The link between Corporate Social Performance and Corporate
Financial Performance in the Banking Sector

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Abstract: - Hectic economic changes and the subsequent regulatory rigor of the past decade have a significant and negative impact on the functioning of the banking industry worldwide. Banks has been trying to resolve and re-establish their decreasing trends in profitability; their weakening relationships with their customers; as well as their former competitive positions by such kind of approaches which depicted them as socially responsible institutions in the money and capital markets, and led to the spread of the different concepts of responsible banking, green banking, or ethical banking. However, it is hard to measure the real extent of the banks’ social responsibility and the effects of these activities on their financial performance on the long run. This paper attempts to review the different methodologies used for the evaluation and measurement of social and financial performance of banks. The authors also try to show what kind of relationship can be found between social and financial performance of banks according to the relevant literature and the results of an empirical analysis using the sample of seven dominant market players in the Hungarian banking sector between 2006 and 2013.

Key-Words: - corporate social performance (CSP), corporate financial performance (CFP), banking sector, Scholtens’ CSP framework

1 Introduction

The concept of corporate social responsibility and its practical realisation in the last decade became a serious interest for both academics and practisers. While the question of a generalizable business case for CSR is still unanswered, in the relevant literature a number of reasons are listed supporting CSR activities such as the ability to strengthen the reputation and image of an organisations [20], [32], to increase customers’ loyalty and trust [36], to decline business risks and cost of capital [5], to explore the growth opportunities towards new products, services and markets [55], the ability to attract and keep skilled workers [16], [32], all in all the ability to enhance profit.

Since the financial crisis of 2008, banks have made significant steps towards the intensification of their CSR activities which can be certified by the growing number of CSR disclosures [62], the incorporation of responsible banking products [53] and the fact that sponsoring and donating activities [59] have become a general habit as part of the responses to the changes on the capital market and to the tightening regulations of the general banking operations. The financial recession has put the banks’ operational and regulation problems in the focus. The Basel Committee ordained the fractional installation of the Basel III principles and measures between 2012 and 2019 for the European banks for systematic risk management. Keeping the sector-specific accounting regulations across the European Countries, the Basel Committee’s guidelines and measures guarantee the security of capital adequacy. In the Basel III regulation the term of leverage has changed, the countercyclical capital puffer has been introduced and the calculation of capital has been tightened as well. The consequence of the introduction of capital puffer will be the rising of the capital adequacy indicator’s level on the long run. The bank’s toolbar is mostly formed of the
assets against clients, loan offices and other outsiders. Asset quality is basically the level of the quality that is equivalent to the risk of outstanding assets’ recovery, therefore the provision created for the obligations in connection with the loans complete the risk management methods and guidelines. According to the study by [19] the integration of Basel capital requirements (raising the capital adequacy ratio to 9%) would mean a profitability loss of 1.5%-4% to European banks on the long run. In bank management, just as in case of any other organisation, the aim is profitability, to insure profit. However the profit of banks mostly comes from the interest margin, which was negatively affected by the super tax and the transaction fee since 2013. Furthermore, this aim must be reached with keeping the bank system’s specific operational regulation – Basel standards, national regulations on banking and financial companies – and by also keeping three basic requirements – liquidity, solvency and prudent operation. Therefore banks need to generate yield in a way that on the long run they can guarantee the safety of their clients i.e. the capital needs to cover the potential losses and on the short run they must have enough cash to ensure their operation. The basic condition of solvent and efficient banking operation is the efficient capital handling because equity guarantees the bank’s liquidity on the long run and it is also suitable to correct the occurring of potentially adverse events, with this, evading bankruptcy. Liquid banks can fill the assets against them at any time, meaning they always have enough liquid assets on hand. The recession forced the banks to adapt significantly, which showed in the lessening of loan-deposit ratio. With the recapturing of lending, at the same time to keep sustainable profitability the focus is put on the growth of deposits. The consequence of lending’s recapturing is squarely the weakening of competition on the market. Deposit expansion has created strengthening deposit market’s competition, where today banks have to compete with other, non-financial institutes (unit linked products) while since the start of the financial recession the rate of non-performing loans has grown significantly. Moreover it is the management’s role to solve the inner conflicts of interests, make the organisation transparent and ascertainable, and enlarge the bank’s efficiency while dropping the operational risks. Beside these regulatory landscape banks had to face the mistrust created during the recession, the mistrust which was directed to the financial institutions. They had to show, that while they keep the depositors’ safety in front, they take the responsibility for their clients on the social level as well. To strengthen the trusting relationship and to keep their clients banks started to publish CSR reports in order to amend and confirm the regulations they follow. According to [35], social responsibility saves the banks from building in every risk in their financial products, it enhances the transparency of financial risks in their products and it helps to serve reforms in case of pro-cycle settings. However it is possible to identify numerous other motivational cases of CSR activities being put in front like compliance with regulations, fall of operational costs and risks, fixing the relationship system with stakeholders, perceived environmental visibility, reputation fixing, insuring competitive advantage and attracting investors ([58], [60]). This study seeks to undertake an up-to-date assessment of the potential link between corporate financial performance (CFP) and corporate social performance (CSP) in the case of seven Hungarian banks.

