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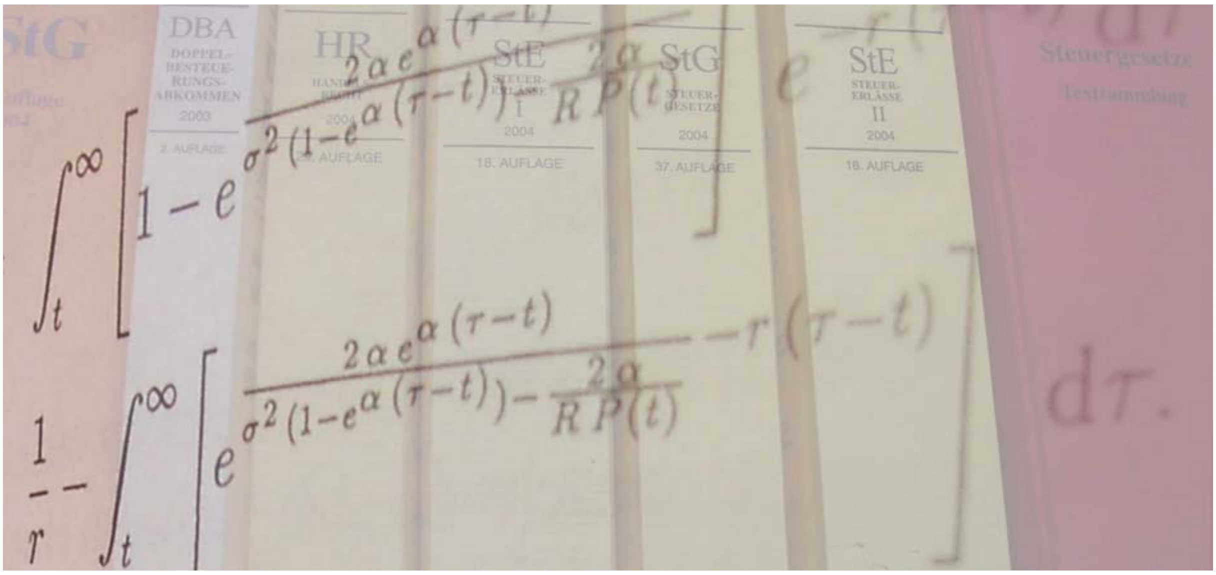

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Allowance for Shareholder Equity –
Implementing a Neutral Corporate Income Tax in the European Union

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Allowance for Shareholder Equity – Implementing a Neutral Corporate Income Tax in the European Union

by Deborah Knirsch and Rainer Niemann

Abstract

This paper proposes the introduction of a consumption-based corporate income tax in the European Union. Our proposal would guarantee neutrality regarding investment decisions and at the same time increase cost-efficiency. The proposal is based on the S-base cash flow tax, where transactions within the corporate sector are not at all taxable and only transactions between shareholders and corporations are subject to tax. In contrast to existing S-base cash flow tax systems, tax deductibility of investments is deferred. Rather, the acquisition costs and capital endowments are compounded at the capital market rate and are set off against future capital gains. Dividends and withdrawals are fully taxable at the shareholder level. Because of the similarities to the Allowance for Corporate Equity (ACE) tax our proposal is called Allowance for Shareholder Equity (ASE tax).

The ASE tax exhibits the same neutrality properties as the traditional cash flow tax. Moreover, the compounded inter-temporal credit method ensures that it is neutral with respect to the decision between domestic and foreign investment.

To increase acceptance of the ASE tax, current taxpayers' documentation requirements will be reduced rather than extended. Our proposal is shaped in a way that it could be realized in a single EU country or in all member states of the EU.

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Allowance for Shareholder Equity – Implementing a Neutral Corporate Income Tax in the European Union

1 Introduction

Current taxation in the European Union is characterized by a wide variety of different corporate tax systems. Due to the ongoing economic integration it is necessary to develop a tax system that is consistent with the requirements of the Common Market and that does not discriminate against cross-border activities. This fundamental problem goes back to the early years of the European Community. Since then, there have been many attempts to harmonize corporate taxation within Europe[1]. Due to the trade-off between tax competition and national tax revenue considerations a harmonization of corporate taxes has not yet been realized.

The most recent initiative for harmonizing corporate taxation in the EU started in 2001. The study "Corporate taxation in the internal market" measured the effective tax burden of intrastate and cross-border activities. The study's main conclusion was the proposal of a harmonized tax base that should be allocated to the member states via formula apportionment[2].

The introduction of formula apportionment intends to avoid the problems associated with transfer pricing, especially the shifting of tax bases to low-tax jurisdictions. Corporations have an incentive to shift expenditures to high-tax and revenues to low-tax countries. In the current system of separate taxation this effect can be easily reached by manipulating transfer prices. Since arm's length transfer prices are notoriously hard to determine fiscal authorities tend to impose very tough documentation requirements on multinational groups. As a result, compliance costs are high for taxpayers as well as for tax authorities. Introducing formula apportionment would eliminate the need for transfer prices – at least for groups operating only within EU member states[3]. However, intra-group transactions beyond the EU borders ("water's edge") would still require transfer prices. Apart from the possible reduction of compliance costs, the effects of formula apportionment on production and investment decisions as well as on the overall tax revenues are ambiguous[4]. Canadian and U.S. experience with formula apportionment is not very helpful because the tax rate differentials between EU member

[1] See European Commission (2001), p. 16 ff.
[2] Four different reform proposals exist in order to harmonize tax bases in the EU. See European Commission (2001). Currently, different committees develop concepts for implementing the reform proposals. See European Commission (2004, 2005, 2006). For the international allocation of tax bases see Bird/Mintz (2003).
[3] See European Commission (2001).
[4] See Martini/Niemann/Simons (2007).

states exceed the ones between Canadian provinces or U.S. states substantially.

Different corporate tax systems with varying tax accounting rules are not the only source of high compliance costs in Europe. Rather, the diversity of national financial accounting rules which are applied by non-listed companies[5] causes high compliance costs. This is especially evident in countries with two-book systems: For the individual financial statement, a quoted corporation may have to apply national GAAP. For the consolidated financial statement, IFRS are required. The corporate tax return has to be prepared in accordance with national tax accounting rules. Summing up, repeated requests for tax simplification may reflect a level of compliance costs that is perceived unacceptable.

