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Introduction¹

As of 1 January 2008, when the corporate tax reform took effect, the tax treatment of income in Germany has undergone major changes. Up to the very end the reform was viewed with great scepticism by politicians, the business community and economists. The most recent comments indicate that a reform of corporate tax will once again be part of the political agenda in the coming legislative period (Becker and Fuest 2007).



What will this controversial tax reform achieve and why was it passed?

In its basic features the corporate tax reform of 2008 is aimed at both ensuring the international competitiveness of Germany – by reducing the corporate tax burden – and at securing the German tax base by expanding the basis of assessment and limiting tax avoidance strategies. Thus the tax reform is not new in terms of being a tax-cut-cum base-broadening measure, but it rather mimics the US 1986 Tax Reform Act (Joint Committee on Taxation 1986). Similar kinds of tax-cut-cum base-broadening

reforms have also been introduced in numerous other European states during the last few years.^{2,3} In the light of an increasing European and worldwide tax competition, a lowering of the corporate income tax, as envisaged by this 2008 reform, is definitely an expedient measure. However, every tax rate reduction results in tax losses so the question must be raised as to what extent these tax losses can be meaningfully counteracted by expanding the tax base.

As can be seen in Figure 1, Germany's position improved considerably after the corporate tax reform of 2008 was instituted: Before the reform, Germany ranked among the high tax countries in Europe with an effective corporate tax burden of approximately 38.6 percent. After the reform Germany improved its position substantially and is now located in the middle field with a tax burden of just under 30 percent. Moreover, the tax relief brought about by the corporate tax reform of 2008 enabled Germany to narrow the pre-existing tax rate differential between Germany and the new EU member states, which initially offered considerable incentives for profit shifting and firm relocation.⁴

The corporate tax reform of 2008

A core element of the corporate tax reform of 2008 was the lowering of the corporate tax rate from 25 percent to 15 percent. Additionally the uniform trade tax placed on incorporated firms was lowered from 5 to 3.5 percent (on this base tax rate the German municipalities set a regionally different factor that has an average value of about 400 percent, so that the average tax rate of the trade tax is 14.8 percent) such that the tax burden on retained earnings

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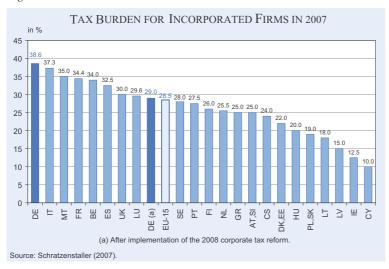
¹ The German version of the article was published in ifo Schnell-dienst 2/2008 (Baretti, Radulescu and Stimmelmayr (2008)).

 $^{^2}$ Thus Denmark adapted its tax system in 2001 and Italy in 1998 using similar tax-cut-cum-base-broadening reforms to the international demands of globalisation (Carone and Salomäki 2001).

³ Even though the tax reform of 2000 was also a hesitant step in the direction of a tax-cut-cum-base-broadening reform before the corporate tax reform of 2008 was introduced, Germany still ranked amongst those countries with the highest tax burden for incorporated firms.

⁴ With an average tax burden of around 18 percent for incorporated firms in the new EU member states, the tax differential between Germany and these states has been reduced from approximately 20 percent to 12 percent as a result of the corporate tax reform of 2008.

Figure 1



for incorporated firms was reduced from 38.6 to 29.8 percent (BMF 2006).

Limited partnerships and sole proprietorships, whose tax burden - with the exception of the trade tax - is determined at the level of the proprietors and their personal income tax, do not profit from a reduction in tax rates, however. On the contrary, the relief on business income within the framework of the "tax on the rich" has been eliminated⁵ and the top personal income tax rate was increased by three percentage points to 45 percent. At the same time there are some changes with respect to the trade tax for limited partnerships and sole proprietorships. The effects of these changes, however, depend to a large degree on the profitability of the respective firm and the percentage of the basic rate established by the individual municipality. For example, the preexisting graduated rate for the trade tax has been eliminated. In the past it had set in above the tax free amount of €24,500 and rose by 1 percentage point from 1 to 5 percent for every €12,000 of trade earnings. After the reform the trade tax rate amounts – as for all incorporated firms – uniformly to 3.5 percent. The tax-free amount of €24,500 has been retained, however. Furthermore the trade tax credit on income tax owed was raised according to Section 35 of the German Income Tax Law from 1.8 to 3.8 percent. What is new is that the tax credit is only granted up to the amount of trade tax actually paid, which particularly affects those businesses that are located in municipalities with a factor under 380 percent.6

