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CORPORATE INCOME TAX CONTRIBUTION OF THE POLISH FINANCIAL SECTOR

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Abstract

The financial crisis has stimulated debate on the taxation of the financial sector. The focus is on the bank levy and financial transaction tax, whereas corporate income tax attracts less attention in the public debate. Accordingly, this study analyses the contribution of the financial sector to Polish revenue from corporate income tax. Based on tax statistics of the Ministry of Finance from 1998 to 2016, the aggregated effective tax burden of the financial sector is determined and compared with the tax burden of corporations from other sectors. In addition, the study deals with loss deduction of the financial sector in comparison to non-financial corporations.

The study shows that the effective tax burden of the financial sector - measured as a ratio of the tax due to income - is higher than the corresponding burden for corporations from outside this sector. A higher corporate income tax burden of the financial sector also applies if it is measured by aggregated profits reduced by losses. An exception to this is the period up to 2002 and the year 2009, when the effective tax burden of the financial sector was lower after the inclusion of losses when compared to other sectors of the Polish economy. This can be explained by the relatively low losses of the Polish financial corporations compared to other corporations. Furthermore, the study shows that tax losses in the financial sector are used much more effectively. The minimum ratio of the expired loss carry-forward - due to its limitation up to five years – to the reported losses accounts for 20.2% for this sector and is thereby significantly lower than the corresponding share of 54.6% for non-financial corporations.

JEL classification: E62, G20, H25
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Introduction

Against the background of the financial crisis, the political debate on the taxation of the financial sector is focused on additional taxes in the form of a bank levy or tax on financial transactions (European Commission, 2010a, p. 4; European Commission, 2010b, p. 2; Devereux, 2014, p. 25). By contrast, this study deals with the contribution of the financial sector to corporate tax.

Some banks as well as insurance companies offer their customers tax-optimised products (examples for the Polish market: Noble Bank, 2018; PZU, 2018). Gellemore et al. (2017) provide empirical evidence regarding the role of banks as tax-planning intermediaries. This suggests that the financial sector is engaged in tax optimisation. Some recent studies confirm the considerable tax-planning activity of banks (Merz & Overesch, 2016; Overesch & Wolff, 2017). Therefore, the hypothesis can be made that the financial sector contributes relatively little to corporate tax revenue.

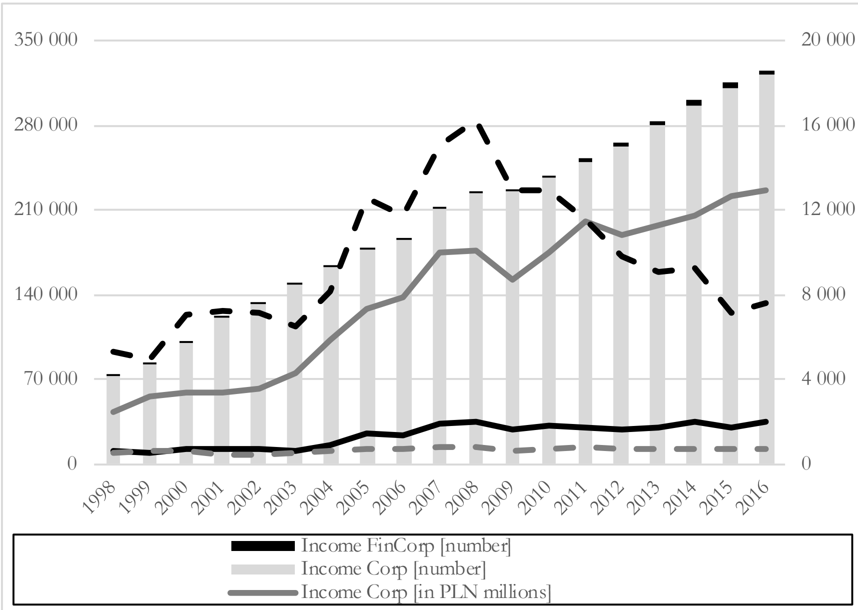
This study investigates this hypothesis for Poland by means of the corporate tax statistics provided by the Polish Ministry of Finance. Section 2 presents the share of the financial sector measured by income and number of taxpayers. Since losses and their utilisation significantly affect the tax burden, Section 3 analyses reported losses and their deduction for both the financial and non-financial sector. Based on the tax due as well as the effective tax burden, Section 4 deals with the contribution of financial and other corporations to tax revenue. Finally, Section 5 concludes.

