in the EU'. *International Tax and Public Finance*, vol. 18, pp. 93–120.

Eberhartinger, E & Six, M 2009, 'Taxation of cross-border hybrid finance: A legal analysis', *Intertax*, pp. 4–18.

Edgar, T 2000, *The Income Tax Treatment of Financial Instruments, Theory and Practice*, Canadian Tax Foundation.

Folkvord, B & Riis Jacobsen, M 2014, 'Corporate income tax and the international challenge', *Nordic Tax Journal*, vol.. 2, pp. 55–87.

Henrekson, M & Du Rietz, G 2014, 'The rise and fall of swedish wealth taxation', *Nordic Tax Journal*, vol. 1, pp. 9–35.

Hilling, A 2007, *Income Taxation of Derivatives and other Financial Instruments—Economic Substance versus Legal Form, A study focusing on Swedish non-financial companies*, JIBS Dissertation Series No. 42.

Hilling, A 2008, 'Kapitalvinstbeskattning av finansiella produkter, En utvärdering mot bakgrund av senare års rättspraxis och utveckling på kapitalmarknaden', *Svensk Skattetidning*, pp. 699–721.

Hilling, A 2012, 'Begreppet ränteutgift i svensk inkomstskatterätt – en kritisk analys', *Juridisk Tidskrift vid Stockholms Universitet*, vol. 2, pp. 309–331.

Hilling, M 2012, 'Är det möjligt att utforma EU-förenliga skatteflyktsregler?', *Svensk Skattetidning*, pp. 754–772 and 814–827.

Holmes, K 2001, *The Concept of Income, A multidisciplinary analysis*, IBFD Publications.

Kleist, D 2014, 'NSFR Seminar 2014—National Report for Sweden', *Nordic Tax Journal*, vol. 2, pp. 215–227.

Lodin, S-O 2009, 'Recept på förenklad kapitalbeskattning', *Skattenytt*, pp. 114–121.

Lodin, S-O 2014, 'An overview of the Proposal of the Swedish Government Committee on Corporate Taxation', *Nordic Tax Journal*, vol. 2, pp. 43–54.

Madison Jr. RB 1986, 'The deductibility of "interest" on hybrid securities', *Tax Lawyer*, vol. 39, no. 3, pp. 465–517.

Marres, O & Weber, D (eds.) 2012, *Tax Treatment of Interest for Corporations*, IBFD.

Melz, P 2007, 'General Description: Sweden' in Ault, HJ & Arnold, BJ 2007, *Comparative Income Taxation, A Structural Analysis*, 3rd ed., Wolters Kluwer Law & Business, pp. 129–143.

Modigliani, F & Miller, MH 1958, 'The cost of capital, corporation finance, and the theory of investment', *American Economic Review*, vol. 48, no. 3, pp. 261–297.

Merton, RC 1971, 'Theory of rational option pricing', MIT Sloan School of Management Working Paper No. 574–71, pp. 141–183.

OECD 2013a, *Addressing Base Erosion and Profit Shifting*, OECD Publishing.

OECD 2013b, *Action Plan on Base Erosion and Profit Shifting*, OECD Publishing.

Ohlsson, F 2014, 'Dags för HFD att begära ett förhandsavgörande om ränteavdragsbegränsningarna?', *Skattenytt*, pp. 650–660.

Olsson, S 2014, 'Avdragsrätt för ränta på konvertibler', *Skattnytt*, pp. 86–88.

Politio, AP 1998, 'Useful fictions: Debt and equity classification in corporate tax law', *Arizona State Law Journal*, vol. 30, pp. 761–810.

Pratt, K 2000, 'The debt-equity distinction in a second-best world', *Vanderbilt Law Review*, vol. 58, no. 4, pp. 1055–1158.

Schoen, W, et al. 2009, 'Debt and equity: What's the difference? A comparative view', Max Planck Institute for Intellectual Property, Competition and Tax Law Research Paper Series No. 09-09.

Seligman, ERA 1925, *Essays in Taxation*, 10th ed., Macmillan.

Shakow, DJ 1986, 'Taxation without realization: A proposal for accrual taxation', *University of Pennsylvania Law Review*, vol. 134, no. 5, pp. 1111–1205.

Starberg, D & Gunne, C 2012, 'Investeringssparkontot – en ny sparform', *Svensk Skattetidning*, pp. 142–155.

Sundaram, RK & Das, SR 2011, *Derivatives: Principles and Practice*, McGraw-Hill, Irwin.