The reform also introduced a favourable tax treatment for earnings retained by partnerships. According to this rule, re-

tained profits could be optionally taxed at a proportional tax rate of merely 28.25 percent (plus solidarity surcharge and, if applicable, church tax) instead of the personal income tax rate of the entrepreneur. Withdrawals from these net of tax reserves/retained earnings are subject to a reduced income tax of 25 percent, whereby these retained profits are assumed to be withdrawn firstly. Other profits, which were not taxed with the new proportional tax rate but with the personal income tax rate could be withdrawn tax free. The latter are assumed to be withdrawn after the proportionally taxed profits. This measure thus supports the use of equity capital in partnerships while adjusting the nominal tax burden of incorporated firms and partnerships.

A further important part of the reform is the introduction of the so-called *Abgeltungssteuer* (final withholding tax) amounting to 25 percent (plus solidarity surcharge and church tax) on income from capital – from 2009 onwards. This measure can be viewed as a tax cut as well as a base-broadening element: whereas interest income was taxed at the top income tax rate of 45 percent (for investors in the highest tax bracket) before the reform, this burden on interest income dropped by 20 percentage points, after the reform. Moreover, with the introduction of the withholding tax, the *Halbeinkünfteverfahren* (half-income principle) has been abolished for privately owned shares. This implies that from 2009 onwards total dividend income is subject to the withholding

This measure is meant to prevent tax competition amongst municipalities to the detriment of federal income tax authorities. An additional new regulation with respect to trade tax which affects incorporated firms, partnerships and sole proprietorships is the classification of trade tax as non-deductible business expenses in cases of income, corporate and trade tax.

⁵ According to Section 52, Paragraph 44 of the German Income Tax Law, Section 32c, which prescribes tax relief on profit income within the framework of the tax on the rich, is to be applied the last time for the tax assessment period of 2007.

⁶ With a municipal tax factor of 380 percent, the trade tax burden amounts to 380 percent of the basic trade rate. At the same time 3.8 of the basic trade rate can be set off of income tax. Since this tax credit is limited to the tax actually paid, the tax credit is lower than the maximum factor of 3.8 allows in municipalities where the tax factor is under 380 percent.

tax of 25 percent.⁷ Furthermore, capital gains that previously were tax exempt if shares were sold after the one-year speculation time limit are now affected by the final withholding tax as well. Despite this expansion of the tax base for income from dividends and capital gains, the marginal tax rate for dividends in the case of top incomes will rise by only a small extent.⁸

If, however, equity holdings in incorporated companies are held, for example, in the business assets and liabilities of a general commercial partnership or an individual business, the profit from capital gains and dividends as of 2009 is to be taxed according to the socalled partial-income system. They are then exempt from income tax at a rate of 40 percent (instead of previously 50 percent). The final withholding tax does not apply in this case. For incorporated firms the existing exemption of capital gains and dividends from corporate income tax will also hold in the future. Income from the disposal of investments in incorporated firms will also be exempt from the final withholding tax for personal assets if the investment/holding amounts to at least 1 percent. Here, too, the partial-income system will be binding as of 2009.

Furthermore the final withholding tax does not apply if the personal progressive tax rate is more favourable and the taxed individual chooses not to be assessed on the basis of the withholding tax.

For 2008 the half-income system will be retained – despite the reduction of the corporate income tax. The profits attained in this year and distributed in advance are thus subject to a very low, historically unique, tax burden (15 percent corporate tax plus income tax based on the half-income system).

The broadening of the tax base brought about by the corporate tax reform of 2008 also involves the trade tax. Before the reform, 50 percent of the interest paid on permanent debt was added when taxable trade earnings were calculated. From now on, 25 percent of all interest paid will be added to the computation of taxable income. This implies that under the current system 25 percent of payments for short-term debts (with the exception of cash discounts and

bonuses) are also included when computing a firm's operating profits. Furthermore, 25 percent of the notional "interest shares" for rent, leasing, licenses and leasing rates are included independent of the treatment of the trade tax for the recipient of these payments.⁹

It should be noted, however, that there is a tax allowance of €100,000 when computing the amount of actual interest and notional "interest shares". Furthermore, as we mentioned before, the trade tax can no longer be deducted as a business expense under the current tax law.