Even more important than low compliance costs, neutrality is the crucial economic requirement of a "good" tax system, i.e., corporate tax systems should be neutral with respect to entrepreneurial decisions. However, even in an intra-state setting current corporate tax systems in Europe have considerable effects on investment and financing decisions[6]. Taking cross-border activities into account introduces a variety of additional tax effects.

Neither the current tax systems nor the existing EU reform proposals are able to correct these economic shortcomings. Despite the current variety of corporate tax systems tax neutrality has not yet been reached in any of the member states. Elements of neutral taxation are implemented in Norway, in Belgium, and in Estonia, but the neutral tax system in Croatia has been abolished in 2000.

Despite the lack of practical implementation, economists' knowledge about neutrality has grown over the years. Neutral tax systems in closed economies are well known for almost 60 years now[7]. Moreover, neutral tax systems under uncertainty have been developed extensively in the past two decades[8]. However, the environment of tax research and tax practice changed profoundly. Current problems of governments include three basic topics:

- Mobility of capital and cross-border taxation,
- Compliance costs of both taxpayers and tax authorities,

[5] In the EU, the IFRS are applied by publicly traded groups of corporations only. Some small countries including Malta did not develop national financial reporting standards. In those countries, IFRS-based reporting is applied by all companies.
[6] Typically, debt is tax-favoured over equity. Distributed profits are taxed more heavily than retained profits. Inter-temporal consumption is distorted by the taxation of interest income. For measuring distortions using neutrality-based effective tax rates see Knirsch (2007).
[7] The cash flow tax in its original form (R-base tax) was developed by Brown (1948).
[8] Neutral tax systems and their effects on investment decisions are described by Fane (1987), Devereux/Freeman (1991), Niemann (1999), Sureth (2002), Bond/Devereux (2003).

- Developments in financial accounting and the relation of financial to tax accounting.

There is extensive theoretical knowledge in these topics in different subdisciplines of public economics and accounting. However, practical implementation of tax reforms in most countries typically does not refer to theoretical insights in neither academic discipline. This paper addresses these problems and proposes a consumption-based neutral tax system which takes cross-border activities and transition problems into account.

The remainder of this paper is organized as follows: Section 2 addresses the implementation of consumption-based corporate tax systems and explains the underlying principle of the Allowance for Shareholder Equity (ASE tax). Section 3 discusses special features of the ASE tax for domestic investment. In section 4 we show how the ASE tax solves problems arising in a cross-border setting. Section 5 addresses the transition from current tax systems to the ASE tax. Section 6 concludes.

2 Implementing consumption-based taxation

2.1 Features of differing consumption-based tax systems

Consumption-based tax systems are the most convenient method to reach tax neutrality. In contrast to a neutral comprehensive income tax (Johansson-Samuelson tax[9]) a consumption-based neutral tax system has already been implemented in practice: Croatia developed an Allowance for Corporate Equity (ACE) in 1994[10]. In 2000 the ACE tax was abolished for political reasons despite a positive evaluation by the IMF[11]. The fact that an ACE tax is difficult to understand for some taxpayers might be considered as a disadvantage. Austrian experience with ACE tax elements confirmed that increasing complexity lowers political acceptance of tax reforms[12]. Implementing a cash flow-based corporate income tax could mitigate this problem.

There are different options for implementing cash flow taxes. All of the options are neutral with respect to investment and financing decisions[13]. However, the versions differ with regard to compliance costs, vulnerability to misuse and revenue volatility[14]. In light of these impor-

[9] See Samuelson (1964), Johansson (1969).
[10] The ACE tax was originally developed by Wenger (1983) and Boadway/Bruce (1984).
[11] See Keen/King (2002).
[12] As an example, see § 11 Austrian income tax code.
[13] The different versions of the cash flow tax are described by Auerbach/Devereux/Simpson (2007), e.g.
[14] Becker/Fuest (2005) find that implementing a consumption tax would reduce tax revenues only slightly.

tant requirements the S-base tax[15] seems especially favourable. Under the S-base tax, income is not taxed on the corporate level. Rather, transactions between corporations and their shareholders are taxable. In order to maintain the neutrality properties of the cash flow tax and to keep tax revenue constant during the transition process we propose a deferred S-base tax called Allowance for Shareholder Equity (ASE) which is described below[16]. Abuse in form of tax refunds obtained by fraud as known from the R-base tax does not arise because tax reimbursements are avoided. In contrast to corporate tax systems, the ASE tax is not based on tax accounting at the corporate level. Only deposits by and distributions to shareholders have to be recognized. As a result, compliance costs on the corporate level can be reduced dramatically.

The dualism of coexistent tax bases is one of the main reasons for tax-induced distortions of investment and financing decisions. Dualism means that the tax base for labor income is determined on a cash basis, whereas the tax base for capital income requires accrual accounting. Although the EU reform proposals fail to address this problem, abolishing dualism is a necessary condition to reach neutrality. Since labor income is already computed on a cash basis this method should be transferred to capital income, too. Introducing a cash-based corporate income tax removes dualism and replaces the current system by a uniform method to define the tax base. Computing the tax base of labor income would not require any reform. The same holds true for self-employed and for small enterprises who typically compute taxable income by using the cash method.

Since a cash flow tax leaves interest income effectively tax-exempt its tax base is smaller compared to a comprehensive income tax. Thus, introducing a cash flow tax may require higher tax rates than a neutral comprehensive income tax if tax revenues are required to remain constant[17]. Compared to real-world tax systems with incomplete taxation of capital income, however, the tax rate increase would be rather small.

2.2 The underlying principle of the deferred S-base tax

Only transactions between a corporation and its shareholders are subject to the S-base tax. Transactions between the corporation and its customers, its suppliers, and its employees are

[15] Named after the Meade report, the S-base tax is also called “Meade tax” or tax on net equity distribution base. See Meade et al. (1978); King (1987). Bond/Devereux (2003) prove that the S-base tax is neutral under uncertainty.

[16] Kay/King (1978), p. 201, propose a compounded loss carry-forward for the transition to the cash flow tax. In Papua-New Guinea, a similar approach is used to tax economic rents from commodity-related investment projects. See Garnaut/Clunies (1983), p. 228 ff.