Financial Sector in Poland

Regarding corporate tax statistics, the Polish Ministry of Finance distinguishes between banks, other financial institutions, insurance companies (hereinafter referred to as FinCorp) and other taxpayers (Corp) (MF 2017). Among the taxpayers who reported an income[1] for 2016, FinCorp only accounted for approximately 1.4% (FinCorp 4,692, Corp 321,376). This proportion increases considerably if the yardstick used is not the number of taxpayers but rather the declared income. Of the total income of almost PLN 263 billion in 2016, FinCorp account for over PLN 35 billion, which corresponds to a share of 13.5%. This is due to FinCorp's significantly higher average income of PLN 7.6 million compared to the average income of PLN 0.6 million generated by Corp. As measured by the gross value added, financial and insurance activities contribute 4% of

1 Income is defined here as the difference between earnings and costs. The amount of income does not include losses, tax exemptions and other reductions in the tax base.

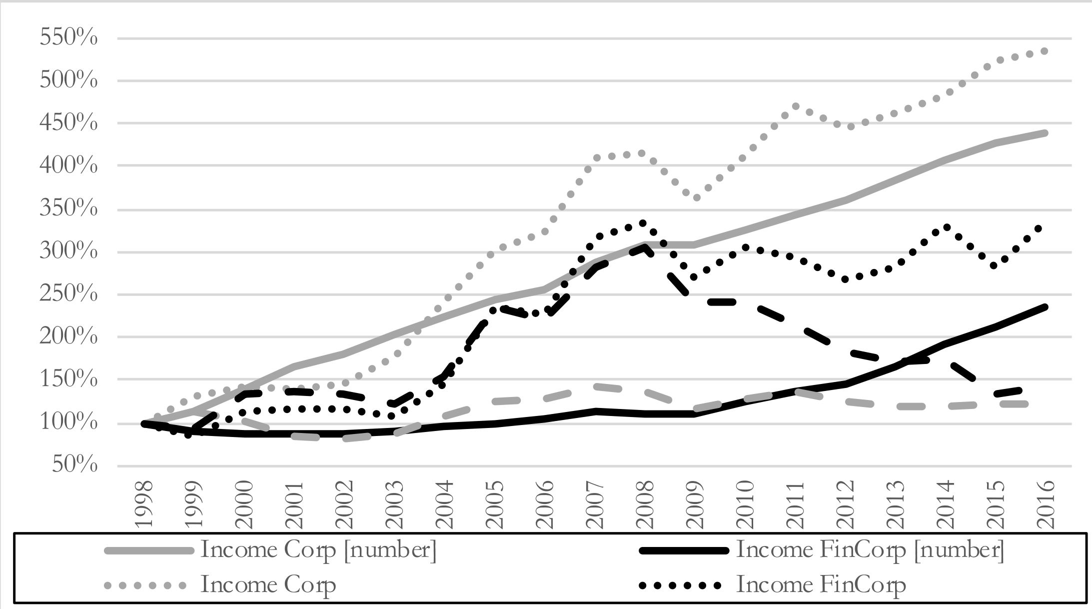
Figure 1: Income of FinCorp and Corp



Explanation: Dashed lines values are displayed on the right axis.