A further base-broadening element of the reform regards the deductibility of debt interest within corporate groups. In detail, within corporate groups the deduction of interest on debt10 for both incorporated firms as well as partnerships is limited under certain circumstances to 30 percent of the earnings before interest expenses, taxes, depreciation and amortization (EBITDA). With the help of this thin cap rule (Zinsschranke), tax avoidance strategies involving internal loans are limited, and the complete financing of investments in foreign countries to the detriment of German profit (BMF 2006) is prevented. In order not to hinder the external financing of small and middle-sized firms, the thin cap rule only applies beyond an allowance of 1 million Euros per year. Moreover it is not implemented if a corporate group can prove that the debt ratio of its German affiliates does not exceed the overall debt ratio of the corporate group as a whole by more than 1 percent ("escape clause").

Furthermore the abolition of digressive depreciation and limiting the immediate write-off of inferior assets have contributed to an additional broadening of the tax base.

Implications of the corporate tax reform of 2008

Incentives for the sources of finance and capital structure of firms

If the interest paid on debt is not or is only partially deductible from the corporate tax base – as is the

⁷ Under the former *Halbeinkünfteverfahren* (half-income principle) only half of the dividend income was subject to the personal income tax.

⁸ Whereas before the reform dividends were effectively subject to an actual tax burden of 22.5 percent (in the case of top incomes) because of the half income principle, after the introduction of the withholding tax they will be taxed at a flat rate of 25 percent.

 $^{^9}$ The legislator defines "interest shares" as a share of rent amounting to 20 percent of movable capital assets, 65 percent of immovable assets (particularly rented rooms) and 25 percent of licenses. That means that the rent for office space -25% of 65%=16.25% – is now to be included. Subletting, for example within an entire corporate group, is to be added as gross figures, i.e. the trade tax will include additions for the tenant as well as for the subtenant.

¹⁰ Net interest or interest paid less interest earnings.

case with the trade tax and interest on debt beyond the allowance of the thin cap rule – the reform is reminiscent of the so-called Comprehensive Business Income Tax (CBIT).¹¹

In economic terms, the CBIT stands out because it is neutral with respect to the financing decisions of a firm, as neither investments financed by external capital nor by equity capital receive a tax advantage. Taking into account the personal income tax paid by the creditor or the shareholder, the financing neutrality of the 2008 corporate tax reform is, however, only achieved if the thin cap rule does not apply. Thus, the partial elimination of the tax privilege for interest paid on debt might result in an increased cost of debt financing such that some firms are willing to rely more heavily on internal equity financing. As a consequence the equity ratio of those firms which are affected by the interest barrier will rise in the long run.

If, however, one assumes that in many cases the thin cap rule will not apply, as of 2009 there will be a preference for debt vis-à-vis equity finance. This is due to the tax treatment of creditors and its impact on the cost of capital. For a stockholder - as long as the firm is not affected by the thin cap rule – it is more profitable for tax purposes to provide a loan to his firm instead of augmenting the firm's equity capital.¹³ In general, internal equity is more expensive than outside capital because creditors have a lower tax burden compared to internal equity holders. In terms of the trade tax, some novelties regarding the treatment of external capital have also been established. Only 25 percent instead of the previous 50 percent of the interest paid on permanent debt is included when assessing the tax base of the trade tax. Furthermore an allowance of €100,000 was introduced. Thus, only the tax treatment of short-term external capital that was previously not included in the assessment of the trade tax and exceeds the allowance is negatively affected.

In the light of the structurally weak equity base of German firms the tax reform seems to be rather counterproductive. In terms of financing incentives, the reform does not show a clear tendency. This is not surprising, however, as neutrality with respect to the source of finance was not a goal of the corporate tax reform.

Investment incentives

From a theoretical perspective, two opposing effects must be distinguished, when analysing the effects of the corporate tax reform of 2008 on the investment behaviour of incorporated firms. On the one hand, the broadening of the tax base brought about by the partial non-deductibility of debt interest increases the cost of capital.¹⁴ On the other hand, the reduction in the corporate income tax results in lower capital costs. From a theoretical point of view it is not clear which of the two effects dominates: do capital costs decrease and thus investment incentives increase or is it the other way around? Since an increase in the costs of capital influences solely the share of investments financed via external capital while both sources of finance - debt and equity- benefit from the lower corporate tax, we expect the costs of capital to fall particularly for those firms with a low share of debt finance.15 The calculations of Radulescu und Stimmelmayr (2007) indicate that a tax relief for incorporated firms has a negative effect on investment activities in the corporate sector. This result can be explained firstly by the fact that the thin cap rule counteracts corporate tax relief. Secondly, the income from dividends and capital gains is subject to a complete double taxation due to the introduction of the final withholding tax. In the past, income from interest was subject entirely to personal income tax; and dividends, which a firm had already paid taxes on, were only taxed according to the half-income system. With the introduction of the withholding tax both sources of income will be taxed in the future, at a rate of 25 percent (plus solidarity surcharge and church tax). The entire tax burden on dividends is higher than that on interest income, and thus investment in financial capital is tax favoured vis-à-vis investment in real capital.

