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A NOTE ON MANAGEMENT EFFICIENCY AND INTERNATIONAL BANKING. SOME EMPIRICAL PANEL EVIDENCE

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This analysis focuses on the assumption that management efficiency is one of the most important company-specific factors affecting a bank's international activities. The theoretical results on whether good or bad management influences international activities in banking are mixed. We attempt to let the data speak for itself, applying advanced panel-econometric regression models to a dataset covering 747 universal banks based in Austria for the period running from 1995 to 2002. The dataset is unique in the sense that it provides almost full coverage of a banking sector at the company level that expanded foreign operations during the period covered on an unprecedented scale at the time. We find that management efficiency as measured by X-efficiency affects the degree of a bank's international orientation positively. In addition, risk-based capital and international orientation in banking is positively related.

JEL classification codes: F36, C23, C52, G21, G24, G34
Key words: efficiency measurement, data envelopment analysis, international banking

I. Introduction

Up to now, most empirical work on the determinants of foreign direct investments (FDIs) in the banking sector has focused on location-specific factors in the host country such as market size, trade relations, regulatory and judicial standards (see, for example, Buch 2004, for a competent review of the relevant literature). Many of these studies stress the tendency of banks to follow their customers abroad as one of the most important reasons why banks make FDIs. Empirical works have

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devoted less attention to the effect of company-specific factors on international banking, mainly because of the difficulty in obtaining data on such factors.

This paper makes an attempt to focus on a very intrinsic, company-specific factor of international banking, which has only recently become an important topic in the debate on the new regulatory framework for international banks. Specifically, the analysis explores the relationship between management quality and international banking activities. In our study, we have focused on one of the core topics of the New Basel Accord (NBA), which is the backbone of the current regulation of international banking.[1] From the perspective of sound and efficient financial markets, it has turned out to be of considerable importance to understand whether it is good management or bad management that makes banks more inclined and thus more likely to go international. Historical evidence indicates that badly run banks pose one of the biggest threats to the soundness and stability of the international banking system (see, for example, Hughes and MacDonald 2002).[2]

Unfortunately, the theoretical results are mixed and provide no clear-cut answer to the question of whether competent managers or reckless managers are more motivated to expand into foreign banking markets. In the banking literature, the prevalent view is that badly run banks have a greater incentive to go international than well run banks, since the former are more likely to 'gamble for resurrection' which is easier abroad than at home. The opposite view rests on the conjecture that expanding into a foreign market is inherently more demanding on a bank's senior management than expanding within the home country. When entering a foreign market, bank managers often have to cope with competitive disadvantages vis-à-vis home country banks due to the natural head start of the latter in terms of language, culture, business relationships and market knowledge. Thus, foreign banks often run the risk of winding up with the 'bad risks' turned down by the better informed domestic banks. It takes superior management skills on the part of the foreign banks to make up for these informational disadvantages in order to do well abroad. According to this line of reasoning, well managed banks are

[1] The NBA has been in force in the European Union and the USA since 2008 and in Japan and Hong Kong since 2007. The NBA consists of three mutually reinforcing pillars. The first pillar targets the risk-consciousness of internationally active banks, while the latter two pillars primarily aim to discipline bank managers and raise their level of competence. A thorough assessment of the NBA is given, for example, in Hall (2001).

[2] Another serious menace to the safety of financial systems is the undercapitalization of international banks.

expected to be more prone to venture into foreign territory than badly run banks.[3]

Empirically, the situation is even more unsettled. The availability of a high-quality dataset covering 747 Austrian universal banks from 1995 to 2002 gives us a unique opportunity to shed some new, empirical light on this core topic. What is more, the Austrian banking sector is particularly well suited for an empirical analysis of the topic, because it was during this period that Austrian universal banks expanded foreign operations by an unprecedented scale. Austrian banks have been among the first to expand into the former communist countries in Central and Eastern Europe (CEE) since the early 1990s. During the first half of the 1990s, the focus of their activities was assisting Austrian entrepreneurs to invest in the countries of East Europe, and arranging and coordinating the privatization process in these countries. In this first stage, only a few large Austrian banks had sizeable stakes in these international operations. In the mid-1990s (i.e., since the onset of our investigation period), Austrian banks of all sizes began to develop their cross-border services for non-institutional and for residential customers, mostly within the strategic approach of Allfinanz. Within the investigation period, the Austrian banking sector increased foreign asset holdings relative to total assets from 21 percent (1995) to 28 percent (2002).

