

Borchert, Manfred

**Article**

## Will West European Banks Affect Monetary Control?

Kredit und Kapital

**Provided in Cooperation with:**

Duncker & Humblot, Berlin

*Suggested Citation:* Borchert, Manfred (2002) : Will West European Banks Affect Monetary Control?, Kredit und Kapital, ISSN 0023-4591, Duncker & Humblot, Berlin, Vol. 35, Iss. 1, pp. 54-72, <https://doi.org/10.3790/ccm.35.1.54>

This Version is available at:

<https://hdl.handle.net/10419/293454>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

## Will West European Banks Affect Monetary Control?\*

By Manfred Borchert, Münster

### I. Lending Beyond the Credit Channel

“Accurately defining the role of banks in the transmission of the monetary policy may hold the key of explaining the effects of policy on the economy”<sup>1</sup>. Traditionally the force of monetary policy is entirely related to changes in money supply<sup>2</sup>. But with the existence of information asymmetries the impact of monetary control will be distributed among borrowers by the *credit channel*<sup>3</sup>, which is brought into effect by the *bank lending channel* (which holds true primarily for small banks<sup>4</sup>) as well as by the *balance sheet channel*. The credit channel seems to be very important in Europe; however, due to the nationally differing structure of banking markets, it operates asymmetrical.<sup>5</sup>

There are numerous empirical investigations on the existence of a credit channel. *Kashyap/Stein* (1994), for instance, tested a disaggregated version of the original *Bernanke/Blinder* (1988) model, using time series of balance sheet items of bank groups (small, big) from call reports. Because the statistical significance of their results seemed to be not always overwhelming, they suggested to use data on the individual bank level for regressions.<sup>6</sup> This paper tries to do so to a, admittedly, very limited extent.

Effects of monetary control can be figured out at the liability side of the banks' balance sheets; regularly the quantity of money is defined by

---

\* This contribution was written in August and September 2000, during a research visit to the International Monetary Fund in Washington, D.C. (USA). The author is indebted to very valuable comments by an anonymous referee and to Martin Leschke for his assistance in implementing econometric methods.

<sup>1</sup> *Kishan/Opiela* (2000): 121.

<sup>2</sup> Cf. *Morgan* (1998): 102.

<sup>3</sup> Cf. *Bernanke/Blinder* (1988): 435–39.

<sup>4</sup> Cf. *Fisher* (1999): 187.

<sup>5</sup> Cf. *Danthine/Giavazzi/Vives/von Thadden* (1999): 84.

<sup>6</sup> Cf. *Kashyap/Stein* (1994): 43.

liability items. However banks can finance their loans by asset items, too. For instance they can sell securities out of their portfolio at the stock market. The lending behaviour is stronger influenced by monetary policy for banks with less liquid balance sheets, where liquidity is measured by the ratio of securities to assets.<sup>7</sup>

If banks accompany their credit demanding customers (by consulting them) to the stock market, they earn commission fees which enter up in the banks' income statements, not directly any more in the banks' balance sheets. Financing loans by banks' asset items as well as by consulting banking leaves the quantity of money unchanged and may be noticed by changes in the interest rate level, later-on by changes in the price level. This leads to the question what and to what extent banks actually do when granting loans.

The following *part 2* refers to a few essentials the European banks are confronted with by the introduction of the euro. *Part 3* illustrates some alternative funds of banks for refinancing their loans and possible channels of monetary policy.

The empirical analysis in *part 4* focuses on the activity of the largest 51 European banks based on their individual balance sheets and income statements<sup>8</sup>: (a) a simple regression analysis points to the main items of the banks' strategies when granting loans, which are then tested in a factor analysis (b) of balance sheet items and (c) of income statements. The banks' business strategies differ widely, but it is suggested that competition will force them into the same direction: to enlarge their disintermediation activities and thereby avoiding partially the influence of monetary control. *Part 5* summarizes this result.

## II. Strategies of West European Banks

In the early 1990s, Western European banks began to strengthen their market positions by pursuing expansionist policies. The introduction of the euro enables all the banks in the European Monetary Union (EMU) to create uniform means of payment. This means it is now possible for money created in one member state to be used as a means of payment in another member country. This development is unprecedented!

---

<sup>7</sup> Cf. *Kashyap/Stein* (2000): 407.