Furthermore the introduction of less generous depreciation rules for real assets has rendered

¹¹ CBIT was developed in the early 1990s by the US Treasury Department (1992) with the aim of creating a reconciliation of the financing costs based on own equity capital and capital from outside sources. Even though CBIT has not been implemented in a pure form anywhere, it continues to plays an important role in tax debates in the US (President's Advisory Panel on Tax Reform 2006), and now also in Germany.

¹² If the marginal investment is subject to a completely nondeductible interest on debt, then the investment based on both own equity capital as well as external capital will carry at the corporate level the same actual corporate tax burden. Since at the level of the shareholder the uniform final withholding tax applies, the actual tax burden for marginal investment will be identical for both sources of finance.

¹³ See also Endres, Spengel and Reister (2007).

 $^{^{\}rm 14}$ The development of external capital costs depends on whether the thin cap rule applies or not.

¹⁵ The lower the external financing share of a firm is, the more likely that the costs of capital will fall as the reduction in the corporate tax will have a stronger effect than the increased cost of debt.

Table 1

Tax burden for a limited liability company* in 2007 and 2009

	Legal situation of 2007	Legal situation of 2009
Trade tax	9,166.67	7,700.00
Corporate tax	11,458.33	8,250.00
Solidarity surcharge on corporate tax	630.21	453.75
Tax at the corporate level	21,255.21	16,403.75
Actual tax burden in % (corresponds to taxation of retained profits)	38.65	29.83
Dividend payout (profit after taxes)	33,744.79	38,596.25
Income tax for shareholder (2007: half-income system at a tax rate of 42%, 2009: final withholding tax)	2,018.00	9,649.06
Solidarity surcharge for shareholder	110.99	530.70
Total tax on distributed profits	23,384.20	26,583.51
Effective tax rate in %	42.52	48.33

* Annual profit of $\mbox{\-}655,000$ with full profit distribution (trade tax factor of $\mbox{\-}400\%$).

Source: Own calculations.

investments in real capital less attractive. The expanded tax on non-income values within the trade tax has sharpened this effect. Leased assets also increase the tax burden.

Considering this aspect of the reform, it becomes clear that capital-intensive firms will experience a smaller tax relief compared to firms with a lower capital intensity. The state is thus supporting the structural change to a service-based economy.

Preventing profit shifting

The corporate tax reform of 2008 tries – also in the light of the international tax competition – to counteract the international profit shifting of multinational firms (BMF 2006). If interest paid on debt is tax deductible, multinational firms are able, using internal loans, to shift their profit from high tax countries to low tax countries. Even if the interest income of subsidiaries has to be taxed in low tax countries, an internal loan of this sort can be advantageous if the tax rate differential between high and low tax countries is sufficiently pronounced. If the thin cap rule applies, this me-

The tax burden of corporate firms and their shareholders

In the following, we will describe the change in the tax burden of corporate firms and their shareholders since they are primarily affected by the reform.

Let us consider a limited liability company with a profit of €55,000. The actual tax burden before and after the corporate tax reform of 2008 can be seen in Table 1. To simplify matters, the comparison is based on the legal situation as of 2009 when the individual aspects of the reform, including the final withholding tax, have taken their full effect. Additionally, we assume a uniform tax factor of 400 percent for the local trade tax and that stockholders do not receive any other income besides that from their own firm. Under the 2007 regime, the stockholder was able to benefit from the half-income taxation of distributed profits.

The numbers in Table 1 show that the effects of the reform are particularly noticeable at the corporate level. Here the tax burden falls by almost ten percentage points. If the shareholder level is included, the result is an increase in the tax burden of more than five percentage points. This is, of course, a result of the extreme example: With an income of $\[mathebox{\ensuremath{$\epsilon$}}55,000$ derived exclusively from firm profits, an option to be taxed with one's personal income tax rate (in other words a permissible circumvention of the final withholding tax) is not advantageous. The reason is that with a circumvention of the

chanism can be cut off in the future. Moreover, the decrease in the tax burden for the retained profits of incorporated firms will also reduce the incentive to shift profits. The taxation of 'functions' that are shifted abroad, as has recently been formulated in Section 1 of the Law on External Tax Relations, will have a similar effect. 18

¹⁶ To shift profit via internal debt, the part of the corporate group located in a high tax country takes on a credit from its subsidiary in a low tax country. By paying off the debt, the profit of the corporate group in a high tax country (artificially) reduces its profit and thus its actual tax load for the firm in the high tax country.