Although the banking data available are quite comprehensive, they do not provide any direct information on the quality of a bank's management. This should not come as a big surprise, since managerial skills and managerial efforts are as such unobservable. Neither bank owners nor supervisory authorities can be sure to have a profound understanding of the professional capacity of a bank's senior management. Thus, among practitioners, it is quite common to use observable performance measures such as profitability or, if the bank is a public company, stock market-related performance indicators to indirectly gauge the managerial skills of a bank's command personnel. However, banking profitability is not always stringently linked to managerial skills, since a bank's performance is influenced by a broad spectrum of factors, among others and not least, by good or bad luck. In addition, there is some scope for window dressing in banking, particularly as regards profit disclosure, due to, at least to a certain degree, adaptable accounting procedures. Even more importantly, many banks are organized as cooperatives and mutual associations, which follow operational goals that go well beyond the scope of profit maximization.

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[3] For a competent and accessible discussion of the inconclusive views on this matter, see Kohn (2004) and Freixas and Rochet (1998). Tirole (2006) shifts this discussion to the broader context of corporate finance theory.

However, whatever the specific goals, according to their charters, all banks have to be run by their managers as efficiently as possible.

Hence, in the academic banking literature the measure of technical efficiency introduced by Farrell (1957) has become quite common for assessing managerial skills indirectly (see Berger and Humphrey 1997 for an introduction to modern efficiency measurement in banking). Since technical efficiency (or X-efficiency) is aimed to reflect the capability of a firm to obtain maximal output (or minimal input) from a given set of inputs (or outputs), this notion appears to be quite appropriate as an indicator (or a proxy) for measuring management performance. Moreover, the goal of maintaining production processes organized as efficiently as possible is undeniably one of the prime tasks of senior managers.[4]

In accordance with the respective literature, we have also applied the concept of technical efficiency to indirectly measure managerial excellence and have used the benchmark view of "frontier analysis". To be specific, Data Envelopment Analysis (DEA) techniques were applied to compute the technical efficiency of the banks being investigated in relation to an estimated frontier surface. The technique employed is designed to uncover the closest-fitting frontier which envelops all given data points. To be efficient, a bank has to lie on this envelopment surface. For each of the banks under review, the management's capability of minimizing input usage in the production of output (or vice versa) was determined relative to this efficient (best practice) frontier.[5]

The rest of the paper is organized as follows: Section II presents the dataset and the variables used to test the impact of management efficiency on the international orientation of a bank. Section III describes the econometric approach applied and the empirical findings. Section IV contains a summary.

II. Data and variables

We used a balanced panel of annual report data of 747 Austrian universal banks. The bank data were extracted from non-consolidated income statement and balance sheet data for the period 1995 to 2002. The dataset is unique in the sense that it provides

[4] From an analytical point of view, allocative efficiency would be more appropriate for measuring managerial performance. The latter reflects the ability of a firm to use the inputs in optimal proportion subject to given input costs and output prices, respectively. Unfortunately, information on input costs and output prices are in general not available at the firm level. This particularly applies to banking.

[5] The details of the DEA models used in this paper are presented and motivated in the following section.

almost full coverage of the Austrian banking sector at the individual bank level.[6]

The dataset used for the analysis has been drawn from the electronic database of the Austrian Central Bank (OeNB) and, as indicated above, covers more than 85 percent of the Austrian universal banks doing business in the period under review (the variables used in the econometric analysis are drawn, without exception, from this database or are computed on the basis of data generated from this database, such as the bank-level efficiency scores). The data have been deflated by the GDP deflator, 1998=100, and adjusted for inconsistent data-related outliers, respectively.[7] Since the panel is balanced, the data are supposed to be free from distortions due to bank mergers occurring during the period of investigation.[8]

As to the variables used in the investigation, the variable to be explained is the degree of international orientation of an individual bank. The left-hand-side variable in our regression approach is defined by the ratio "foreign assets plus foreign liabilities divided by total assets", and is denoted *I_BANK*. Depicting international orientation in banking based on this ratio has been predetermined by the fact that foreign assets and foreign liabilities of the banks investigated have only been made available to us in the portmanteau form.[9]