2 Literature review

In the last decades a number of empirical and normative analyses have been born dealing with the examination of the potential link between corporate social and financial performance, trying to answer the question on how corporate social performance with its huge list of motivation factors impacts the financial results of an organisation. However meta-analysis studies (e.g. [18], [41], [42], [12], [66], [6], [27]) highlighted that there is no clear consensus or overwriting evidence among the different papers regarding the nature and direction of this relationship. Some authors [15] agree that there is a positive link between corporate social and financial performance arguing that good CSP leads to good CFP, while others [28], [14] find negative relationship between CSP and CFP indicating that CSR cannot determine higher financial results because of the inherent costs that decidedly superior to profits. Mixed results [11] can even be found for the impacts of CSP on CFP supporting the theory of non-constant, U-shaped relationship between the two variables. Finally studies with no significant results like [57] and [35] suggest that CSP and CFP are independent variables and no correlation exists between them or as [63] stress the link between social and financial performance is too complex to be described by a direct relationship. Researches like [49], [7], and [26] suggest that in the background of these contradictory consequences theoretical and methodological reasons can also be explored. According to them these reasons can be traced back to the use of different views on the
importance of the driving forces and conceptual
determinants of CSP, the lack of clear theoretical
foundations of CSP, the absence of systematic and
widely accepted measurements for CSP and CFP, the
various theoretical expectations of the potential
link between CSP and CFP and the methodological
differences of sample sizes, control variables and
time horizons.