¹⁷ According to Weichenrieder (2007) or Huizinga and Laeven (2007) the profit shifting of multinational firms depends to a large degree on the bilateral tax rate difference between high and low tax countries.

¹⁸ Section 1 of the Laws on External Tax Returns in the version of corporate tax reform law stipulates that for business relationships with associated companies in foreign countries a dealing-at-arm's-length rule must hold. The aim is to prevent German profit from being shifted to foreign countries by charging excessive internal transfer prices.

¹⁹ The burden of non-distributed profits is reached already in 2008.

capital gains tax, the **entire** income tax rate applies and not, as was previously the case, only half of it.²⁰

If in 2007 the shareholder was, already prior to profit distribution, subject to a marginal income tax rate of 42 percent, then, in accordance with the half-income procedure, the marginal tax burden on distributed profits amounted to 21 percent, whereas it will reach 25-percent under the withholding tax in 2009. As a consequence the total burden, including both the level of the corporation and of the shareholder, amounted to 52.24 percent in 2007 and will amount to 48.33 percent in 2009. From the tax relief at the corporation level, nearly 4 percentage points will accrue to the shareholders.

Thus the income of the shareholder is crucial for the change in total tax burden: the higher the taxable income, the greater the tax relief. The problematic element here is that the corporate tax reform does indeed allow the taxpayer to choose not to be assessed on the basis of the final withholding tax, but taxation in this case is not according to the partial-income procedure, which should logically be the case. The legislator has consciously allowed here a double taxation to occur. Thus, there is an urgent need to amend the reform to give small shareholders tax relief; this is also required for systemic reasons.

The conclusion that can be drawn at this point is that the tax relief for corporations primarily affects the level of the corporation. Therefore, dividends and investments in new projects have a tax disadvantage vis-à-vis leaving the profits within the company. The effect of the reform is thus to conserve existing structures.

The above-mentioned measures affect domestic investors. For foreign shareholders, who are exclusively interested in the ultimate taxation at the corporation level, the significant reduction in the corporate tax rate is clearly positive. For small investors with a low marginal tax rate, however, holding shares becomes less attractive in terms of taxation.

The effect on partnerships and sole proprietorships

In addition to the effects of the tax reform on corporate firms, the impact on partnerships must also be examined. It is striking that the income tax law has not undergone any changes comparable to the reduction of the corporate tax. Instead, the tightening of the depreciation allowances, in particular, has had a negative effect on partnerships and sole proprietorships. The tax relief relating to special depreciation allowances brought along by the reform only provided a small correction, especially since the elimination of promotion for business start-ups that existed in the discontinued saving-amortisation meant a deterioration here, too.

Profit retention

For partnerships and individual proprietorships, the legislator introduced a profit retention reserve (Art 34a German Income Tax Law) as the "little brother" of the clearly lowered tax rate for the corporation tax. This unfortunately was a somewhat bureaucratic measure. Although retained profits are taxed at the relatively low rate of 28.25 percent (or 29.8 percent including the solidarity surcharge), the risks for the companies are relatively high. If profits enjoying this tax benefit are subsequently withdrawn, a supplementary tax of 25 percent plus solidarity charge must be paid. The termination of the business, sale of a business and conversion to a corporate form are treated the same way as withdrawals.

The definition of a withdrawal is particularly problematic: A withdrawal has occurred when the positive balance of withdrawals and deposits exceeds profits. Withdrawals thus take place primarily from the profit retention reserve. An example makes this clear:

The individual proprietor Mr. X had a profit of ϵ 100,000 taxed and retained in 2008. In 2009 he made a deposit to the amount of ϵ 150,000. In 2015 he would like to withdraw ϵ 50,000. At the time of withdrawal his capital is composed of:

Profits in 2008 at a favoured tax rate: ϵ 100,000

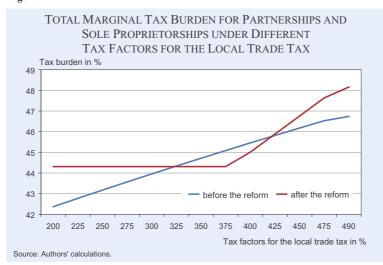
Deposit in 2009: ϵ 150,000

Total capital ϵ 250,000

The desired $\[\epsilon 50,000 \]$ must be taken from the profit retention reserve and is subsequently taxed although in 2009 Mr. X (i.e., after building up reserves) had made

 $^{^{20}}$ At $655{,}000$ the average tax rate, at the basic rate, is $27.61\,\%$, which is above the 25% final withholding tax. Opting for a tax assessment at the normal income tax rate would thus be detrimental. Because of the test as to what is more advantageous, which the tax office is required to carry out, it would not even be possible. It has to be noted that this effect only occurs for small shareholders. If someone owns more than 1 percent of a company's shares under certain circumstances he can be treated according to the part-income procedure (Teileinkünfteverfahren). In this case his profit shares are taxed with 60 percent of his personal income tax rate.