<sup>8</sup> Balance sheets as well as income statements of all 51 individual European banks were collected by the author in 2000.

Admittedly, the single European currency does not entail any changes in retail banking in the local banking market, but it does result in changes in wholesale banking since banks within the EMU can now attract more big customers by offering credits on the basis of money they have themselves created. Banking regulations for big credits, however, require a minimum amount of equity capital.

By and large, under the terms of the *Basle Accord* (1988), big credits have to be notified if they exceed 10% of the bank's equity capital. The way this regulation is applied depends on the risk category into which a credit falls.<sup>9</sup> A credit granted to a single bank client may not exceed 25% of the bank's equity capital.<sup>10</sup>

There are considerable differences between the activities of big banks and those of small banks operating at a local level. While small banks operating at local level are mainly interested in cutting their retail banking costs, big banks are chiefly interested in achieving synergetic advantages in wholesale banking, investment banking and consulting banking. This means that big banks are now making inroads into a section of the market which has hitherto been the preserve of international special-purpose banks operating as so-called boutiques.

When credits granted to non-banks are refinanced, what matters is often not so much the need for central bank money<sup>11</sup> as credit controls, especially lending restrictions that establish a link between the size of a loan and a bank's equity base.

Cost cuttings as well as enlarging the banks' spectrum of activities has led to the actual merger movement<sup>12</sup> of European banks. On the one hand, their M&A activities pose a threat to banks by inducing them to accept a higher level of risk; on the other hand they offer certain advantages since increased diversification makes bankruptcy less likely.<sup>13</sup> Especially large banks involved in wholesale banking are trying to extend their function as credit mediators by means of securitisation as well as by enlarging their equity capital.

---

<sup>9</sup> Cf. *Walsh* (1994): 50.

<sup>10</sup> Cf. *Norton* (1994): 214.

<sup>11</sup> Cf. *Borchert* (1999): 54 and especially 59.

<sup>12</sup> Horizontal bank mergers might have an impact on bank performance due to (a) economies of scale, (b) selective redeployment of assets, (c) the transfer of assets to better quality of managers, and (d) via renegotiation of implicit labor contracts. Cf. *Haynes/Thompson* (1999): 828.

<sup>13</sup> Cf. *Mishkin* (1999): 680 and 686.

### III. Theoretical Considerations about the Activity of West European Banks

In order to illustrate the alternative funds for refinancing and to show the possible channels of monetary policies, a compound structure of a bank's balance sheet is presented:

<i>Balance Sheet</i>			
cash	<i>C</i> <sub>1</sub>	deposits by banks	<i>DB</i>
central bank	<i>C</i> <sub>2</sub>	customers accounts:	
loans to banks	<i>LB</i>	- demand deposits	<i>D</i>
loans to customers	<i>CR</i>	- other deposits	<i>od</i>
securities	<i>S</i>	securities in issue	<i>si</i> } <sub>R</sub>

For the sake of simplicity, it will be assumed that bank-to-bank receivables and bank-to-bank liabilities sum up to zero ( $LB = DB$ ), which is not given in reality. If one furthermore assumes  $C = C_1 + C_2$ , the following equation (1) results with

$$(1) \quad C + CR + S = D + R.$$

Cash-holdings of a bank consist of *working balances*, which are used to conduct the daily transactions for customers. *Working balances* are assumed here to depend upon a linear relationship with an experience coefficient  $c$  linked to demand deposits  $D$ , i. e.

$$(2a) \quad C_1 = c \cdot D.$$

Claims at the central bank  $C_2$  regularly consist of minimum reserve requirements and a liquidity reserve, which will be neglected here for the sake of simplicity.

Introducing the minimum reserve ratios  $m_i$  (the index  $i$  relates to the different balance sheet items), leads to

$$(2b) \quad C_2 = m_D \cdot D + m_R \cdot R + m_S \cdot S,$$

while all minimum reserve ratios can be assumed, of course, to be zero. Finally, it follows from equations (2a) and (2b) that

$$(2c) \quad C = C_1 + C_2 = (c + m_D) \cdot D + m_R \cdot R + m_S \cdot S.$$

Yet in equation (1) two additional conditions have to be considered:

**A.** A bank holds its volume of refinancing  $R$  in a certain relation to the creation of credits  $CR$  and therefore to the current accounts  $D$ . Loans are normally taken by non-banks for the purpose of immediate transactions (in form of  $C_1$  or  $D$ ).