[17] On the other hand, a cash flow tax increases investment incentives which augments national tax revenue.

not taxable (see Figure 1).

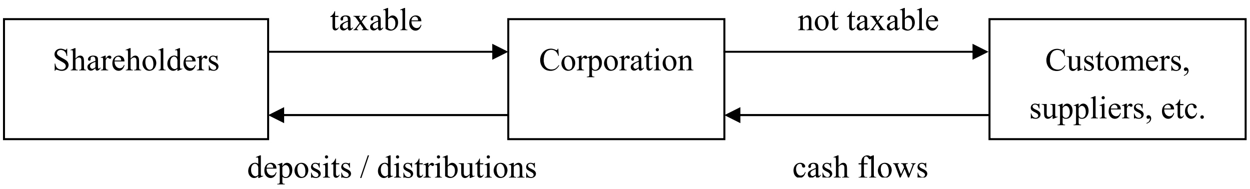

Figure 1: The tax base of the S-Base Tax.

Under the traditional S-base tax known from the literature[18] capital raised by shareholders arouses immediate tax reimbursements. On the other hand, distributions like dividends are taxed immediately. This procedure ensures investment neutrality because the after-tax net present value of an investment project is always proportional to its pre-tax value. Since interest income is effectively tax-exempt the S-base tax also guarantees inter-temporal consumption neutrality.

However, an S-base cash flow tax has not yet been implemented. Fiscal authorities have been aware of the abusive potential because they fear that tax reimbursements are obtained by fraud (analogous to VAT fraud) without ever generating positive operating cash flows. Moreover, a strong incentive to take advantage of international tax rate differentials exists: Investors could invest in high-tax countries and shift profits to low-tax countries. Similar problems will occur if investors emigrate or if corporations are bequeathed.

This problem can be avoided if deposits do not qualify for an immediate tax relief. Rather, deposits by shareholders should be subject to an “Allowance for Shareholder Equity” (ASE) that can be subtracted from future distributions or realized capital gains. In present value terms this procedure is equivalent to the Allowance for Corporate Equity (ACE) which was practiced in Croatia from 1994 until 2000[19]. The underlying technique resembles the offsetting of a loss carry-forward, the only difference being the compounding of interest.

At the time of providing the capital endowment, the investor’s tax due equals zero. When the capital is paid back to the investor the tax base TB_t equals the difference of withdrawal[20] and accumulated capital endowment:

[18] See Meade et al. (1978).
[19] See Schmidt/Wissel/Stöckler (1996), e.g.
[20] Our proposal is designed for corporations as well as partnerships and sole proprietors. For this reason, we do not distinguish between “dividends” and “withdrawals”. Both terms refer to distributions to the owners of a firm.

$$
\begin{aligned}
&TB_0 = 0 \\
&TB_t = \max\{0; Dis_t - EA_t\} \\
&EA_t = (1+i)\cdot EA_{t-1,final} + CE_t \qquad (1) \\
&EA_{t,final} = EA_t - Dis_t \\
&t = 1,\dots,T.
\end{aligned}
$$

with	CE_t	capital endowment
	Dis_t	Distributions
	EA_t	equity account prior to distributions
	$EA_{t,final}$	equity account after distributions
	i	capital market rate[21]
	t	Time
	T	time horizon
	TB_t	tax base

Annual profits are not added to the equity account.

For quoted corporations this procedure would be very expensive, because each distribution and each capital contribution would require a separate computation of the accumulated equity account for each investor. A less complex alternative would be the separation of current and final taxation. Current events like dividend payouts or withdrawals from partnerships would be fully taxable. Only infrequent or singular events like disinvestments or liquidations would be taxable taking deductibility of the accumulated equity account into consideration. This means that all payments to shareholders are fully taxable unless the shareholder can prove a singular event. As a consequence, the tax bases are defined as follows:

$$
\begin{aligned}
&TB_{t,current} = Dis_t \\
&TB_{t,singular} = \max\{0; Dis_t - EA_t\} \qquad (2) \\
&EA_t = (1+i)\cdot EA_{t-1} + CE_t \\
&t = 1,\dots T.
\end{aligned}
$$

with	$TB_{t,current}$	tax base for current taxation
	$TB_{t,singular}$	tax base for final taxation

Moreover, the separation of current and final taxation is reasonable to ensure a reliable tax collection. For current events a withholding tax should be levied prior to the individual tax assessment. In contrast, final taxation requires an individual tax assessment with a proof of the accumulated equity account. This procedure is consistent with tax practices in most countries and double taxation treaties.

[21] In the ACE tax the deductible interest allowance is also called "protective interest". See Rose/Wiswesser (1997).

Like other versions of the cash flow tax the ASE tax is neutral only for a proportional income tax rate[22]. Whether a progressive tax rate or a proportional tax rate with high personal exemptions is desirable from a distributional perspective has to be considered in the political process.

In a federal state local, regional, and federal taxes have to be co-ordinated[23]. This is also true for the ASE tax. The neutrality property only holds if the tax bases on all levels are identical. This can be easily accomplished by a local or regional surcharge on the federal tax[24].

2.3 Experiences with consumption-based tax systems in other countries

Some countries have already implemented tax systems with some elements of this reform proposal. In the following we will describe these tax systems and use valuable experiences that help implementing and designing the details of the allowance for shareholder equity. First, these experiences give insights in retaining information concerning the acquisition costs of shares and in compounding these numbers as it is known from Norway[25]. Second, in Papua-New Guinea[26] we can learn how to deal with an R-based cash flow tax. Third, some countries' governments fix a riskless interest rate to calculate companies' Allowance for Corporate Equity (ACE). Croatia had implemented the ACE tax from 1994 to 2000.

In Norway, the well-known dual income tax[27] has been modified[28] as from January 1st 2006 in order to implement a neutral taxation of 'active' shareholders. Corporate income taxes will be paid on the corporate level. In case of profit distributions shareholders will pay dividend taxes only if the distributions exceed the 'Rate-of-Return Allowance', an imputed interest of the equity. In case of retained profits, the active shareholder does not lose the allowance: The amount will be carried forward on an annual basis and accumulated over time. This tax system differs from our tax reform proposal. Nevertheless, we can learn from Norway that it is possible to handle storage and to carry shareholder information forward.