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[6] Unfortunately, we have not been able to expand data coverage beyond the Austrian banking sector. A comparable high-quality database, covering the entire banking sector at the company level for this particular period of time for other OECD countries, has either not been available or access has not been permitted. Those bank databases we got access to such as the BankScope database of the London-based International Bank Credit Analysis Ltd (IBCA) provide, at the company level, only partial coverage of the banking sector across countries. Furthermore, and most importantly, no data on individual banks' foreign assets and foreign liabilities (except for the banks domiciled in Austria) are reported in BankScope. In addition, BankScope's coverage of individual banks' risk-based capital ratio is, at best, very fragmentary. Among others, this indicator is used as an explanatory variable in the econometric analysis.

[7] Since we were granted access to the balance sheet and income statement of all Austrian banks, we subjected the reported data at the company level to simple accounting-based consistency checks. If a bank failed this test (i.e., due to incomplete or inconsistent data reporting), it was excluded from the analysis. In order to check for remaining outliers, we consistently applied estimation techniques which are sensitive to outliers.

[8] Due to their involvement in in-market mergers during 1995 and 2002, a few of the large nation-wide operating Austrian banks have been excluded from our bank sample. Admittedly, these few uncovered banks are among those Austrian banks that have gained a strong foothold abroad, particularly in the neighboring CEE countries since the early 1990s. However, supplementary calculations indicate that the results obtained from the balanced dataset are also representative for most of the banks not covered.

[9] Foreign assets and foreign liabilities at the bank level have been provided by the OeNB only as a sum of all foreign banking activities on the asset side (lending and investing) and on the liability side (borrowing), respectively.

To control for bank size, which is frequently associated with a bank's inclination to become international, we used the variable *SIZE*, as measured by the *i* th bank's total assets (this variable enters into the respective econometric models in log transformation).

Another control variable, denoted *CAP*, is designed to capture the influence of equity capital on a bank's desire to engage in international activities. The consideration of capital as measured by the risk-based capital ratio according to the Basel Capital Accords (here Basel I), is motivated by the presumption that well-capitalized banks are fitter and, thus, more likely to reach out to foreign markets than undercapitalized banks, because the former are more capable of coping with the assumed higher risks in the foreign markets than the latter. By the same token, bank supervisors are expected to be more tolerant of foreign banking activities when the bank is well-capitalized. However, referring to the line of reasoning based on Jensen and Meckling (1976), the management of undercapitalized banks may also have an articulate tendency to go international with the aim to take gambles in order to increase their chances of raising their capital base by earning higher profits. This implies a negative relationship between the size of a bank's capital and the degree of its international orientation.

The quality of a bank's personnel is also frequently considered a key factor behind the trend of internationalization in banking. In the following, we proxy the skills level of a bank's employees, denoted *SKILL*, by the ratio of staff costs per employee assuming that staff costs per head and professional skills level are positively related.

As regards the core explanatory variables for evaluating the impact of efficiency on the internationalization tendency in the banking sector, we considered three measures of efficiency: X-efficiency (*XEFF*), scale efficiency (*SEFF*), and scale elasticity (*SCALE*), all of which are computed by methods of Data Envelopment Analysis (DEA).

The notion of X-inefficiency measures the degree of waste of inputs given the level of outputs (see among others, Cooper, Seiford and Tone 2000). Thus, X-efficiency is a measure of productive efficiency and as such an appropriate yardstick of management quality. Assuming that inputs are more likely to be under control of the bank management, *XEFF* is computed by an input-oriented slacks-based DEA model (SBM) based on a "variable return-to-scale" (*VRS*) technology according to Tone (2001). This DEA model is superior to the standard DEA approach due to the way it treats input excesses and output shortfalls by directly incorporating the information contained in the slacks into the objective function.