Source: Own elaboration based on data provided to the author by the Ministry of Finance (1998-2002) and (MF 2004-2017)

Figure 2: Income of FinCorp and Corp with 1998 as base year



Explanation: Explanation: 1998 is the base year and thus the index is calculated as follows: $I_t=Y_t/Y_{1998}$; $t_{\in}$N∩(1998;2016)
Source: Own elaboration based on data provided to the author by the Ministry of Finance (1998-2002) and (MF 2004-2017)

the total activities.[2] This ratio appears to be low compared to the above-mentioned share of income (13.5%) for the financial sector. However, it should be noted that the tax statistics applied here relate solely to corporations, which is the dominant legal form in the financial sector.[3]

Figure 1 illustrates the differences between the financial sector and other taxpayers from 1998 to 2016. The number of taxpayers declaring an income has increased in recent years (stagnation can only be observed during the 2008/09 financial crisis; see Figure 1, the bars). Prior to the financial crisis, the average income in the financial sector was generally rising. Since 2008, the income has decreased on average with the exception of the last year, in which a positive development was apparent (see Figure 1, the dashed black line).

A deeper analysis can be conducted by means of an index-based presentation of the sectoral income development, which provides Figure 2. Up to 2008 for the financial sector, the development of aggregated and average income closely matched each other. However, since the financial crisis the aggregated income has remained relatively stable, while the average income has decreased (see Figure 2, dashed and dotted black lines). This is due to the growing number of FinCorp in the last decade (see Figure 2, solid black line). By contrast, the number of other corporations has increased since the first year of the observation period (see Figure 2, solid grey line). The development of aggregated income is more volatile but nevertheless positive and accompanied by a relatively stable average income (see Figure 2, dotted and dashed grey lines).

Loss Offset

The tax contribution of taxpayers depends on their economic situation. In the case of losses, the tax burden is not only eliminated in the year in which the loss is incurred; rather, the losses reduce the tax burden of subsequent periods through the loss carry-forward (LCF). For instance, the lack of tax liability in approximately 70% of active corporations in the USA is due to a negative net tax income or the net operating loss deductions carried forward from prior tax years (GAO, 2016, p. 10-11). It is noteworthy that in the USA a loss carry-back (LCB) and LCF is limited to 2 and 20 years, respectively (PwC, 2017a,

2 Calculation based on data from the Eurostat (Database by themes > Economy and Finance > National accounts (…) > Basic breakdowns of main GDP (…) > Gross value added (…])
3 In accordance with article 2 of the Polish Banking Law Act (*ustawa Prawo bankowe*), banks are defined as legal entities. According to article 6 of the Polish Insurance and Reinsurance Act (*ustawa o działalności ubezpieczeniowej i reasekuracyjnej*), an insurance undertaking may carry on insurance business only in the form of a stock company, mutual society or a European company.

p. 2601), whereas the Polish tax law allows loss offsetting to a very limited extent. In Poland, a LCB is not allowed and according to Art. 7 para. 5 of the Polish CIT Act, the LCF is limited to the following five consecutive tax years. Moreover, the deduction in any of these years may not exceed 50% of the loss. Figure 3 presents the losses and their utilisation for the financial sector and other corporations since 1998.

The share of FinCorp among all taxpayers that suffered a loss amounts to 2.9% in 2016 (FinCorp 4,287, Corp. 142,852) and is therefore twice as high as the corresponding share regarding profitable corporations. However, the losses declared by the financial sector account for 8.9% of the total losses (FinCorp PLN 4,929 million, Corp. PLN 50,464 million), which is below the aforementioned share of 13.5% for the generated profit.