**B.** Securities  $S$  are held by banks as liquidity funds and can be transferred into claims at the central bank on request or can be sold on the stock market.<sup>14</sup> This enables banks to expand their credit supply.

The European countries can be split into two groups: those in which banks refinance their credits primarily through the liability account of their balance-sheets (*German-type*), and those in which bank credits are refinanced to a considerable extent by selling securities (*Anglo-Saxon type*) out of a bank's portfolio.<sup>15</sup>

With *liability-side refinancing* of banks (*condition A.*) a shift of part of the current account holdings  $\Delta D_S$  (*idle* – sediments of – demand deposits which on the average will usually not be used, i.e. which are not urgently required by money demand) into other deposits will lead, *ceteris paribus*, to a maximum margin of credit expansion  $\Delta CR$

$$(3) \quad \Delta CR = \frac{(m_D + c - m_R)}{(m_D + c)} \Delta D_S.$$

That is, even if the minimum reserve ratios are identical – since January 1<sup>st</sup>, 1999 within the member countries of the *EMU* uniform minimum reserve ratios  $m_D = m_R = 2\%$  have been effective –, a shifting of deposits would be worthwhile for a bank, since *working balances* only need to be kept for current accounts. Therefore, it is the cash at banks which is now important for the efficacy of monetary policy.

With *asset-side refinancing* of banks (*condition B.*) the banks on the one hand could sell eligible assets of  $\Delta S$  to the central bank and receive the monetary base  $\Delta C_2$ . Subsequently, the bank will use the monetary base in order to create additional credits  $\Delta CR$  in accordance with the current accounts  $\Delta D$ . In this case the maximum margin of credit expansion is given with

$$(4) \quad \Delta CR = \frac{1}{(m_D + c)} \Delta S.$$

<sup>14</sup> "If a bank's lending is constrained ... it may do all its marginal adjustments by buying and selling securities." *Kashyap/Stein* (1993): 25.

<sup>15</sup> Cf. *Black* (1996): 11.

On the other hand securities *other* than those eligible for rediscount can be sold in the market (balance sheet contraction). This enables the banks to expand their credit supply and current accounts to the same extent, provided that  $m_S = 0$ .

The *European Central Bank* pays interest on minimum reserve requirements which might be equally high than the earnings on securities held by the banks. Even in this case it is more profitable for banks to rely on securities because of the banks' interest payments due for their liability items  $R$ .

In case of  $m_S > 0$  (not valid today!), selling securities at the market will reduce minimum reserve requirements on securities as well as on demand deposits that had originally been used to buy the now sold securities. In the following any creation of credits will freeze monetary base on demand deposits only, so that the volume of newly created credits exceeds the securities just sold.

In this regard, in offering higher interest rates, (a) banks might persuade their customers to shift their deposits to securities with fewer (or no) reserve requirements. Besides, (b) banks might conduct security transactions on their own account. Furthermore, (c) banks can accompany their credit demanding customers to the stock market by consulting banking. The factual choice of any operation is extremely important for the efficiency of monetary policies, because only (a) affects the quantity of money (with diverging paths for  $M1$  and  $M3$ ).

#### IV. Empirical Analysis

The empirical analysis is focussed only on the large European banks. All results shown here rest upon big banks and neglect activities of small banks which are assumed to focus mainly on deposit-shiftings of their customers and on cost cuttings.

In a cross-section analysis the data of the largest 51 European banks – which are labeled by the numbers attached to their names listed in the annex – were normalised by the corresponding banks' total assets for the year 1999. No distinction was made between banks in countries belonging to the *ins* of the EMU, the *pre-ins* (Great Britain, Denmark, Sweden) or the *outs* (Switzerland).