Within the frame of DEA, scale efficiency of a firm is obtained by conducting both a DEA based on a "constant return-to-scale" (*CRS*) technology yielding global (technical) efficiency scores and a DEA based on *VRS* technology yielding local (technical) efficiency scores (for a detailed discussion, see Cooper, Seiford and Tone 2000). A difference in the *CRS* and the *VRS* scores for a specific firm indicates that this firm has scale inefficiency. Thus, we compute *SEFF* by the ratio of *CRS* to *VRS* scores based on input-oriented SBM.[10]

Defining scale elasticity as the ratio of marginal product to average product, Tone and Sahoo (2004) propose a model that evaluates scale elasticity of production in multiple input/output environments and is capable of quantifying the degree of economies (diseconomies) of scale for each bank under review. Since, on many occasions, the model of Tone and Sahoo (2004) generates multiple solutions, we use the average of the lower and upper scale efficiency score to compute *SCALE*.[11]

As regards the production model used to compute the three efficiency measures as outlined, we prefer a model that supports the notion of managerial efficiency in the form of a measure of efficient usage of production inputs. The latter is suggested by the line of reasoning set forth in the introductory section. Thus, a model specification aimed at capturing the provision of transaction and document-processing services in banking comes the closest to this precept when based on "labor costs" (personnel expenses) and "capital costs" (expenses for equipment) as inputs, and "loans", "deposits" and "other earning assets" as outputs, respectively.[12]

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[10] Note that scale efficiency is not identical to scale elasticity (or economies of scale). Scale efficiency, if input-oriented, measures the change in input required to produce a given output at a minimum efficient scale, whereas scale elasticity is a measure related to the relative change in costs associated with an incremental change from a particular output level. The latter concept is usually associated with the measurement of economies of scale.

[11] For the computation of the efficiency measures considered, we have used the software package DEA-Solver-PRO 4.0.

[12] In addition, we employed two particularly profit-oriented models. Following Casu and Molyneux (2003), we specified "total loans" and "non-interest earnings" as output variables and "total costs" covering interest expenses, non-interest expenses, and employee expenses, respectively, and "total deposits" as input variables. According to the respective literature, this intermediation approach is considered to be the best-suited one for assessing frontier efficiency with the aim of gauging banking profitability, since it stresses the importance of minimizing total costs, not just production costs, in order to maximize profits. The second model follows suggestions made in Berger and Mester (2003) with the cost components "employee expenses" and "other non-interest expenses" as inputs, and the revenue components "net interest revenue", "net commission revenue", and "other income" as outputs. Though the regression findings based on efficiency measures gained from both models are supportive of the key results of the empirical analysis in this paper, the estimates concerning the role of managerial efficiency are smaller.

From 1995 to 2002, the average of *XEFF* and *SEFF* was about 0.52 and 0.97, respectively. The *SCALE* ranges from 0.35 to 1.53, with the median being close to unity. Descriptive statistics of these and the remaining variables used in the regression analysis are summarized in the Appendix.

Although the bank-level data have been pre-adjusted for outliers caused by measurement errors, we checked the sensitivity of the efficiency measures for the remaining noise by applying the method proposed by Resti (1997). The procedure suggested by Resti (1997) carries out two DEA, the first DEA uses all the observations available and the second DEA uses only the data points of those banks that have scored an efficiency level less than unity in the first DEA. A high correlation between these two efficiency score vectors indicates that the results are robust. We conducted this sensitivity test for each year under investigation and the findings clearly show that the remaining noise in the data is of secondary order and, thus, is not likely to distort our estimations in a statistical sense.

III. Econometric methodology and results

The model used to check if managerial quality as measured by X-efficiency has an impact on the degree of international orientation in banking has the following structure:

$$I\_BANK_{i,t} = b_0 + b_1 XEFF_{i,t} + b_2 SEFF_{i,t} + b_3 SCALE_{i,t} + \sum_{j=4}^{6} b_j Z_{ij,t} + \nu_t + \eta_i + \varepsilon_{i,t} \qquad (1)$$

where Z_{ij} stands for the control variables *SIZE*, *CAP* and *SKILL*, respectively. The ν_t and η_i are unobserved time-specific and bank-specific effects, with time periods $t = 1995,\ldots,2002$, and banks $i = 1,2,\ldots,747$, and $\varepsilon_{i,t}$ is the classical disturbance term with $E[\varepsilon_{it}] = 0$ and $Var[\varepsilon_{it}] = \sigma_\varepsilon^2$.

Methodologically, we used two panel-econometric techniques: (a) the standard two-way error component model (that is, the static fixed effects and static random effects estimator), and (b) the dynamic panel General Method of Moments (GMM) two-step system estimator introduced by Arellano and Bond (1991), Arellano and Bover (1995), and Blundell and Bond (1998), respectively. Since the estimators applied are supposed to be sensitive to potential outliers, we used the robust variance estimator of White (1980) in the static estimation approach, and the robust variance estimator of Windmeijer (2005) in the dynamic system estimation approach.