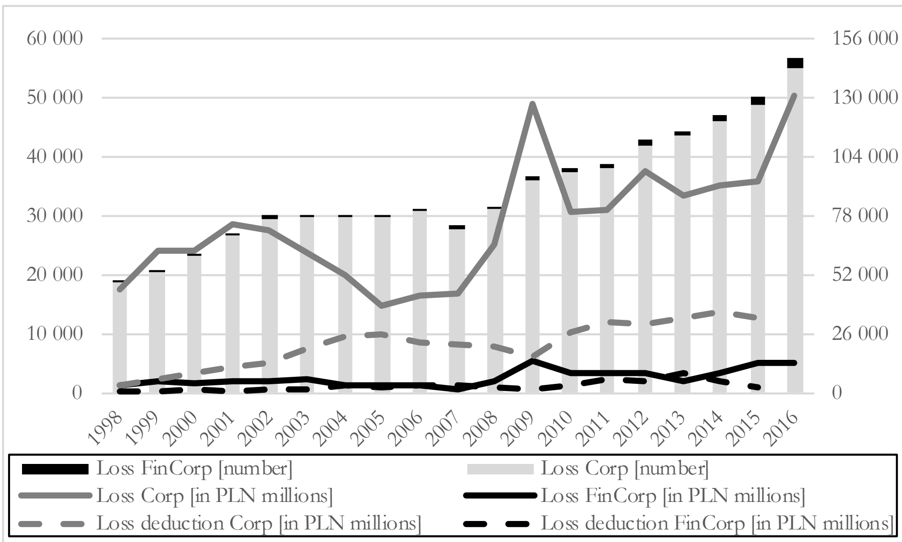
As a result of the financial crisis, both FinCorp and Corp have recorded a significant increase in declared losses in 2009. Furthermore, the losses of Corp also increased considerably in 2016. The difference in loss deduction is remarkable: while in some years the loss offset of the financial sector exceeds the reported losses, the loss deduction of Corp is significantly lower than the level of the declared losses. This shows that FinCorp utilise losses for tax purposes much more effectively than Corp.

Between 1998 and 2015, the non-financial corporations deducted PLN 145.8 billion losses from income and declared PLN 491.3 billion losses in the same period. The ratio of deducted losses to declared losses is therefore 30%. Under the assumption that the loss deduction in the respective year refers to the losses of the previous year, the percentage of loss utilisation for Corp is up to 56.1%. By comparison, FinCorp use the losses for tax purposes more effectively. For the financial sector and the period from 1998 to 2015, the ratio of losses deducted (PLN 21.2 billion) to losses declared (PLN 43.2 billion) is approximately 49%. For FinCorp, the ratio between the loss deduction for the respective year and the loss incurred in the previous year reaches a respectable 151.5%.

Losses do not have to be deducted in the year immediately following their occurrence. Due to the relatively short LCF period in Poland, the postponement in the loss deduction is accompanied not only by a negative time effect but also by the risk of a decline in the LCF. Although it is not possible to determine this decline based on the available information, the data allow calculating the minimum loss amount that expires due to the limitation of the LCF.

Under the very optimistic assumption that all losses incurred up to 1997 have been deducted up to 1998 and regardless of the aforementioned restriction on the annual threshold for the LCF of 50% of the previous

Figure 3: Losses and Loss Deduction



Explanation: Bar numbers are displayed on the right axis

Source: Own elaboration based on data provided to the author by the Ministry of Finance (1998-2002) and (MF 2004-2017)

loss amount, the non-deductible losses (NDL) can be calculated as a surplus of declared losses over the losses used in the following five years.

Taking into account the five-year LCF, losses deducted by FinCorp in 1999 to 2015 (PLN 20.8 billion) account for 79.8% of the total losses declared in the period from 1998 to 2010 (PLN 26.1 billion). In effect, PLN 5.2 billion (20.2 %) of the declared losses expired. By contrast, at least 54.6% (PLN 173.6 billion) of losses reported by other corporations during the same period of time can no longer be used.

Interestingly, in 2015 the UK introduced a restriction for banks, according to which the LCF is limited up to 50% of the annual taxable profit. The objective of this measure was to limit the deduction of losses accumulated in the banking sector during the financial crisis and therefore to increase the banks' contribution to the CIT (HMRC). In effect from 1 April 2016, the amount of taxable profit that can be offset by pre-April 2015 losses has been reduced from 50% to 25% (HMRC 2016). According to a study conducted by PwC, one-third of the reporting banks were affected by this legislation, increasing the tax revenue by £300 million in 2017 (PwC, 2017b, p. 22).