Figure 2



trade tax burden arises.²³ Up to this threshold, the trade tax burden and the imputed amount are identical. An overcompensation from the imputation, as in the past, is no longer possible, since the imputation is limited to the tax actually paid.

Figure 2 depicts the relationship between the marginal tax burden for a sole proprietorship or a partnership with a profit of €55,000 according to the new and the old law and the tax factor of the local trade tax.

a large deposit. He, however, can only access this money, after the favoured reserves of ϵ 100,000 have been completely withdrawn.

Since individual proprietors or partners in a partnership – in contrast, for example, to managing partners of a limited liability firm – cannot, according to tax law, draw salaries from their companies, in periods where they make a loss they have to rely on making withdrawals. In practice, retained profits will thus hardly play a role.²¹ They are only worthwhile in cases of very high profits and very long retention periods.²²

Overall effects of the income and local trade tax

The conclusion we draw with regard to the income tax is that there is no significant privileged treatment for the self-employed. Instead, as already mentioned, from now on business income is also included in the assessment of the "tax on the rich" of 45 percent.

The effect of the trade tax reform is unclear. On the one hand, the graduated tax rate and the deductibility of the trade tax as a business expense were abolished. On the other hand, the tax credit factor on income tax was raised considerably from 1.8 to 3.8. Not taking into account the broadening of the tax-base, e. g., by adding rent expenses to the income, the effects of the reform clearly depend on the municipal factor of the trade tax. As soon as the municipal factor exceeds a value of 380 percent, an effective

The graph shows that the reform leads to a reduced tax burden – including the trade tax, income tax and solidarity surcharge – only within a relatively narrow corridor of a tax factor of the local trade tax of between 325 percent and 460 percent. In the other ranges, the old law turns out to be more favourable. The average tax factor for the trade tax in Germany is ca. 433 percent.²⁴ In large cities in particular, it is often much higher (Munich tops the list at 490 percent, for example). Thus, it is precisely the commercial businesses in the large cities that are worse off after the reform.

If the partners of a partnership or an individual proprietor file separately for individual income tax and have a taxable income of more than $\[\in \] 250,000$ (joint filers: $\[\in \] 500,000$), the marginal tax burden after the reform is 3 percentage points higher as a result of the "tax on the rich". Under this unfavourable constellation, the marginal tax burden exceeds the total tax burden of an incorporated firm.

A marginal analysis does, however, not provide an entirely realistic picture. The progressive character of the income tax must also be taken into consideration as well as the resulting average tax rates. For this reason the following calculation for a partnership with a profit of 655,000 is provided. For reasons of simplicity it is assumed that the separately filing business has no

 $^{^{21}}$ Results of simulations using model firms by Spengel, Elschner, Grünewald and Reister (2007) confirm this view.

²² Endres, Spengel and Reister (2007).

²³ As already explained, the tax to be paid with a municipal rate of 380 percent is precisely 3.8 times the trade tax assessment amount. At the same time the income tax burden (according to Art. 35 German Income Tax Law) decreases by 3.8 times the trade tax assessment amount (at most by the amount of the determined trade tax). In this case the trade tax to be paid and the income tax relief cancel each other out.

²⁴ The scope of this study were municipalities and the income tax relief cancel each other out.

²⁴ The scope of this study were municipalities with more than 50,000 inhabitants (see also Endres, Spengel and Reister (2007)).

Table 2 Tax burden on business income before and after the reform*

	Municipal rate 400%		Municipal rate 490%	
	Before reform	After reform	Before reform	After reform
Profit before tax	55,000.00	55,000.00	55,000.00	55,000.00
Business tax	-1,982.14	-4,270.00	-2,370.97	-5,230.75
Income tax (basic rate)	-14,353.00	-15,186.00	-14,190.00	-15,186.00
Solidarity surcharge	-789.42	-835.23	-780.45	-835.23
Imputation of trade tax	891.96	4,056.50	870.97	4,056.50
Total tax	-16,232.59	-16,234.73	-16,470.45	-17,195.48
Net income	38,767.41	38,765.27	38,529.55	37,804.52
Reform impact (+ = burden, - = relief)	+2.14		+725.03	
Effective tax rate in %	29.51	29.52	29.95	31.26

^{*} Assuming €55,000 of profits and tax factors for the local trade tax of 400 or 490 percent, respectively.