Almost unnoticed in the international literature, a neutral R-based[29] cash flow tax is in effect

[22] It can be proved that the cash flow tax violates neutrality under time-dependent tax rates. See Niemann (2004a), p. 278 f.
[23] For the benefits and problems of fiscal decentralization see Wellisch (2000).
[24] Municipal surcharges as a percentage of cantonal taxes are levied in Switzerland, e.g.
[25] See Sørensen (2005b).
[26] See Garnaut/Clunies (1983), p. 228 ff.
[27] See Sørensen (1994); Sørensen (2005a), e.g.
[28] See International Bureau of Fiscal Documentation (Ed.) (2006), p. 495.
[29] The ASE tax is an S-based cash flow tax. In contrast to the R-based tax, the S-based cash flow tax inherits the advantage that no special tax rules are needed for financial institutions; see Meade et al. (1978), p. 240; Sinn

in Papua-New Guinea since the 1970s. In the mining sector, initial investment costs are typically very high. There is an immediate write-off of these initial acquisition costs, causing a loss carry-forward. The loss carry-forward is compounded over time. It is reduced by cash inflows. Thus, taxes are effectively paid on a cash flow basis. As in our reform proposal of the ASE tax, a compounded loss carry-forward replaces the immediate tax refund in case of losses.

In Croatia, an ACE tax had been implemented from 1994 until 2000. Profits were reduced by an imputed interest rate on equity. The imputation rate was defined by the government and included both an interest and inflation rate. Summing up, the two components were necessary because a developed capital market was missing throughout the post-communism and post-war transition years. This task would have to be carried out differently in Europe nowadays, because we can use long-term interest rates paid at the capital market.

A very innovative tax system has been implemented in Estonia in recent years: As in our ASE tax proposal, shareholders instead of corporations are taxed. Retained profits are tax-exempt[30], while distributed profits are taxed at 23%. Contrary to the ASE tax, acquisition costs are not compounded. Thus, the tax system does not reach neutrality. Nevertheless, Estonia's tax system is a large progress in respect of simplifying the tax base and reducing compliance costs.

3 Taxation of domestic businesses

3.1 Corporations

As mentioned above, the ASE tax separates current dividends and infrequent events like share disposals or liquidation proceeds. Deduction of compounded acquisition costs only takes place in case of selling shares or liquidation of the corporation. The taxable capital gain is calculated by subtracting the compounded acquisition costs from the liquidation proceeds. This gain is fully taxed, regardless of the fraction and duration of ownership. Due to coordinated dividend and capital gains taxation, tax avoidance is not possible whether the corporations retain or distribute profits. The following example highlights this advantage.

(1987), p. 15 f.; Bond/Devereux (2003)

[30] See International Bureau of Fiscal Documentation (Ed.) (2006), p. 183.

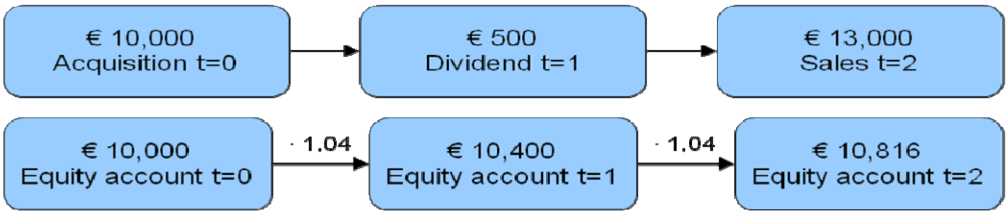

Figure 2: Assumptions and equity account for taxing corporations.

Assume an investor who buys shares for € 10,000. After one year he receives € 500 dividends. After another year he sells the shares for € 13,000. The interest rate for calculating the allowance is fixed by the government at 4% which corresponds to the capital market rate. The income tax rate is proportional and amounts to 40%.

Without taxes, the investment's net present value is NPV$=-10,000+\dfrac{500}{1,04}+\dfrac{13,000}{1,04^2}=2,500$€.

For calculating the net present value after taxes, the acquisition costs of € 10,000 are stored, compounded, and carried forward; no taxes are due. After one year, the shareholder receives the dividend and pays $0,4\cdot 500=200$€ income tax. At year 2, the capital gain from selling the shares is derived by subtracting the compounded acquisition costs from the liquidation proceeds: $13,000-10,000\cdot 1,04^2=2,184$€. The income tax is $0,4\cdot 2,184=873.60$€. In total, the after-tax net present value is NPV$_\tau=-10,000+\dfrac{500-200}{1,04}+\dfrac{13,000-873.60}{1,04^2}=1,500$€. This is equal to the net present value before taxes, reduced by the tax rate: $2,500\cdot(1-0.4)=1,500$€.

A similar net present value will be realized if the corporation does not pay dividends. Instead, the profit is reinvested in the corporation at the capital market rate. The liquidation proceeds increase at the amount of the compounded capital market investment to € 13,520. The after-tax net present value is NPV$_\tau=-10,000+\dfrac{500\cdot 1,04+13,000-0,4\cdot\left(13,520-10,000\cdot 1,04^2\right)}{1,04^2}=1,500$€. This example shows that, assuming a finite time horizon of the investor, the ASE does not affect profit distribution policy and does therefore not induce a 'lock-in effect'[31].

All kinds of transactions within a group of companies are not taxable. For example, financing subsidiaries or distributing profits to a parent corporation is not taxed. Only the last link of the

[31] Classical corporate tax systems as known in many countries induce a 'lock-in effect'.

chain, the shareholders' transactions with the parent corporation, are taxed as described above.

3.2 Partnerships and sole proprietorships

Partnerships and sole proprietorships can also be taxed according to the ASE tax. Investments in the partnership will increase the equity account as it is well-known for taxing partnerships applying the accrual method of accounting. In contrast to typical tax systems, the equity account is compounded annually. Withdrawals or sale of the business are fully taxable. In case of selling the business, the capital gain is derived by subtracting the compounded investments from the liquidation proceeds[32]. Thus, the ASE tax guarantees that partnerships and sole proprietorships are taxed exactly like corporations and the choice of legal form is independent of taxes.