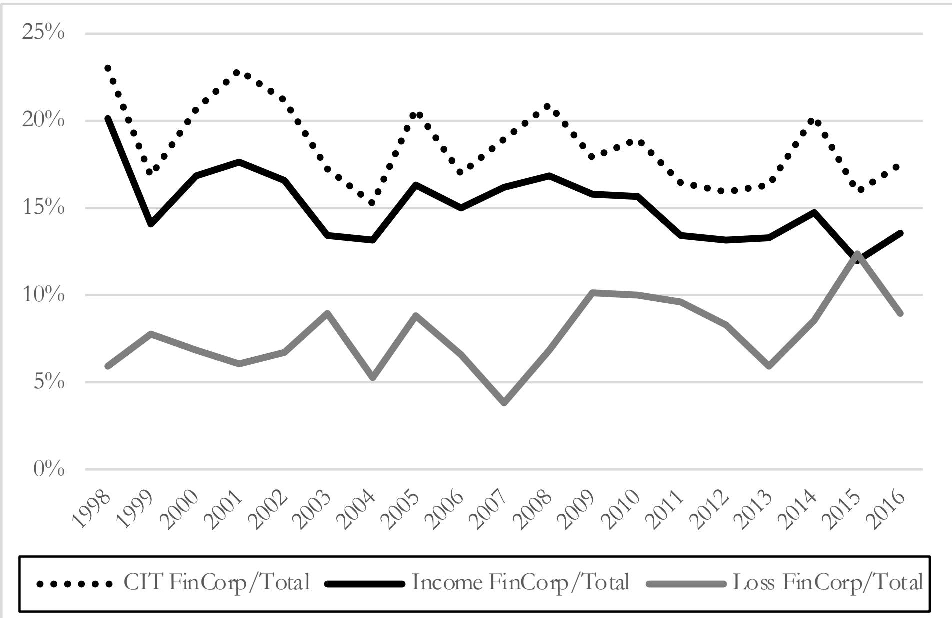
This type of restriction is already practised in other countries. In Austria, for example, the LCF is limited to 75% of taxable income (PwC, 2017a, p. 13). Noteworthy, the aforementioned thresholds refer to the amount of the taxable profit and avoid the situation whereby the entire income could be reduced by loss relief. However, the Polish restriction refers to the amount of loss and thereby extends the deduction of a loss over a period of at least 2 years, but allows a reduction of taxable profit up to zero as long as the profit does not exceed 50% of the previous losses.

As of 2018, the Polish legislature has tightened loss offsetting by distinguishing between capital income and other income. Losses may only be offset within the same type of income. This change can significantly limit the utilisation of losses. A possible scenario is that despite an overall negative result and due to profit from particular source of income, a tax liability arises.

CIT and Effective Tax Rate

The average contribution of FinCorp to tax revenue in 1998-2016 is 18.3% and accounts for 17.4% in the last year. Since the share of the financial sector – as shown above – in terms of income and number of taxpayers is 13.5% and 1.4%, respectively, the corporate tax contribution of FinCorp is above average. Figure 4 shows the relatively high contribution of the financial sector to the total CIT in comparison to the share of this sector in the reported income. Moreover, Figure 4 illustrates the relatively low

Figure 4: Share of the Financial Sector in the Total CIT, Income and Loss



Source: Own elaboration based on data provided to the author by the Ministry of Finance (1998-2002) and (MF 2004-2017)

proportion of losses in the financial sector.

The CIT contribution can be investigated by means of the effective tax rate (ETR), which represents the ratio of the tax due to the economic income. The differences between the ETR and the statutory tax rate (STR) result from the tax-related adjustments of income, such as non-deductible costs, tax exemptions and tax allowances. Furthermore, reductions in the tax amount have an impact on the differences between the ETR and STR.

For the purpose of this study, the ETR is defined as the ratio of the aggregated CIT to aggregated income or income reduced by declared losses for a particular year. According to the information provided to the author by the Polish Ministry of Finance, the ETR presented in the tax statistics is based on the income excluding tax-exempt income before tax deductions. Figure 5 shows the ETR for both the financial sector and other corporations as well as the STR and the ETR reported by the Ministry of Finance.