As [17] already stated both CSP and CFP are meta-
constructs which explains the numerous definitions
used in the literature for both concepts with strong
subjectivity reflecting the unique and different
thoughts of the pursued theoretical bases like
neoclassical theory, stakeholder theory, shareholder
theory, institutional theory or even new institutional
theory. The active and constructive attention
surrounding corporate social responsibility practices
has left appreciable marks on the economic and
management disciplines leading to the appearance
or strengthening of various theories and research
streams such as the renaissance of stakeholder
theory and value orientation [1], [44], [46], good
management theory [8], slack resource theory [15],
social marketing [24], business model innovation
[52], corporate accountability in business ethics
[23], or the different assessment tools of CSR.
However there is a lack of consensus not only on the
definition of corporate social responsibility but on
the typology of CSR practises, their main elements
and the measuring approaches suitable for corporate
social performance. As [18], [41], [42], [12], [66],
[6], and [27] agree that in the CSP-CPF literature
one- and multi-dimensional measuring methods can
also be found for quantifying corporate social
performance. In most of the papers examined by the
aforementioned meta-analysis studies corporate
social performance is measured by, or with the help
of reputational indexes or ethical ratings such as
Dow Jones Sustainability Index, FTSE4Good index,
Domini 400 Sustainable Index, Ethibel
Sustainability Index, or the special indexes of KLD,
CRA, CSRHub, and Asset4esg datasets. Using
indicators of one single aspect of various socially
responsible practices can form another group. The
CSR proxies in this respect are in connection with
CSR costs i.e. the costs of donation and sponsoring
activities, environmental engagements or
representing the distribution of the economic value
created by the given organisations. Content analysis
of annual CSR or Sustainability reports measures
the amount of corporate social performance as it is
declared in the published documents of the
organisations. In this regard words, lines, sentences
and special information on social activities
accessible in the firms’ social disclosures are
analysed and summarised by dummies or multi-
dimensional indicators. Some authors develop their
own CSP measuring frameworks and use
questionnaire surveys completed by company
managers, directors, employees or even customers
and clients. All of these commonly applied
methodologies for quantifying CSP have their own
limitations, since by using questionnaires mainly
personal perceptions of social responsibility from
both sides can be evaluated, content analysis is
inseparable from the organisation’s own
declarations, reputational and ethical ratings mirror
third party considerations who often do not have
knowledge of the inner conditions and are based on
agency-specific quantification models and CSR
cost-based analysis ignores aspects which cannot or
hardly be expressed in monetary terms. Moreover
thanks to their subjective CSP calculation models
regarding stakeholder consideration, indicator
selection and weighting methods of these five
approaches it is difficult to compare the
consequences of the specific CSP-CPF studies or
the unique CSP values of the same organization
measured by the different approaches.

Corporate financial performance reflects the
financial health of the firm. Wide array of financial
variables used to measure CFP which can be
grouped into two main categories: accounting-
based, market-based and perception-based
indicators. Although market based indicators are
exposed to information asymmetry they reflects
external market responses to organization.
Accounting-based indicators measures the
efficiency of the internal decisions in a firm over a
given period in spite of their historical, easy-to-
manipulate and strongly dependent nature on
accounting policies and procedures. Meta-analysis
studies (e.g. [18], [41], [42], [12], [66], [6], [27])
have shown that ROA, ROE and ROS are the most
widely accepted accounting based indicators and
most frequently used market based CFP indicators
are Tobin-Q and price per earnings ratios, however
in some studies CFP is approximated by the
outcomes of questionnaire surveys filled by
corporate directors and managers.

The existence of a link between social performance
and financial performance has been usually
examined by means of linear regression models.
Most of these regression analysis has explored the
impact of CSP on CFP, only few authors examined
the influence of CFP on CSP, or the interactive link
between the two performance metrics. Traditional
OLS regression models are usually criticized in the relevant literature because of the assumed curvilinear relationship between CSP-CFP [4], its ability to give rise to the missing third variable problem [54], and the problem of reverse causality [54], [63], i.e. good CFP leads to good CSP and vice versa which is supported by good management and slack resource theories as well, has to be treated with the help of two-staged linear regression models and Granger-casuality test [27], [54]. While according to the meta-analysis studies (e.g. [18], [41], [42], [12], [66], [6], [27]) control variables used in the investigations revised appears to be disparate, the majority of cross-sectional studies take into account the effects of firm size, the industry or industry specific factors, ownership, capital structure and leverage, systematic and non-systematic risks, R&D and advertising expenses on CSP or CFP respectively. In the case of international comparisons control variables reflecting local, regional or national circumstances such as GDP growth rate, population, or inflation are also built-in. Some authors (e.g. [17], [64]) draw attention to the fact that unique characteristics of a company, an industry, a region or a country make the nature of both CSP and CFP unique based on the different internal and external circumstances and institutions leading to different mechanisms in the background of the relationship of social and financial performance.