Source: Authors' calculations.

other source of income. The simulation is conducted for tax factors of the local trade tax of 400 percent and 490 percent (highest rate in Germany), respectively.

Table 2 illustrates that under a tax factor of 400 percent for the local trade tax hardly any changes for partnerships or sole proprietorships occur. Under the currently highest municipal rate in Germany (Munich) of 490 percent an additional tax burden of 725.03 is calculated. The choice of business location within Germany thus becomes an important parameter for firm politics.²⁵

As an alternative situation, we examined the impact of the tax reform for a clearly higher income of €200,000, again, for a separate filing business and for a tax factor for the local trade tax of either 400 or 490 percent, respectively (Table 3).

We find that the effect of the tax factor on the effective tax burden of a non-corporate firm is even stronger as the income of the considered business or partnership rises. Under a tax factor of only 400 percent the business or partnership faces a tax relief, while under a tax factor of 490 percent the tax burden is substantially larger compared to the old situation. Those who tend to benefit mostly from the

reform, ceteris paribus, are businesses or partnerships with higher income.

Thus there is no uniform result regarding the impact of the tax reform on partnerships and sole proprietorships. Tax treatment depends on a business' income and the municipal assessment rate it is subject to. In any case, a clear tax relief for these businesses is not apparent.

In principle, the corporate tax reform offers the possibility of reducing the marginal tax burden on retained profits. However, due to the rules for subsequent taxation, this alternative is less attractive. To be sure, the direction of the reform is aimed at promoting

> retained profits. But unlike the case for incorporated firms, the incentives for retaining profits in the firm are not as strong.

> Moreover, the unequal treatment of capital gains for businesses (subject to the progressive tax rate) and for private assets (subject to the withholding tax) creates an incentive to withdraw liquidity from a business, which tends to weaken the equity capital base also for partnerships.26 This leads to prefer-

Table 3 Tax burden for business income before and after the reform*

	Municipal rate 400%		Municipal rate 490%	
	Before reform	After reform	Before reform	After reform
Profit before tax	200,000.00	200,000.00	200,000.00	200,000.00
Business tax	-25,250.00	-24,570.00	-29,813.25	-30,098.25
Income tax (basic rate)	-65,481.00	-76,086.00	-63,564.00	-76,086.00
Solidarity surcharge	-3,601.46	-4,184.73	-3,496.02	-4,184.73
Imputation of trade tax	11,362.50	23,341.50	10,951.81	23,341.50
Total tax	-82,969.96	-81,499.23	-85,921.47	-87,027.48
Net income	117,030.05	118,500.77	114,078.53	112,972.52
Reform impact (+ = burden, - = relief)	-1,470.73		+1,106.01	
Effective tax rate in %	41.48	40.75	42.96	43.51

^{*} Assuming €200,000 of profits and tax factors for the local trade tax of 400 or 490 percent, respectively.

Source: Authors' calculations.

²⁵ Endres, Spengel and Reister (2007).

²⁶ Endres, Spengel and Reister (2007).

ential treatment of external financing, since businesses' interest expenses reduce the highly progressive income tax liability, and interest on withdrawn profits of the partnership are only taxed at the lower withholding tax rate.

Conclusion

With an additional reduction of the tax rate for incorporated firms and a partial restriction of the deductibility of debt interest, the German government in its corporate tax reform of 2008 has followed the principles of a *tax-cut-cum-base-broadening* approach. In the light of increasing tax competition and the active profit shifting of multinational firms, this kind of reform was long overdue in order to react adequately to the challenges of globalisation.

A positive feature of the 2008 corporate tax reform is that by lowering the tax burden for incorporated firms, Germany has considerably improved its position in international tax competition and is now fit for the challenges of the globalisation process. With regard to the other elements of the reform, however, a more ambivalent picture emerges. What we have is anything but a consistent reform with a clear direction, apart from the reduction of the corporate tax rate.

Even though with the lowering of the corporate tax the investment wedge at the firm level has been considerably reduced with the introduction of the withholding tax on capital gains a double taxation of incorporated firm profits was introduced. As a consequence of the 2008 corporate tax reform, both real investment is at a considerable disadvantage vis-à-vis financial investment, and the overall investment activity by corporate firms is negatively affected.