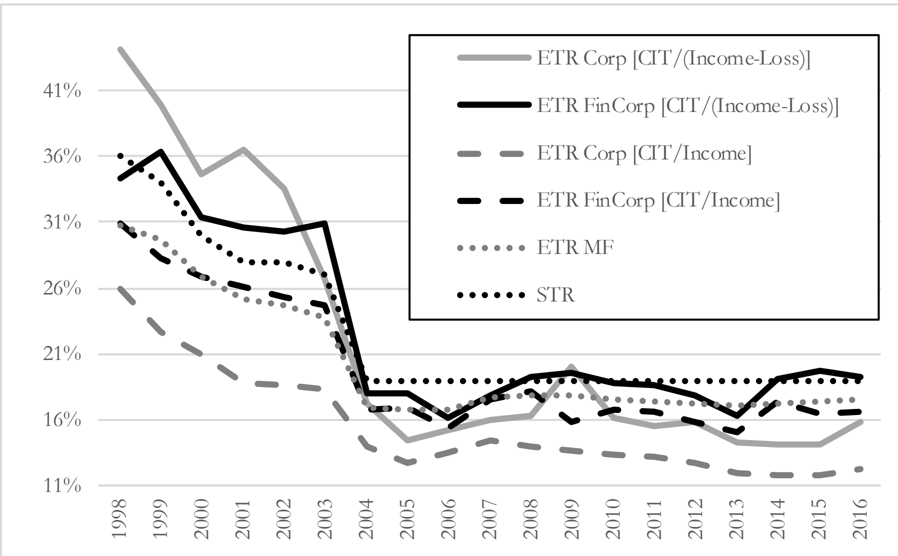
The decline in the ETR up to 2004 is due to the gradual decrease of the statutory corporate tax rate in Poland from 36% (1998) to 19% (2004). Since then, the Polish STR has remained unchanged within the period of observation.[4]

The comparison of the ETR between the financial sector and other economic sectors validates the relatively high contribution of FinCorp to corporate tax revenue. As measured by income, the ETR of FinCorp exceed the effective tax burden of other corporations across the whole period of observation. Apart from the first years (1998-2003) with the significantly higher STR, the ETR in the financial sector accounts for 16.6% on average, while the corresponding value for Corp is 13% (see Figure 5, dashed lines).

The lower level of the ETR compared to the STR is due to the deduction of previous losses, among other reasons. Nevertheless, these losses are not included in the aggregated income. For this reason, the additional ETR is measured by income reduced by losses. Including losses, the ETR increase and therefore are closer to the STR. During the period of the significant STR cut (1998-2003), ETR exceeded STR and the financial sector ETR being below the ETR for other corporations suggests a lower CIT contribution of FinCorp (see Figure 5, solid lines). It changes for the period from 2004 onwards,

4 Since 2017, a reduced tax rate of 15% applies for small corporations as well as corporations in their first year of activity.

Figure 5: ETR and STR



Explanation: ETR MF is the ETR reported by the Ministry of Finance and based on the income reduced by tax-exempt income and before tax deductions.

Source: Own elaboration based on data provided to the author by the Ministry of Finance (1998-2002) and (MF 2004-2017)

Table 1: Descriptive Statistics for the ETR 2016 (CIT/Income)

Industry [1]		Number	Mean	Std. Dev.	Min	Max
All industries		1,194	15.9%	5.8%	0.0%	31.1%
FinCorp	Finance and insurance	102	17.2%	3.9%	1.6%	19.0%
Corp	Other than FinCorp	1,092	15.7%	5.9%	0.0%	31.1%
	thereof					
	Wholesale and retail trade ... [2]	352	17.5%	3.8%	0.1%	20.7%
	Manufacturing	481	14.8%	6.5%	0.0%	27.6%

Explanation: The figures relate to the ETR, which is the ratio of the CIT to income. Corporations with losses and corporations without industry-specific information are not included.