### 1. Regression Analysis

At first, the main factors for refinancing loans  $CR$  will be tested in a regression analysis

$$(5) \quad CR = f(C, D, od, si, S, e),$$

with  $e$  = equity capital, and  $\varepsilon$  = residual; the other variables are defined in the balance sheet on page 57. Missing values are supplemented by the mean values of the sample. A cross section analysis leads to the results shown in equation (6), and table 1:

$$(6) \quad \hat{CR} = 51,72 + 4,36 \cdot C - 0,94 \cdot S + 0,18 \cdot D - 0,09 \cdot od + 0,28 \cdot si + 1,19 \cdot e + \varepsilon,$$

(6,71)    (2,42)    (-7,15)    (1,24)\*\*    (-0,60)\*\*    (2,19)\*    (1,27)\*\*

*Table 1*  
**Resume of the Model**

R-square	adjusted R-square	standard deviation	Durbin-Watson-statistics
0,66	0,61	8,06	1,99

<sup>a</sup> independent variables: (constant),  $e/a$  = equity capital/assets,  $si/a$  = securities in issue/assets,  $C/a$  = monetary base at banks/assets,  $S/a$  = securities/assets,  $D/a$  = deposits/assets,  $od/a$  = other deposits/assets

<sup>b</sup> dependent variable:  $CR/a$  = loans/assets

<sup>c</sup> \*\* means not statistically significant on a 10 % level

<sup>d</sup> \* means not statistically significant on a 5 % level, but on a 10 % level number of observations: 51

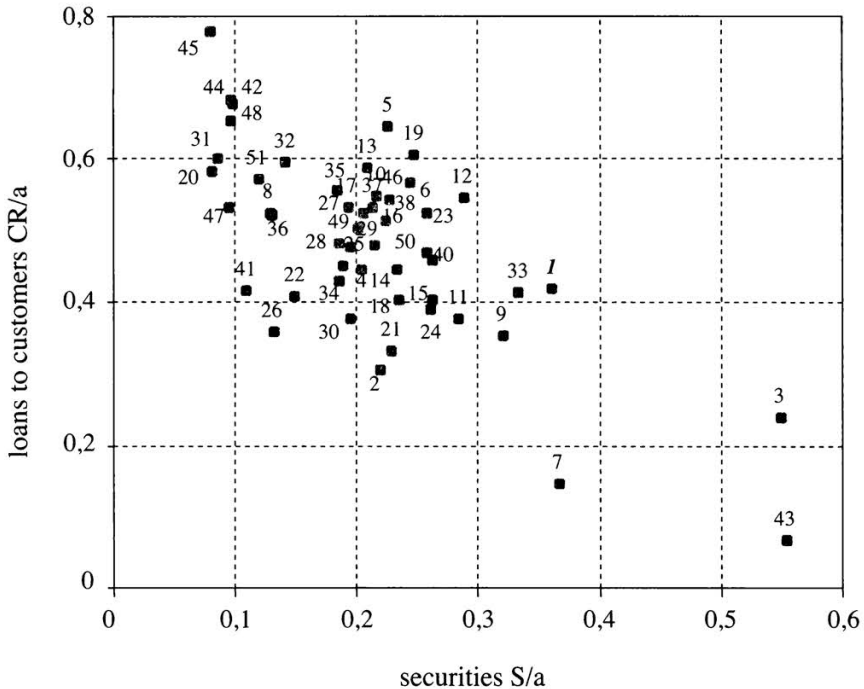
The t-statistics (in paranthese) indicate that the variables  $D$ ,  $od$ , and  $e$  are not statistically significant on a 10 % level;  $si$  is statistically significant on a 10 % level, all others are statistically significant on a 5 % level.

The negative sign attached to the variable “securities  $S$ ” means that selling securities out of the portfolio leads to additional loans granted by banks. The negative sign attached to the variable “other deposits  $od$ ” points to the reverse relationship between demand deposits  $D$  and the refinancing component of crediting  $od$ .

The dispersion of banks regarding variables not under monetary control are presented in the following two scatter charts.