In spite of the fact that most studies employ a cross-sectional research design and focus on large manufacturing and service organizations [27], [41] sector-specific researches concentrates mainly on the banking and financial sectors especially due to the consequences and impacts of the financial crisis of 2008. It was shown earlier, after the financial crisis of 2008 driving forces towards corporate social responsibility behaviour for banks and financial institutions has been intensified. However, the assumptions and consequences of these researches examining the potential linkage between corporate social and financial performance in the case of the banking industry can neither be unified. Most of the recent studies have adopted factors such as different methodology for social and financial performance quantification, different sample sizes and composition, or time spans, as well as distinct control variables that were not consistent with each other. For measuring the corporate financial performance of banks accounting based indicators are generally used. In this regard financial results are expressed by traditional indicators such as ROE (e.g. [57], [37], [21], [31], [22], [38]); ROA (e.g. [57], [37], [21], [31], [22], [38], net income (e.g. [37], [39]), net interest income or net non-interest income [67], however the usage of special indicators, like non-performing loans [58], [65], or deposit per employees [45] can also be observed. Market based measures used to express banks’s corporate financial performance incorporate Tobin-Q, earnings per share and price per equity ratios [2], [9], [29], [51]. Approaches used for quantifying the social performance of banks and financial institutions were the same as it was observed for cross-sectoral studies. Of the most recent quantitative studies revised on the subject CSP has been approximated by multidimensional CSR or ethical ratings, such as KLD, CRA, ESI, EIRIS, Asset4esg in three cases (e.g. [51], [56], [57]) and by own CSP indicators based on the stakeholder theory or Carroll’s framework in the case of [30], [43] and [65]. Of the two studies used content analysis, [48] develops her own rating model of CSR disclosures by following the principles of the stakeholder theory whereas [37] bases their investigation on the main categories grounded by Carroll’s framework. However in the most recent studies corporate social performance is usually expressed by environmental or CSR costs (e.g. [22], [29], [37], [39], [40]), or corporate social performance is approximated by the outcomes of questionnaire surveys completed by employees and managers (see [2], [21], [29], [38], [46]) or even clients.

Regarding the methodologies of statistical analysis used in CSP-CFP studies specified in the banking and financial sectors correlation and linear regression analysis are outstanding, and from the studies revised only [65], [29], and [22] attempt to consider and treat the potential appearance of endogeneity phenomenon between the social and financial performance of banks. The use of control variables seems to also be dispersed as beside traditional variables - like size, age, ownership, GDP, and inflation - variables reflecting the unique aspects of corporate governance or the stricter regulatory expectations induced by Basel I and II can also be identified. In the latter case capital adequacy, asset quality, coverage and liquidity ratios are employed suggesting the intention towards the use of the CAMELS framework.

Overall, according to the studies examined the link between social and financial performance in the banking industry seems to be either positive (e.g. [56], [31], [30], [21], [65]) or neutral ([2], [37], [45], [37], [21], [31], [22], [38], net income (e.g. [37], [39]), net interest income or net non-interest income [67], however the usage of special indicators, like non-performing loans [58], [65], or deposit per employees [45] can also be observed. Market based measures used to express banks’s corporate financial performance incorporate Tobin-Q, earnings per share and price per equity ratios [2], [9], [29], [51]. Approaches used for quantifying the social performance of banks and financial institutions were the same as it was observed for cross-sectoral studies. Of the most recent quantitative studies revised on the subject CSP has been approximated by multidimensional CSR or ethical ratings, such as KLD, CRA, ESI, EIRIS, Asset4esg in three cases (e.g. [51], [56], [57]) and by own CSP indicators based on the stakeholder theory or Carroll’s framework in the case of [30], [43] and [65]. Of the two studies used content analysis, [48] develops her own rating model of CSR disclosures by following the principles of the stakeholder theory whereas [37] bases their investigation on the main categories grounded by Carroll’s framework. However in the most recent studies corporate social performance is usually expressed by environmental or CSR costs (e.g. [22], [29], [37], [39], [40]), or corporate social performance is approximated by the outcomes of questionnaire surveys completed by employees and managers (see [2], [21], [29], [38], [46]) or even clients.
3 Empirical analysis of the link between CSP and CFP in the case of the biggest Hungarian Banks