[1] As defined in (European Commission 2008)

[2] Wholesale and retail trade; repair of motor vehicles and motorcycles

Source: Own elaboration based on (MF 2018)

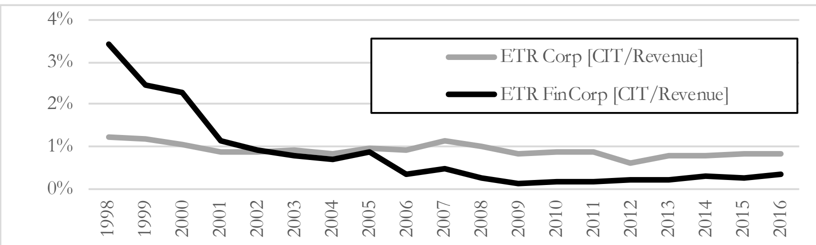
in which the ETR including losses is higher for FinCorp than the non-financial sector. This implies a relatively high contribution of the financial sector to revenue from corporate tax. In line with these results, the British Office for Budget Responsibility (OBR) reports the highest effective tax burden for corporate and income tax for financial intermediaries (OBR 2011, 89).

The results of this study, which is based on aggregated data, can be confirmed by the analysis of the exemplary microdata of the large corporations. Table 1 shows the descriptive statistics for the ETR (measured as the ratio of the CIT to income). For 1578 of 2339 taxpayers, whose individual data were published by the Ministry of Finance, the industry could be assigned; 1,194 of them have declared an income. On average, the ETR of the 102 identified FinCorp exceeds the ETR of the remaining corporations by 1.5% (17.2% vs. 15.7%). Noteworthy, the standard deviation of the ETR is significantly lower for the financial sector. A similarly high ETR and relatively small standard deviation report the corporations in the wholesale and retail sector. By contrast, the production companies have a lower ETR and a higher standard deviation.

One could argue that the contribution to tax revenue should not be measured by income but rather by turnover. Tax planning refers partly to deductible costs. Indeed, in terms of revenue, the effective tax burden of the FinCorp has been lower in recent years compared to the other companies (see Figure 6).

However, this result should be treated with caution. Considering income as a yardstick disregards the ratio of income to costs. However, this ratio is strongly influenced by sector-specific rate of return, which can only be attributed to tax planning to a very limited extent. Moreover, the relatively low ETR of FinCorp (in terms of revenue) is not confirmed by the analysis of the microdata of the large corporations. On average, this even results in a higher tax burden for the financial sector (see Table 2) and is in line with the results provided by Heckemeyer and de Mooij (2017) who suggest that banks are significantly less responsive to tax incentives for debt than non-banks.

Figure 6: ETR (CIT/Revenue)



Source: Own elaboration based on data provided to the author by the Ministry of Finance (1998-2002) and (MF 2004-2017)

Table 2: Descriptive Statistics for the ETR 2016 (CIT/Revenue)

Industry [1]		Number	Mean	Std. Dev.	Min	Max
All industries		1,201	1.1%	1.3%	0.0%	15.7%
FinCorp	Finance and insurance	102	1.9%	2.1%	0.0%	9.9%
Corp	Other than FinCorp	1,099	1.0%	1.2%	0.0%	15.7%

Explanation: The figures relate to the ETR, which is the ratio of the CIT to revenue. Corporations with losses and corporations without industry-specific information are not included.

Source: Own elaboration based on (MF 2018)

Conclusion

Despite a relatively small number of financial corporations, the financial sector reports over 10% of total income. Nevertheless, the number of FinCorp has increased in the recent years, while the development of the corresponding income has been marked by stagnation.

Regarding the loss utilisation, the financial corporations perform much better in comparison to other corporations. While the minimum ratio of the expired LCF to the reported losses accounts for 20.2% for the financial sector, the corresponding share for Corp is 54.6%. This can be explained by lower losses of FinCorp. However, the relatively high loss deduction within the financial sector may be due to tax planning.

The contribution of financial corporations to the CIT is above their share in the declared aggregated income. This result is underpinned by the effective tax burden, which is mostly higher for the financial sector than other corporations. It essentially holds for the ETR based on income before and after loss deduction. However, up to 2002 and during the financial crisis in 2009, the inclusion of losses leads to a higher CIT contribution of the non-financial sector.

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