Regarding the taxation of internal vs external capital, no clear conclusion can be reached. The introduction of the thin capitalisation rule does increase the cost of debt finance – but only for companies with very high interest payments. With the trade tax, however, the treatment of debt finance in the tax rules is improved. At the same time the introduction of the final withholding tax will create a stronger tendency among investors to grant external capital instead of own equity capital. In the light of the structurally weak equity capital base of German

firms, the effects of the reform are even more counterproductive. Finally it should be noted that partnerships and sole proprietorships will under certain circumstances even face a higher tax burden after the reform, and the relief effects of the reform will go especially to incorporated firms at the firm level. The introduction of the final withholding tax on dividends and capital gains will tend to have a structurally conserving effect for domestic equity holders. For foreign equity holders, who are exclusively interested in the definitive taxation at the firm level, the significant reduction in the corporate tax rate is extremely welcome.

To summarize, the reform lacks a clear direction. Its individual components often work in conflicting ways, so that in many parts the reform appears to be patchwork.

References

Becker, J., C. Fuest and T. Hemmelgarn (2006), "Corporate Tax Reform and Foreign Direct Investment in Germany – Evidence from Firm-Level Data", CESifo Working Paper No. 1722.

Becker, J. and C. Fuest (2007), "Steuerpolitische Perspektiven der Unternehmensteuerreform 2008", Vierteljahreshefte zur Wirtschaftsforschung 2, 39–48.

BMF, Bundesfinanzministerium der Finanzen (2005), Die wichtigsten Steuern im internationalen Vergleich 2005, Berlin.

BMF, Bundesfinanzministerium der Finanzen (2006), Die Reform der Unternehmensteuer stärkt den Standort Deutschland, Rede von Minister Peer Steinbrück vor dem BDI Steuerkongress am 26.09.2006, http://www.bundesfinanzministerium.de.

Carone, G. and A. Salomäki (2001), "Reforms in Tax Benefit Systems in Order to Increase Employment Incentives in the EU", *EC Economic Paper* No. 160.

Endres, D., C. Spengel and T. Reister (2007), "Neu Maß nehmen: Auswirkungen der Unternehmensteuerreform 2008", *Die Wirtschaftsprüfung*, 7, 1–12.

Huizinga H. and L. Laeven (2007), "International Profit Shifting within European Multinationals", CEPR Discussion Paper No. 6048

Joint Committee on Taxation (1986), Summary of Conference Agreement on H.R. 3838, Tax Reform Act of 1986, US Government Printing Office, Washington.

Maiterth R. and H. Müller (2007), "Unternehmensteuerreform 2008 – Mogelpackung statt großer Wurf", *Vierteljahreshefte zur Wirtschaftsforschung* 2, 49–73.

OECD, Organisation for Economic Co-operation and Development (1991), Taxing Profits in a Global Economy: Domestic and International Issues, Paris.

President's Advisory Panel on Tax Reform (2006), Simple Fair and Pro Growth: Proposal's to Fix America's Tax System, US Government Printing Office, Washington.

Radulescu, D. M. (2007), CGE Models and Capital Income Tax Reforms. The Case of a Dual Income Tax for Germany, Springer Verlag, Heidelberg.

Radulescu, D.M. and M. Stimmelmayr (2007), "Die Unternehmensteuerreform 2008 – Eine Reformalternative für Deutschland?", *Perspektiven der Wirtschaftspolitik*, forthcoming.

Radulescu, D. M. and M. Stimmelmayr (2006), IfoMod – A Dynamic CGE Model to Simulate Capital Income Tax Reforms, mimeo, University of Munich.

Schratzenstaller, M. (2007), "Unternehmensbesteuerung in der Europäischen Union – Aktuelle Entwicklungen und Implikationen für die deutsche Steuerpolitik", *Vierteljahreshefte zur Wirtschaftsforschung* 2, 21–38.

Spengel, C., C. Elschner, M. Grünewald and T. Reister (2007), "Einfluss der Unternehmensteuerreform 2008 auf die effektive Steuerbelastung", *Vierteljahreshefte zur Wirtschaftsforschung* 2, 86–97.

Stimmelmayr, M. (2007), Fundamental Capital Income Tax Reforms: Discussion and Simulation using ifoMOD, Mohr-Siebeck, Tübingen.

US Department of the Treasury (1992), Integration of the Individual and Corporate Tax Systems: Taxing Business Income Once, US Government Printing Office, Washington.

Weichenrieder, A. (2007), "Profit Shifting in the EU: Evidence from Germany", $CESifo\ Working\ Paper\ No.\ 2043.$