In our research we are looking for the connection between the society performance and financial performance in the domestic banking sector during the 2006-2013 period with a special interest to the dominant seven banks that are joint stock companies according to the Hungarian National Bank. Besides being joint stock companies, it is also to their advantage that they are dominant on the market, they were present during the whole research period and that they have publicly available information about their CSR activity on the long term. During the research 56 bank-years were analysed. The data that looks at the links of the civilian and financial performance was analysed through a regression-analysis on the whole sample, with the help of the SPSS 22.0 statistical analysis software. According to the literature that deal with the links of the civilian and financial performance of the banks, Table 1 has been compiled, listing the main elements of the regression model.

As Table 1 shows we choose three generally accepted measures of financial performance in the banking sector: average return on assets, average return on equity and net income. Average return on assets measures how profitable a bank is relative to its total assets, which reflects the ability of bank management to use their assets i.e. loans and securities to generate income efficiently. Average return on total equity reflects the amount of net income generated with the money have been invested by the shareholders. The use of net income as a dependent variable is justified by the fact that “the application of ratio measures may exaggerate relations and can cause the distortion of results since independent variables can influence the numerator, the denominator or both” [3].

Table 2. Values of CSP1 and CSP2 for the banks examined, 2006-2013 (in %)

<table>
<thead>
<tr>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP1</td>
<td>CSP2</td>
<td>CSP1</td>
<td>CSP2</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1.67</td>
<td>20.24</td>
<td>23.81</td>
<td>23.81</td>
<td>27.98</td>
<td>32.14</td>
<td>32.14</td>
</tr>
<tr>
<td>3</td>
<td>25.00</td>
<td>25.00</td>
<td>20.83</td>
<td>28.57</td>
<td>28.57</td>
<td>36.07</td>
<td>36.07</td>
</tr>
<tr>
<td>4</td>
<td>47.98</td>
<td>47.98</td>
<td>55.48</td>
<td>55.48</td>
<td>64.64</td>
<td>68.21</td>
<td>68.21</td>
</tr>
<tr>
<td>5</td>
<td>8.33</td>
<td>8.33</td>
<td>43.81</td>
<td>43.81</td>
<td>46.31</td>
<td>46.31</td>
<td>32.14</td>
</tr>
<tr>
<td>6</td>
<td>47.38</td>
<td>47.38</td>
<td>49.88</td>
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</tr>
<tr>
<td>7</td>
<td>16.67</td>
<td>16.67</td>
<td>32.50</td>
<td>32.50</td>
<td>32.50</td>
<td>31.07</td>
<td>31.07</td>
</tr>
</tbody>
</table>

Source: own calculation

Thanks to the deficit in CSR indexes listed by the rating agencies, the enumeration of CSR performance of banks can be done in two ways according to the framework of [53]. Firstly, similarly to [25] the average performance of the banks (CSP1) will be examined with the help of the Scholtens framework’s 29 indicators (See Appendix 1). Secondly, the CSR performance of the banks will be analysed (CSP2) with changes in the criteria system of the Scholtens model. In the modified Scholtens model (See Appendix 2), the main and sub criteria have been adjusted so that it makes it possible to resolve the shortcomings of the original model, with the help of the following elements: validation of employee aspects, incorporation of the CSR in the strategy and the organisation, Additionally the direct and indirect social
engagement. It was a goal to exclude those elements that were less relevant for domestic banks, also to exclude those variables which cannot be analysed sufficiently because of lack or data. Both CSP1 and CSP2 indicators have been calculated according to the annual financial reports, the CSR or Sustainability reports of the banks and information from their respective websites. At the individual and also at some cases at the parent banks, for all years averages were calculated and according to these averages, performance indicators were assigned (See Table 2.).