3.3 Debt financing

We have shown that the choice concerning the legal form of a business as well as a company's distribution policy is unaffected by the ASE tax. Another important aim, well-known in the finance literature[33], is that the choice between equity and debt financing should be unaffected by taxes. In most countries, this aim is not fulfilled. Instead debt financing is very often taxed preferentially compared to equity financing. This causes an incentive to replace equity by debt and treasuries try to restrict this behavior by implementing thin capitalization rules[34].

A cash flow tax system's feature is tax-exemption of interest earned and no tax-deductibility of interest paid as long as the interest rate corresponds to the capital market interest rate. In case of debt financed by shareholders at a higher interest rate, the ASE tax aims at taxing the debt equal to equity: The part of the interest payment exceeding the capital market interest rate is fully taxable, while the adequate part is tax-exempt.

To achieve this goal, obtaining a shareholder loan increases the shareholder's equity account exactly as in case of equity, while interest payments and current amortizations are fully taxable and do not affect the equity account. High amortization rates decrease the equity account and are tax-exempt to this amount. In case of a shareholder loan yielding at the capital market interest rate, the loan is not taxed at all as known from all cash flow tax systems.

[32] In case of very high withdrawals, taxation could take place as in case of sales. Then only withdrawals exceeding the compounded equity account would be taxed. Afterwards, the equity account has to be reduced by the withdrawn amount.
[33] See, e.g., the seminal paper by Modigliani/Miller (1958).
[34] See, e.g., § 4h German individual income tax code, § 8a German corporate income tax code.

Loans between companies remain tax-exempt. This is comparable to all other kinds of transactions between businesses as long as no personal investor is involved. The present value of tax payments on the capital market interest rate is always zero. This holds for both shareholder's and financial institution's loans. Only interest payments exceeding the capital market rate are fully taxable.

Thus, the ASE tax provides a solution for avoiding excessive debt financing. Complex thin capitalization rules can be abolished. The present value of tax payments is always the same, independent of declaring distributions as dividends, withdrawals, interest payment or wage and salary.

4 Taxation of cross-border activities

The ASE tax is a tax at the shareholder level. As a consequence, the international tax allocation is based on the shareholders' residence which realizes the concept of capital export neutrality. A world-wide implementation of capital export neutrality would guarantee production efficiency[35]. A consistent implementation of the ASE tax could therefore overcome the arbitrary mixture of capital export neutrality and capital import neutrality inherent in the current taxation of cross-border activities[36].

4.1 Structures of cross-border activities

In the following we will describe how the ASE tax is levied on cross-border investments. We distinguish between domestic and foreign shareholders, corporations, and groups of companies which operate cross-border.

4.1.1 Domestic shareholder, foreign corporation

For domestic shareholders it makes no difference in which country their corporation is located. Capital gains are taxed in the shareholder's country of residence[37]. According to the OECD model tax convention, dividends can be taxed in the source country up to a limited rate which can be credited against the shareholder's domestic income tax liability. If the foreign withholding tax on dividends exceeds the shareholder's individual tax rate the shareholder is in an excess credit position[38]. Under the ASE tax excess credits are converted into a credit claim which is compounded at the capital market rate[39] and can be credited as soon as the

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[35] See Frenkel/Razin/Sadka (1991); Homburg (1999), p. 4.
[36] For a discussion of capital export neutrality and capital import neutrality see Mintz/Tulkens (1996).
[37] See Art. 13 para. 5 OECD model tax convention.
[38] See Scholes et al. (2005), p. 317 ff., e.g.
[39] An example for the inter-temporal compounded credit method is given in the appendix.

shareholder is in an excess limitation position. Hence, a tax reimbursement cannot occur.

Our proposal is intended to minimize the costs of transition to the ASE tax. Thus, we take the existing double taxation treaties and their allocation of tax revenues as given. Most double taxation treaties between industrialized countries refer to the OECD model tax convention with its typical withholding tax rate for dividends on widely held stock of 15%[40]. Due to the compounded inter-temporal credit method no shareholder will be worse off than under current law.

Repatriations by foreign branches have to be taxed in accordance with dividends from foreign corporations. Repatriations to a domestic business property are not taxable, because repatriations are not equivalent to withdrawals. Only direct repatriations to private property are taxable in the shareholders' country of residence[41]. If the foreign country taxes foreign branch profits (which is the typical case in Europe), foreign source taxes will be credited against domestic tax liabilities upon withdrawal from the domestic business property. Possible excess credits are converted in a credit claim which is compounded at the capital market rate.

Capital gains from selling foreign corporations are taxed like domestic capital gains. Hence, shareholders have to prove the accumulated acquisition costs. Typically, there is no foreign withholding tax on capital gains. However, if the foreign country levies a withholding tax on capital gains it will be credited against domestic income tax liabilities, possibly compounded in later periods.

4.1.2 Foreign shareholder, domestic corporation

Since the ASE tax is levied at the shareholder level, domestic corporations are not taxed. This is valid for domestic subsidiaries owned by foreign shareholders as well as for domestic branches of a foreign parent company. Repatriations are taxed upon withdrawal from a domestic business property by a natural person.

Dividends from domestic corporations are subject to a withholding tax[42] independent of the shareholders' country of residence. If the withholding tax can be credited against the foreign income tax will depend on foreign tax law. In the system of the ASE tax, there is no need to impose a withholding tax on capital gains[43].

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[40] See Art. 10 para. 2 lit. b) OECD model tax convention.
[41] This should be a rare case.
[42] As under current law, the difference between the actual source tax rate and the tax rate mentioned in the double taxation treaty must be refunded to the foreign shareholder upon request.
[43] See Art. 13 para. 5 OECD model tax convention.

Since the ASE tax does not tax profits at the corporate level, foreign shareholders have an incentive to realize profits in domestic branches instead of domestic subsidiaries. In case of a double taxation treaty that exempts foreign branch profits, foreign investors could reach a double non-taxation of domestic profits by non-taxation of branch profits in accordance with the ASE tax and non-taxation of repatriations in accordance with the double taxation treaty. To avoid this misuse of the ASE tax it is necessary to align the taxation of branches and subsidiaries: Repatriations from domestic branches to foreign natural persons qualify as dividends and are subject to a domestic withholding tax. Technically, this procedure is equivalent to the U.S. "branch profits tax"[44] which also intends to implement an equal tax treatment of branches and subsidiaries. In the shareholder's country of residence the domestic branch profits tax has to be credited against the individual income tax.