Although the static, fixed effects model captures a specific endogeneity problem caused by the presence of time-constant omitted variables, the GMM-based estimator

can be used for controlling for a rather general form of joint endogeneity, which in our model cannot be ruled out for sure beforehand (i.e., the latter involves the variables *I_BANK*, *XEFF*, *CAP* and *SKILL*). To be specific, by applying the GMM system estimator we control for potential consistency losses due to simultaneity (that is, explanatory variables are simultaneously determined with the dependent variable) and/or two-way causality between the explanatory variables and the dependent variable, respectively. In addition, this estimator has the advantage of having been designed for datasets like ours, that is, datasets with many panels and few periods.

As specification tests for the GMM system estimator, we have used a Sargan test of over-identifying restrictions and a test of lack of residual serial correlation. The first test examines the validity of the moment conditions assumed and the second, the fitness of the lagged explanatory variables as appropriate instruments.[13] For example, a persistent serial correlation of the residuals indicates that unobserved, firm-specific effects are still present.

Since the endogenous variable *I_BANK* is bounded by zero and two per construction, we also applied a Tobit estimator adapted to a panel framework with a random effects specification. This model is fitted by maximum likelihood.

Table 1 summarizes the estimation and test results gained by these specific econometric methods.

To begin with, the data obviously do not appear to support the fixed effects model. This is clearly indicated by the standard Hausman test.[14] The respective test statistic suggests that, in the given context, fixed effects estimators are not likely to be superior to random effects estimators. This implies that the bank-specific effects η_i should rather be viewed as individual specific disturbances where $E[\eta_i] = 0$, $Var[\eta_i] = \sigma_\eta^2$, and $Cov[\varepsilon_{it}\eta_i] = 0$. Importantly, this reading is strongly supported by the estimates gained by the GMM system estimator. The respective system estimation results clearly indicate that potential consistency losses due to simultaneity, two-way causality, omitted variables and unobserved firm-specific effects are (most likely) of secondary order in the given context. That is, the GMM estimates, as reported in Table 1, basically do not appear to interfere with the results already established by the two random effects estimators (with the exception of

[13] The null hypothesis of the Sargan test is that the instruments used are not correlated with the residuals. The null hypothesis of the serial correlation test is that the errors in the first-difference regression exhibit no first-order and second-order serial correlation.

[14] The null hypothesis of the Hausman test is that there is no systematic difference between fixed effect estimates and random effect estimates.

Table 1. Robust estimation results

Dependent variable: I_Bank	Static fixed effects model[1]	Static random effects model[1]	Static random effects Tobit model[2]	Dynamic panel regression[3] GMM system in levels and differences
XEFF	0.0923***	0.0959***	0.0956***	0.0709***
	(0.025)	(0.024)	(0.0353)	(0.0171)
SEFF	-0.0894	-0.0904	-0.0902	-0.0285
	(0.382)	(0.376)	(0.4533)	(0.0346)
SCALE	0.0105	0.0087	0.0089	-0.0038
	(0.014)	(0.014)	(0.0214)	(0.0153)
SIZE	0.0641***	0.0567***	0.05712***	0.0750***
	(0.013)	(0.008)	(0.0094)	(0.0031)
CAP	0.0012**	0.0013***	0.0013***	0.0013*
	(0.001)	(0.001)	(0.0001)	(0.000)
SKILL	0.0004	0.0009	0.0008	0.0007***
	(0.002)	(0.002)	(0.0043)	(0.0003)
CONSTANT	-0.1555**	-0.1280**	-0.1293**	-0.0292
	(0.069)	(0.054)	(0.0660)	(0.062)
Number of observations	5,976	5,976	5,976	5,229
Number of banks	747	747	747	747
Number of periods	8	8	8	7
Log-likelihood			8,461.02	
Specification tests:				
p-values				
(a) Hausman test		0.9927		
(b) Sargan test				0.5032
(c) Serial correlation				
AR(1)				0.0219
AR(2)				0.6700

Notes: *** significant at 1 percent; ** significant at 5 percent; * significant at 10 percent; robust standard errors in parentheses.
[1] Robust Huber-White estimator.
[2] Maximum likelihood estimation, bootstrap sampling with 1000 replications.
[3] Arellano-Bover and Blundell-Bond two-step system estimator with one lag of dependent variable included as regressor. The standard errors are robust due to Windmeijer-correction. The instruments for the regression in differences are the lagged levels of the explanatory variables. For the regression in levels, the instruments are the lagged differences of the explanatory variables. These instruments are considered appropriate when the correlation between the explanatory variables and the company-specific effect is constant over time.

the coefficient estimates on *SEFF* and *SCALE*, respectively, which, however, are statistically insignificant in all four regression models). The fact that both the Sargan test and serial correlation test support our base model is viewed as further affirmative evidence.