The control-variables of the regression analysis, according to the sector specific researches, were chosen from the elements of the CAMELS credit institution performance measurement model. The effects of the organisational size were quantified with the size indicator (FS indicator), according to the natural logarithm of all assets. The financial performance indicators and the values of the control variables were based and quantified according to the annual financial reports of the banks, also on the Golden Books of the Hungarian National Bank (MNB). According to the regression tests of the examined data, the links of the dependent and independent variables can be described by a linear regression equation. It can be described by the following equation:

\[ CFP_i = \beta_1 CSP_1 + \beta_2 CA_i + \beta_3 AQ_i + \beta_4 ME_i + \beta_5 LC_i + \beta_6 LI_i + \beta_7 FS_i + \epsilon \]

Table 3 summarises the results of the linear regression analysis, based on the net income, according to each of the individual civilian performance indicators. According to the table, the Scholtens CSP indicator (SCP1) the values of the multiple correlation coefficient between the dependent and independent variables \((r_{NI}=0.803, r_{AROE}=0.728, r_{AROA}=0.7283)\) show a middle-strong linear tightness. According to the multiple determinant coefficient \(r^2\) values, the deviation according to the change in the independent variables can be explained by the following percentages: 1) deviation of the net present value 64.5%, 2) average return on equity 53%, 3) average return on assets 52.2%. Similar results can be observed at the modified Scholtens CSP indicators. At this case, there is a stronger linear tightness correlation between the dependent and independent variables, the explanatory power of the independent variables is also stronger. It has to be stated that a change in the dependant variables can be also influenced by factors that are not considered in this analysis, also that it would be recommended to perform the same analysis on a longer time-interval. The F-statistics and significance values according to the variance table of the regression analysis (Table 4) indicates that all established models explain well the deviation of the financial performance indicators.

<table>
<thead>
<tr>
<th>Table 4: Coefficients for CSP1 and CSP2</th>
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</table>

Source: own calculation based on SPSS 22.0

Table 3 summarises the results of the linear regression analysis, based on the net income, average return on equity and return on assets according to each of the individual civilian performance indicators. According to the table, the Scholtens CSP indicator (SCP1) the values of the
Next step is the examination of the conditions of the regression calculation are met. It is evident to see from Table 4 that the values of the Variance Inflating Factor (VIF) at the civilian performance indicator, regardless of its type, don’t reach 3. According to the correlation matrixes, the relationship between the examined independent variables is weak-medium. Their respective value never goes above the 0.7 border-value, thus it can be stated that there is no multicollinearity at any of the models [50]. Regarding the error-members, the homoscedasticity, the autocorrelation and the normal distribution has to be further examined. According to the Durbin-Watson tests, there is no autocorrelation of the error-members at any cases. The histograms, that examine the normal distribution of the residuum’s, and the significance levels of the Kolomogorov-Smirnov one-sample probe (in case of CSP1 are: NI:0,66; AROE:0,205, AROA:0,117; in case of CSP2 NI: 0,530, AROE:0,254, AROA: 0,089) show that in no case does the distribution of the residuum variate significantly from a normal distribution. The variance of the error-members has been examined through a graphical representation and the Breusch-Pagan test that’s values (in case of CSP1 NI:0,56; AROE:0,57, AROA:0,36; in case of CSP2 NI: 0,51, AROE:0,63, AROA: 0,49) show that the homoscedasticity presumed in the Null Hypothesis cannot be rejected at any case.