The graph exhibits a negative relationship between loans and securities, the correlation coefficient (according to *Pearson*) of which is





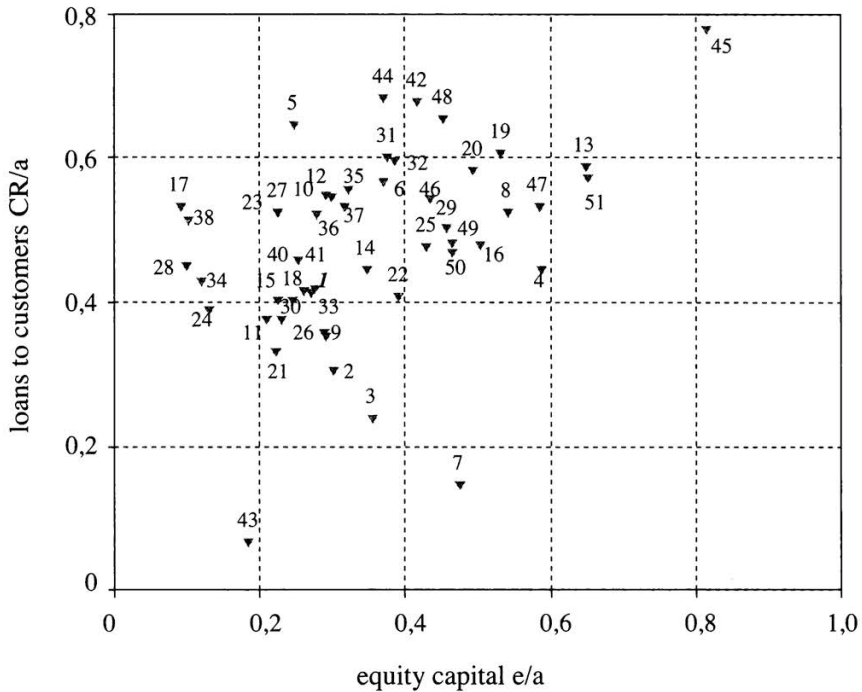
Source: The author's calculations on the basis of the year-end reports of 51 European banks.

Figure 1a: Dispersion of Banks Regarding Loans CR and Their Refinancing Source Securities S

$r = -0,711$ . The more securities a bank holds in its portfolio, the more it can potentially grant credits to customers. This might be true for banks like *UBS* (3), *Abbey National* (43), *Credit Suisse* (7) followed by *Deutsche Bank* (1) and the Belgian *KBC-Bank* (33).

Banks exhibiting a larger supply of loans as well as asset items above average (securities) are especially *Rabobank* (19), *ABM AMRO* (6), *Hypo-Vereinsbank* (5), *ING Bank* (13) and *Commerzbank* (12); below average are *KfW* (26), the German *Landesbanken NordLB* (30) and *LB Baden-Württemberg* (21) as well as *BNP Paribas* (2) and *KfW* (26).

With increasing capital European banks exhibit additional loans to customers, the correlation coefficient (according to *Pearson*) of which is  $r = 0,402$ . Banks with higher equity capital ratios are *Bank of Scotland* (45), *ING-Bank* (13), *Rabobank* (19) and *La Caixa Group* (51). Banks with fewer equity capital is, for instance, *Den Danske Bank Group* (43).



Source: The author's calculations on the basis of the year-end reports of 51 European banks.

*Figure 1b: Dispersion of Banks Regarding Loans CR and Their Limiting Source Equity Capital e*

## 2. Factor Analysis of Balance Sheet Items

Factor analysis is a term for statistical techniques concerned with the reduction of a set of observable variables in terms of a small(er) number of latent factors. The underlying assumption of factor analysis is that there exists a number of unobserved variables (so-called factors) that account for the correlations among observed variables. If so, then each observed variable ( $y$ ) can be expressed as a weighted composite of a set of latent factors ( $f$ ) such that

$$y_1 = a_{11} f_{11} + a_{12} f_{12} + \dots + a_{1n} f_{1n} + e_1$$

$$y_2 = a_{21} f_{21} + a_{22} f_{22} + \dots + a_{2n} f_{2n} + e_2$$

...

$$y_m = a_{m1} f_{m1} + a_{m2} f_{m2} + \dots + a_{mn} f_{mn} + e_m.$$

Given the assumption that the residuals ( $e$ ) are uncorrelated across the observed variables, the correlations among the observed variables are accounted for by the factors ( $f$ ). The primary purpose of factor analysis is data reduction. Thus, a precondition is, of course,  $n < m$ .

In order to get significant results it is reasonable to do the factor analysis by carrying out the following steps:

(1) Selecting a factor model: The most commonly employed factor analytic techniques for my aim is the principal component analysis. This kind of technique is searching for common notions among the range of variables. It is not looking for causes. Therefore, the communality estimate for a variable (the estimate of the proportion of the variance of the variable that is both error free and shared with other variables in the matrix) is supposed to be one.