As all domestic enterprises are subject to a withholding tax on dividends or branch distributions regardless of the shareholder's country of residence, there is no discrimination of foreign investors. Thus, the ASE tax does not violate European law.

4.1.3 Foreign parent company, domestic subsidiary

The ASE tax exempts all transactions within business property. This is also valid for transactions within corporate groups. According to the Parent-Subsidiary Directive[45], intra-group dividends in the EU are already exempted from withholding taxes, which is compatible with the ASE tax, too. Double taxation treaties typically permit a withholding tax of 5% or 15% on dividends paid to non-EU countries or to non-qualified shareholders, depending on the equity stake. Source taxation of intra-business dividends contradicts the principle of the ASE tax. It could at best be justified for reasons of reciprocity or to limit transition costs.

Repatriations of domestic branches to foreign parent companies should be subject to the same branch profits tax rate as intra-group dividends of domestic subsidiaries (0%, 5%, or 15%, depending on the parent company's country of residence and stake of the shareholder). Since the ASE tax is strictly based on capital export neutrality, shifts of tax revenue compared to the current status are possible. Thus, a co-ordinated implementation of the ASE tax seems preferable, although a unilateral implementation would be technically possible.

[44] See Sec. 884 IRC (U.S. Internal Revenue Code).

[45] Parent-Subsidiary-Directive: Council Directive of 23 July 1990 on the common system of taxation applicable in the case of parent companies and subsidiaries of different Member States (90/435/EEC), OJ 1990, L 225/6-9, amended in OJ 1990, L 266/20. Changed by Directive 2003/123/EC of 22.12.2003, OJ 2004, L 7/41-44.

4.1.4 Domestic parent company, foreign subsidiary

According to current double taxation treaties, intra-group dividends may be subject to a withholding tax. Under the ASE tax, however, intra-group transactions are tax-exempt. If foreign withholding taxes are still levied on intra-group dividends they have to be credited indirectly against the parent company's shareholders' individual income tax liabilities as soon as the parent company pays out dividends[46]. If the parent company currently does not pay dividends the intra-group withholding taxes have to be converted into a credit claim which is compounded at the capital market rate and can be credited against the shareholders' income tax later.

Intra-group capital gains are not taxable under the ASE tax. This corresponds to current corporate tax practice and double taxation treaties in many countries. Foreign branches of domestic parent companies have to be taxed in accordance with the treatment of foreign subsidiaries. According to many double taxation treaties foreign branch profits are tax-exempt in the country of residence and only taxable in the source country[47]. If the ASE tax is implemented in the entire EU double taxation will be avoided. As under current law, activities in non-EU countries, however, may be subject to double taxation unless a cross-border imputation system is implemented. Apart from the inter-temporal credit method the transition to the ASE tax does not pose any novel technical problems.

4.2 Further topics in cross-border taxation

4.2.1 Expatriation taxation

Since the ASE tax does not tax profits at the corporate level relocating a corporation has no direct tax consequences under the ASE tax. In contrast, if a natural person moves to a new country of residence, the former country of residence will lose its right to tax future capital gains which have been accumulated during the time of residence. For a proper international tax allocation virtual capital gains taxation has to be carried out when the taxpayer leaves the country of residence. The ASE tax also requires this procedure already known from current tax systems. To ensure freedom of establishment within the EU, however, the virtual capital gains tax must not be levied when taxpayers move within the EU. Instead the tax will be deferred until the assets under consideration are actually being sold or if the taxpayer moves to a non-EU country.

[46] The indirect credit method corresponds to a corporate imputation tax system.
[47] See Art. 7 para. 1 in combination with Art. 23A OECD model tax convention.

4.2.2 CFC legislation

Controlled foreign corporations (CFC) legislation is practiced in some countries in order to prevent taxpayers in high-tax countries from using tax shelters for passive income in low-tax countries. Under the ASE tax it is not necessary to establish a CFC legislation, because non-taxation at the corporate level is not a loophole, but an integral part of this tax system. In a consumption-based income tax interest income is tax-exempt in any case, so there is no need to shift interest income to tax shelters. Hence, CFC legislation has to be abolished under the ASE tax. This leads to a further reduction in tax compliance costs.

4.2.3 Transfer pricing

Determination and documentation of transfer prices is a vast problem in international taxation which induces high tax planning and tax compliance costs[48] for taxpayers as well as for fiscal authorities. Since the ASE tax refrains from taxing income at the corporate level, the incentive to shift profits to low-tax jurisdictions by means of transfer pricing is reduced dramatically. If all countries implemented the ASE tax there would be no need at all for transfer prices, because only the shareholders' country of residence would receive tax revenue.

However, a world-wide implementation of the ASE tax is unlikely. As our proposal is intended to minimize transition costs we take the existing double taxation treaties as given. For non-European countries opting out of the ASE tax, transfer pricing still matters for the distribution of withholding taxes on dividends (0%/5%/15%, e.g.). Hence, arm's length transfer prices according to Art. 9 OECD model tax convention are still required. In case of intra-EU companies, there are no taxes levied on dividends and therefore no transfer price documentation is necessary. In any case, the relevant tax rate differentials and the incentives for profit shifting decrease substantially compared to the status quo.

Any country introducing the ASE tax can improve its competitive position considerably. Compared to the present tax competition the intensity of tax competition which can be expected between ASE tax countries and non-ASE tax countries will increase. As a consequence, ASE tax countries will be able to shift tax compliance costs associated with transfer pricing documentation to non-ASE tax countries which can be regarded as a recommendation to join the ASE tax area.

[48] For transfer pricing documentation requirements see Ernst & Young (2006).

4.2.4 Hidden distributions

The current tax system potentially provides incentives for hidden distributions because expenditures can be deductible at the corporate level whereas receipts may or may not be taxable at the individual level. The ASE tax abolishes these incentives because there is no taxation at the corporate level and hence no deductibility of corporate expenditures. As a result, hidden distributions from domestic corporations to domestic or foreign shareholders are non-deductible. Hidden distributions from foreign corporations to domestic shareholders are taxed like ordinary dividends: All compensations received by domestic shareholders are fully taxable, regardless whether they are labelled as dividends, royalties, interest, or salary. This implies that all payments from business property to private property are subject to individual income tax.