Examining the effects of the financial performance of the regression coefficient (see Table 4) it can be stated that there is a negative correlation between the net income and the following: 1) civilian performance (CSP1 and CSP2), 2) asset quality and 3) liquidity coverage. In case of size, there is a positive correlation. While the management efficiency, liquidity and capital adequacy cannot be proven on a p=5% level. The negative effect of the capital adequacy can be detected on the following levels: In case of the equity based return (CPS1) the indicators are on a p=5% level, while at the modified Scholtens model (CSP2) the indicators are on a p=10% level. The negative effect of the asset quality can be verified at both of the linear regression models at a p=5%. The negative effects of the civilian performance on the ROE can only be verified in the case of the indicators in the modified Scholtens model (CSP2) on a p=10% level. In the case of the average asset return rates, the negative effect of the asset quality as a control factor can also be verified. In the case of the Scholtens indicators (CSP1) the negative effect of the civilian performance on the return on assets cannot be, in case of the modified Scholtens indicators (CSP2) it can be verified.

4 Conclusion

In the past decade, there have been effect-mechanisms and sector based changes present that lead not only in the domestic banking sector to new competition and a market restructuring. One of the most important consequences were the processes aimed at security at the capital adequacy, also known as the Basel defined policies and guidelines that became to apply to the Hungarian banks according to the Hungarian accounting standards from January 2008. The concept of leverage has been modified in the Basel III. Regulations, there has been also an addition of the anti-cycle capital buffer, and the calculation methods of the capital have also become stricter. The required level of the capital adequacy ratio has become higher in line and as an effect of the introduction of the capital buffer. The European Banking Authority requires that those financial organizations that are important in terms of the systematic risk to have to have a 9% capital adequacy rate from June 2012. To the risk management methods and guidelines there is an addition of a strategic reserve that is attached to the lending related commitments. This reserve and the equity loans coverage capabilities are important on a practical basis because in 2013 the Hungarian National Bank (MNB) started a growth loan program that caused an overall growth of the loans. In this case, the level of the asset quality shows the recovery risk of the receivables. This is relevant since from the start of the financial crisis, default rates have gone up significantly in the banking sector and its value is showing only a modest fall.

Although our research didn’t consider the whole of the Hungarian market and it is in contradiction with international banking researches, it is still showing a clear evidence that those most relevant players of the Hungarian banking sector experienced a negative impact on their return on income, return on equity and return on assets. The causes of this negative impact were: the subsidized and micro loans in their product portfolio, the support of civilian actions through CSR activity like sponsorships, education and foundations. This was a response reaction to the global financial crisis and the loss of market space that made the banks prioritized on customer retention and the strict enforcement of financial regulations. These factors that have a short term negative effect on returns can have a positive return on the long term, since it has
been proven that capital adequacy has a positive correlation to net income. This is only consequential and this will only mean higher net income if the banking sector on the long run can achieve the same capital adequacy with an improvement of the size and quality of the loan portfolio and better risk management. The growth of the reserve requirement operations, brought forward by the regulatory barriers has a negative short term effect on the return on equity. The restructuring and reclassification of the loan portfolio, stricter risk management and higher liquidity coverage because of the success of the Growth Loan-Program have a positive effect on the overall asset quality. Unfortunately this is in ever better light because of the alternative savings possibilities (for eg. unlinked) that cause a decline in the deposit collection. These last two factors have a negative impact on the return on assets, and although the corporate responsibility and performance also has a short term negative effect on the ROA, it is still in turn restoring the confidential relationship that was lost from the customer relationships of the banks during the crisis. On the long term, this same customer base will be the factor to ensure the survival of the banks, the market competitiveness and a growth in profitability with a fundament on a more secure and better risk management.

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Appendix 1: Corporate Social Responsibility Framework of Scholtens (2008)

<table>
<thead>
<tr>
<th>Group</th>
<th>Indicator name</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Business ethics</td>
<td>Sustainability/CSR report</td>
<td>0: No separate report, 1: Separate report</td>
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<tr>
<td></td>
<td>ICC Business Charter for Sustainable Development</td>
<td>Adopted (Y/N)</td>
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<td></td>
<td>UNEP FI</td>
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Source: Scholtens (2008: 165)

Appendix 2: Modified Corporate Social Responsibility Framework of Scholtens

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<td>ICC Business Charter for Sustainable Development</td>
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Source: own model