(2) Determining the number of factors: The decision is ultimately subjective. There is one important requirement from the economic point of view. One must be able to interpret the factors. If a theory suggests a certain number of factors and one wants to confirm that hypothesis, then a factor analysis with the prespecified number of factors should be run. Nevertheless, the factors should have an eigenvalue greater than one (*Kaiser-Guttman* rule).

(3) The rotation of factors: The idea of simple structure has provided the most common basis for rotation. The goal is to rotate the factors simultaneously in order to have as many zero loadings on each factor as possible. I will do the simplest case of rotation, that is an orthogonal rotation in which the angle between the reference axes of factors are maintained at 90 degrees (Varimax rotation), and I will show the factor loadings of the rotated area.

(4) Last the factor matrix will be shown. Here we get in impression how certain banks behave.

A factor analysis was carried out as a *principle component analysis* in which the key figures of the big western European banks were reduced to certain factors. This kind of technique is searching for common notions among the range of variables. It is not looking for causes. Therefore, the communality estimate for a variable (the estimate of the proportion of the variance of the variable that is both error free and shared with other variables in the matrix) is supposed to be one. The scree-plot in figure 2 gives us an idea that three factors should be extracted.

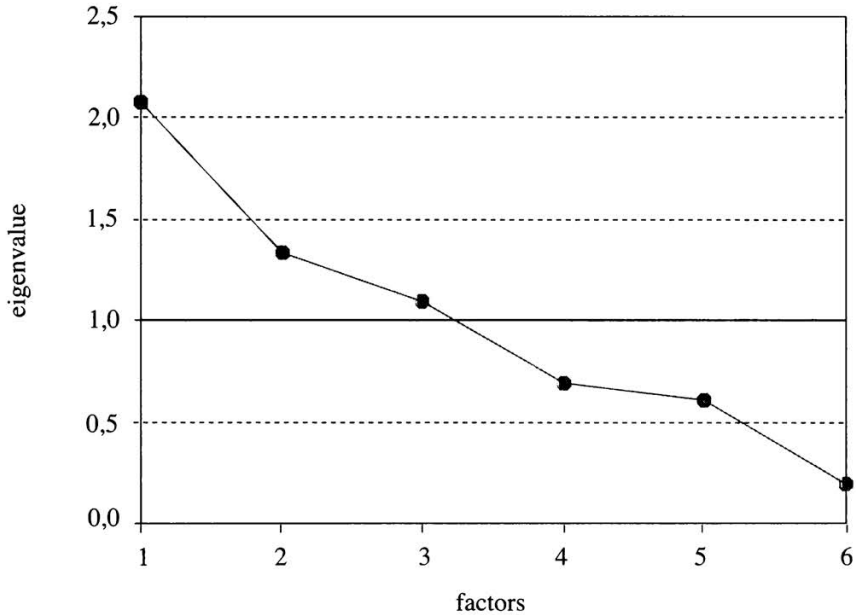


Figure 2: Screeplot of Balance Sheet Items

Due to the *Kaiser-Guttman* rule the factors should have an eigenvalue above one. That holds for factor 1, 2 and 3. The correlation between these factors and the original variables gives us the factor loadings represented in the Varimax rotated factor matrix in table 2.

The absolute values of factor loadings assign the various variables to factor 1, 2 and 3, which, of course, still have to be interpreted in economic terms. The factor values in figure 3 show the relationship between the two factors and the objects (banks). The coordinate axes represent mean values of the factors obtained for the underlying survey population.

*Factor 1* was interpreted as *assets* with demand deposits *D* as a reflex of crediting, while *factor 2* was interpreted as *liabilities*; these are the sources of refinancing that the banks use when they grant credits to non-banks. *Factor 3* shows *institutional components*. In figure 3 factor 1 and factor 2 show the projection of these factors out of a three-dimensional graph.