4.2.5 Formula apportionment

Tax base competition between member states is regarded undesirable by the European Commission. Thus, the current corporate tax reform proposals are intended to harmonize the tax base which should be allocated to the member states in accordance with a pre-defined apportionment formula[49]. Formula apportionment is supposed to eliminate the transfer pricing problems arising under separate accounting. However, introducing formula apportionment requires approval of all EU member states. In light of the well-known problems of formula apportionment[50] the EU-wide introduction is unlikely.

In contrast, the ASE tax eliminates the deficiencies of current corporate taxation in the EU and simultaneously avoids the problems of formula apportionment:

- As shown above, the ASE tax does not require the determination of arm's length transfer prices.
- Formula apportionment still requires tax accounting at the corporate level and induces higher tax compliance costs whereas the ASE tax levies no tax at all at the corporate level, thus making tax accounting systems unnecessary.
- Formula apportionment generates large incentives to shift the tax base by changing economic decisions instead of just using accounting options.

[49] For a description of formula apportionment see Martens-Weiner (2006), p. 33 ff.
[50] See Martini/Niemann/Simons (2007).

- Assuming that the choice of residence of natural persons is inelastic with respect to tax rates, persisting tax rate differentials within the EU cannot be expected to induce substantial incentives for relocation.

4.2.6 Group taxation

Non-harmonized tax bases in different jurisdictions complicate cross-border group taxation substantially. Under current tax law in some EU member states, losses of foreign subsidiaries may be offset by domestic parent companies by applying domestic tax accounting rules. Complicated rules for subsequent taxation are required to prevent a “double dip”, i.e., a loss-offset by both the subsidiary and the parent company[51]. Due to non-taxation at the corporate level, these problems do not occur under the ASE tax.

The Marks & Spencer verdict by the European Court of Justice[52] basically requires that final losses of foreign subsidiaries must be set off against domestic profits. The ASE tax complies with this requirement, because capital losses from liquidating (domestic or foreign) corporations are assigned to the shareholders. Therefore, complicated group accounting rules are dispensable under the ASE tax.

4.2.7 Thin capitalization rules

Thin capitalization rules are frequently applied in high-tax jurisdictions to prevent excessive intra-group borrowing that would lead to a drain of tax revenue. The ASE tax is neutral with respect to financing decisions. At the corporate level, financing costs are non-deductible, regardless of the source of finance. Hence, there is no incentive for excessive borrowing.

For domestic shareholders interest income is tax-exempt up to the capital market rate, regardless of providing equity or loans. For foreign shareholders the optimal source of finance depends on the tax system in the country of residence. If the foreign country of residence also introduces the ASE tax financing neutrality is guaranteed even in the cross-border context.

5 Transition from the current tax system to the ASE tax

5.1 Introduction

As the tax bases under current tax systems and the ASE tax differ substantially, the transition

[51] For the investment effects of the Austrian group taxation see Niemann/Treisch (2005).
[52] See European Court of Justice, 13.12.2005, Rs. C-446/03 (Marks & Spencer: Cross-border loss offset in a parent-subsidiary case).

from the old to the new system has to be planned carefully. To ensure that all profits are taxed exactly once in the overall period, double taxation as well as double non-taxation has to be avoided[53]. The ASE tax permits a very easy-to-handle transition: Instead of recording data for every profit and loss account position the taxpayer has to calculate the correct equity account at the transition date. This reduces paperwork and tax compliance costs considerably.

The opening equity account of partners and sole proprietors equals the one known under common accrual methods of accounting tax systems. Adaptations are not necessary, the only difference is that the equity account needs to be compounded after the implementation of the ASE tax. This is different for corporations. In these cases, the acquisition costs of the shares represent the opening balance of the equity account[54].

5.2 Existing loss carry-forwards

Loss offset restrictions are a typical element of all existent corporate and personal income tax systems. Existing loss carry-forwards have to be taken into account at the transition to the neutral tax system, because ignoring them would be an implicit expropriation of taxpayers. Profits and losses of partners and sole proprietors belong to the personal level of the owner. Existing loss carry-forwards can be kept without adjustments[55]. To maintain the neutrality properties of the ASE tax, the loss carry-forwards have to be compounded annually. The origin of the loss (negative capital gain, negative self-employed income, negative business income) is irrelevant. Positive income will only be taxed if it exceeds the compounded loss carry-forward. This method guarantees a present value of tax payments equal to the present value that would result in case of a full immediate tax refund. Nevertheless, the treasury has the advantage of lower tax revenue volatility.

Transition rules are more complex in case of corporations. Corporate losses are attributed to the corporations, not to their owners. As the ASE tax does not include levying a tax on the corporate level, corporate loss carry-forwards are worthless. To keep the value of current carry-forwards, they have to be attributed to the owners of the shares where they can be offset

[53] These kinds of transition problems already exist in countries with parallel tax base definitions. In Germany, small companies can choose between the accrual method of accounting and the cash method of accounting. When switching between those systems, the taxpayer has to follow special rules to guarantee a smooth transition (see R 17 German income tax directive). Proposals for transition rules are given by King (1987), p. 390 ff.

[54] In some countries, capital gains taxation depends on the holding period of the shares. For example, in Germany capital gains will be tax-exempt if the shares are held for more than 1 year and the stake in the corporation is less than 1%. In those cases, grandfathering rules have to be implemented to assure tax-exemption of capital gains after the transition. For more details concerning taxation of capital gains in Germany, Austria and Switzerland see Schanz/Knirsch/Bauer (2007).

[55] Niemann (2004b) analyzes loss offset restrictions in a cross-border setting.

against future earnings. This is realized by adding the value of the loss carry-forwards to the shareholders' equity accounts. Thus, a future capital gain is reduced due to higher deductible acquisition costs of the shares. Income at the amount of the compounded loss carry-forward remains tax-exempt, because the equity account is compounded over time. Thus, compounding the loss carry-forwards is assured, comparable to those resulting in partnerships and sole proprietorships.