The most critical result of the analysis is, of course, the firm corroboration by the data of the proposition that managerial quality is positively related to the degree of international orientation in banking. This result is quite robust since the coefficient on *XEFF* is positive and statistically significant in all four robust regression models. Even though the GMM-based estimate of the coefficient on *XEFF* reflects, as compared with the other estimates, a somewhat smaller impact of managerial efficiency on international banking, the difference among the estimates gained by the estimators applied remains of secondary order.[15] Furthermore, the extent of international orientation in banking does not seem to be positively influenced by the degree of scale inefficiency and scale elasticity. That is to say, the existence of economies (or diseconomies) of scale, as measured by *SCALE*, is not related to the magnitude of international orientation in banking. Likewise, the degree of scale inefficiency represented by *SEFF* has no significant influence on the degree of international banking, either. The latter finding is more relevant than the former since scale efficiency reflects the extent of "global" technical inefficiency. Obviously, what matters for the degree of international orientation in banking is not whether a bank operates close to or at its global cost-efficient minimum scale, which is usually not under the control of management, but rather whether a bank operates close to or at its local cost-efficient minimum scale, as represented by *XEFF*, which is under the control of management.

Finally, the sign of the estimated coefficients for the variables 'bank size' (*SIZE*), 'professional qualification of staff' (*SKILL*) and 'risk-based capital' (*CAP*), is reasonable. All three control variables are positively related to the degree of a bank's international orientation, though the statistical significance of these control variables is somewhat weaker than that of managerial efficiency as measured by *XEFF* (this applies mainly to the variable *SKILL*).

The positive effect of risk-based capital on the magnitude of international activities in banking is a very important piece of evidence on its own and adds to the finding on management efficiency. The positive influence of both management efficiency and risk-based capital on international banking is of particular importance

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[15] It is worth noting that replacing *XEFF* by a profit-based variable such as the 'return on assets' or 'return on equity' yields consistently inferior and insignificant results in a statistical sense.

from the viewpoint of banking regulation as advocated by the NBA since this very evidence is strongly in line with the Accord's regulatory principles and rules that exclusively bear on bank capital and managerial efficiency (rather than on profitability), respectively.

IV. Concluding remarks

A dataset covering 747 Austria-based universal banks for the period running from 1995 to 2002 has been used to empirically explore the role of management efficiency in international banking. The dataset given is unique in that it almost completely covers a banking sector at the company level that expanded foreign operations during the period of coverage on an unprecedented scale. The econometric analysis based on advanced panel-econometric regression techniques has yielded findings that strongly corroborate that management efficiency as measured by X-efficiency is an important company-specific factor affecting the degree of a bank's international orientation positively. That is, the higher a bank's level of management quality, the larger its degree of internationalization. In addition, the analysis also provides evidence that risk-based capital and international orientation in banking is positively related. Hence, the findings of this note strongly support the regulatory approach advanced by the New Basel Accord that centers equally on risk-based capital and management efficiency in order to promote prudence and soundness in international banking.

Appendix: data

Table A1. Descriptive statistics

Variable	Unit of measurement	Mean	Median	Standard deviation	Minimum	Maximum
I_BANK	%	0.226	0.186	0.139	0.000	0.637
XEFF		0.515	0.502	0.126	0.049	1.000
SEFF		0.974	0.991	0.049	0.486	1.000
SCALE		1.022	1.013	0.076	0.354	1.526
SIZE	mn €	207.156	63.150	637.532	1.267	8,865.580
CAP	%	13.514	12.387	4.752	8.080	24.652
SKILL	1,000 €	51.251	50.250	8.154	35.000	75.250

Notes: Time period: 1995 to 2002. Number of observations: 5,976.

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