The crossing of the two zero-axes indicate the average of all listed banks. The banks in the upper segment of figure 3 display a well above

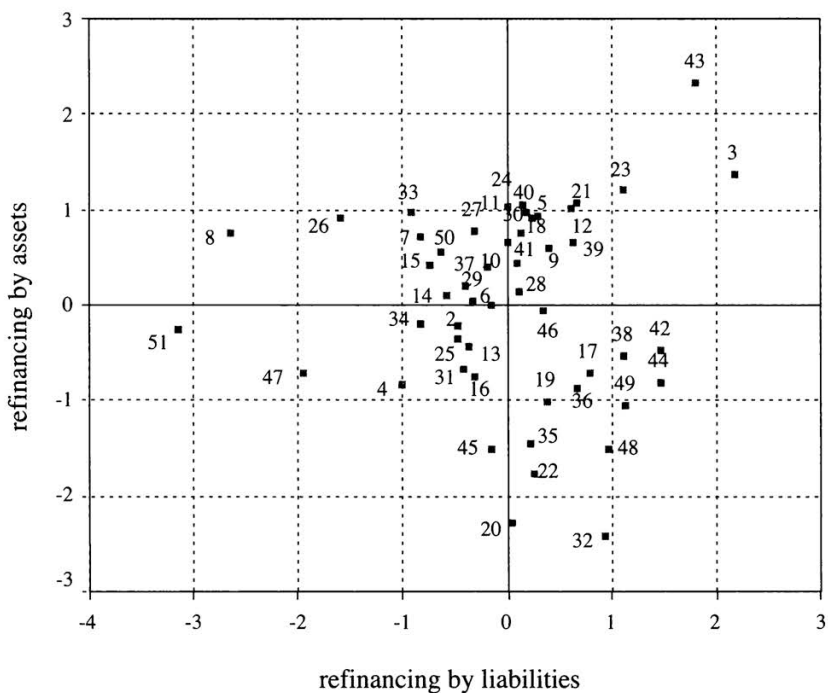
Table 2  
Rotated Factor Matrix<sup>a)</sup>

balance sheet items		factors		
		1	2	3
demand deposits	<i>D</i>	-0,889	0,239	0,071
securities	<i>S</i>	0,666	0,317	-0,010
securities in issue	<i>si</i>	0,459	0,689	0,020
other deposits	<i>od</i>	0,164	-0,939	0,104
monetary base at banks	<i>C</i>	0,077	0,054	0,915
share capital	<i>e</i>	-0,429	-0,336	0,604

Extraction method: analysis of main components

Rotation method: Varimax with Kaiser-normalisation

<sup>a)</sup> the rotation is converging after 4 iterations



Source: The author's calculations on the basis of the year-end reports of 51 European banks.

Figure 3: The Orientation of Western European Banks, 1999

average tendency to resort to refinancing by assets whenever they grant credits,<sup>16</sup> for instance: *UBS* (3) and *Abbey National* (43). In principle, the banks in this segment are refinancing their loans already to a considerable amount by items not under monetary control.

The clusters in the lower segments of figure 3 present certain points of resemblance with regard to their refinancing by liabilities. This, of course, does not mean that they neglect to refinance loans by assets at all; they just do it to a lesser extent than average.

But competition between the large European banks on a regional or EMU-wide level will force them to adapt to the strategies of the other banks.

### 3. Factor Analysis of Income Statements

In another factor analysis (principle component analysis) the number of main items of the income statements of the West European banks were reduced to 2 factors: *factor 1* was interpreted as interest income and *factor 2* as commission income; these are the components of the banks' credit terms, i. e. interest payments as well as yields in the course of refinancing, and proceeds in the course of consulting and companion to the stock market, i. e. during the process of securitisation.

The scree plot in figure 4 shows that the decision to extract two factors meets the *Kaiser-Guttman* rule, the two factors have an eigenvalue greater than one.

The results of this factor analysis are shown in figure 5. Although the interest business is the main source of the banks' income in West Europe until now, an increasing number of large banks have already specialized in a marked degree in investment and consulting banking, and in this respect they are in effect what are known as boutiques.

Accompanying investors to the stock market is an essential part of banking business in Great Britain and Italy. Competition will force the other banks into the same direction.

Some banks are intensifying their consulting business vis-a-vis their lending activities, as can be seen, for instance, for *Banca Nazionale del Lavoro* (48): The bank's position for refinancing loans via assets as well

---

<sup>16</sup> The future role of the banks will depend on the nature of the assets involved as well as on the interaction between banks (short-term assets) and markets (long-term assets); cf. *von Thadden* (1999): 1005.