6 Conclusion

In this paper, we introduce the deferred Allowance for Shareholder Equity tax. This tax system comprises taxation of business profits independent of the legal form of the business. Thus, it is possible to tax corporations, partnerships, and sole proprietorships according to one single tax system. The ASE tax is neutral with respect to investment decisions. The main feature of the Allowance for Shareholder Equity is that business profits remain tax-exempt as long as they are not distributed to shareholders or business owners.

As distributions are taxed according to the tax system in the country of residence of the shareholders, problems of profit shifting or investment shifting to other low-tax countries are eliminated. These incentives do exist in current corporate tax systems, especially in European countries. Under an ASE tax, taxation does not depend on the source country and does not depend on the form of repatriations, be it interest payments, dividends, or capital gains. Foreign withholding taxes can be credited against the domestic tax liability. In case of an excess credit situation an annually compounding credit claim is introduced. This credit claim can be set off against future domestic tax liabilities. If the ASE tax was implemented in a EU member state, withholding taxes would be zero according to the Parent-Subsidiary-Directive.

As a consequence, profit shifting incentives are eliminated and fiscal authorities can remove costly transfer pricing documentation requirements. Thus, complicated and distorting formula apportionment rules and harmonized tax accounting rules as currently discussed by the European Commission are unnecessary. Another important simplification compared to current tax law is the dispensability of a national tax accounting system. As profits are not calculated, there is no need for an accrual tax accounting system.

The ASE tax is neutral with respect to investment and financing decisions and to the choice of the legal form of the business. Equity and debt financing are equally taxed; current thin capitalization rules can be abolished. Many other problems arising under current tax systems in cross-border settings are solved by the ASE tax.

An advantage of the ASE tax over the well-known Scandinavian dual income tax (DIT) is equal tax treatment of all kinds of income. Thus, splitting small businesses' income into labor income and capital income is unnecessary.

At first sight, there seems to be a lock-in effect in the ASE tax because retained profits are not subject to tax. But this effect only appears under a short-term view. In the overall period, the after-tax net present value remains unaffected by the time of distributing profits and paying taxes; therefore no lock-in effect occurs.

In the literature we find different analyzes showing that implementing a cash flow tax arouses only small tax revenue decreases[56]. Business profits and interest income up to the level of the capital market rate remain tax-exempt, but the exceeding income is fully taxable. The revenue decrease would even be smaller under the ASE tax, because no tax refunds are granted when investments take place. Keeping equity account records restricts tax revenue volatility, while compounding the accounts guarantees neutrality of the tax system. Thus, the disadvantage of a possible abuse of a cash-based tax system can be avoided.

EU member states opting in favor of the ASE tax would gain a substantial competitive edge over non-ASE countries and would create massive incentives to invest from abroad.

[56] See King (1987), p. 394 f.; Becker/Fuest (2005).

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Appendix: Compounded inter-temporal credit method

In most countries including Germany[57] and Austria[58] the credit method only refers to the tax period under consideration and does not permit inter-temporal tax credits. If foreign source taxes cannot be credited against domestic income taxes due to losses, e.g., the excess credit is lost and cannot be used in subsequent tax periods. Instead of the credit method, some countries permit the deduction of foreign taxes[59] in order to mitigate double taxation. However, deduction only provides partial relief of double taxation.

As a result, an equal tax treatment of domestic and foreign investments requires the integration of ASE elements in the credit method. Current crediting methods have to be replaced by a compounded inter-temporal credit method. As soon as taxpayers face a positive domestic tax liability, it has to be offset against the inter-temporal credit claim. The deduction method is not required any more. Abolishing the choice between credit and deduction would dramatically reduce the complexity of tax planning for international investment[60].

The following example shows the effects of the compounded inter-temporal credit method. In period t=1 a foreign subsidiary pays a dividend of 100,000 € to a domestic natural person. We assume that the domestic person has an exogenously-given loss carry-forward of 230,000 € from past activities. Labor income amounts to 50,000 € annually. Due to the loss carry-forward foreign withholding tax on dividends (assumed to be 5%) cannot be credited against domestic income taxes. According to current tax law in many countries the claim to credit the foreign withholding tax would be lost because it cannot be carried forward to subsequent periods.

Assuming a compounded inter-temporal credit method the credit claim would grow at the capital market rate (assumed to be i=10%) to 5,500 € in period t=2. Due to a remaining loss carry-forward it is not possible to use the credit claim in period t=2. Only in t=3 and t=4 the credit claim can be fully offset against domestic income tax liabilities.

[57] See § 34c para. 1 German income tax code.
[58] See the Austrian directive for avoidance of international double taxation
[59] See § 34c para. 3 German income tax code.
[60] Inter-temporal repatriation decisions involve mixed-integer optimization problems which are notoriously hard to solve.

t	1	2	3	4
$Dividend_t$ (fully taxable)	100,000	0	0	0
Foreign withholding tax_t (5%)	5,000	0	0	0
Labor $income_t$	50,000	50,000	50,000	50,000
Sum of $earnings_t$	150,000	50,000	50,000	50,000
Taxable $income_t$	0	0	20,000	50,000
Crediting the foreign withholding tax				
Domestic income tax_t (20%)	0	0	4,000	10,000
Credit $claim_t$ (see below)	5,000	5,500	6,050	2,255
Maximum amount to be $credited_t$	0	0	4,000	2,255
Determining the compounded credit claim				
Initial $value_t$	0	5,000	5,500	2,050
Excess $credits_t$	5,000	0	0	0
$Compounding_t$ (10%)	0	500	550	205
Current amount to be $credited_t$	0	0	4,000	2,255
Terminal $value_t$	5,000	5,500	2,050	0
Loss carry-forward				
Initial $value_t$	230,000	80,000	30,000	0
Currrent loss $offset_t$	150,000	50,000	30,000	0
Terminal $value_t$	80,000	30,000	0	0

As a result, the present value of the current amounts to be credited exactly equals the foreign withholding tax paid in t=1: $\frac{4,000}{1.1^2}+\frac{2,255}{1.1^3}=5,000$.

Although there are countries which practice an inter-temporal credit method[61], only the compounded inter-temporal credit method ensures equal taxation of domestic and foreign investment projects.

[61] In the U.S., Sec. 904 (c) IRC permits carry-backs und carry-forwards of excess credits. However, compounding excess credits is not granted.

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