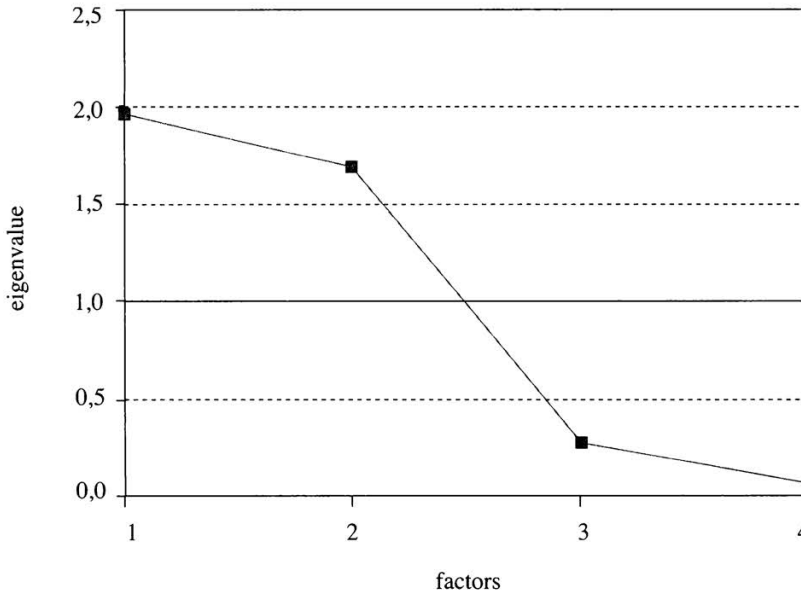


Figure 4: Screeplot of Items of Income Statements

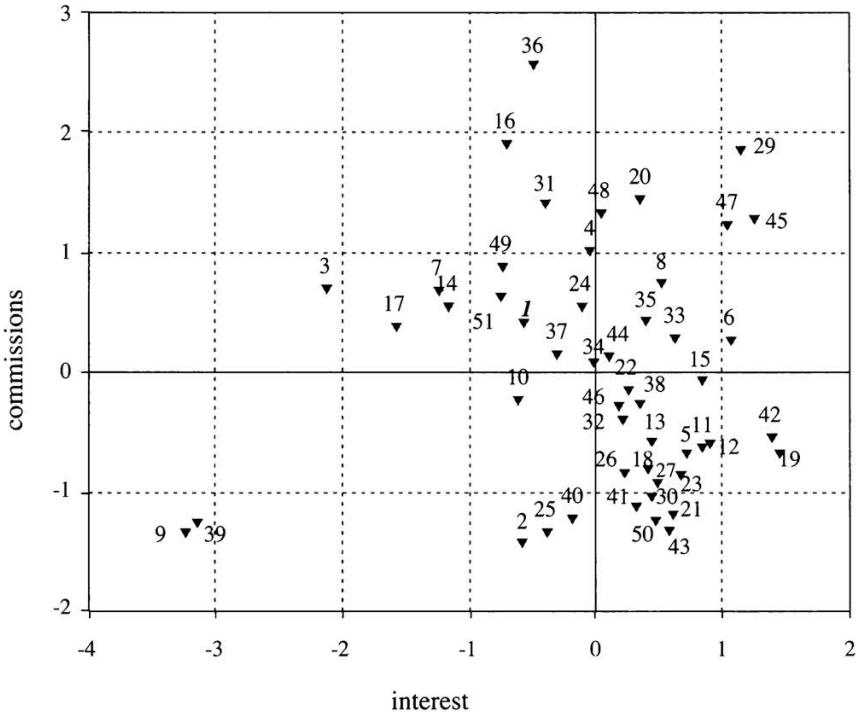
as via liabilities (fig. 2) is below average, whereas its business direction “consulting” (fig. 5) is far above average. The same holds true, for instance, for *Lloyds TBS* (20), *UniCredito Italiano* (31), *HSBC* (4), *Bank of Scotland* (45) and *Standard Chartered* (47).

Only a few banks are far behind average regarding their business direction “consulting” and granting loans: *Société Générale* (9) and *Crédit Mutuel* (39). The originally planned merger between *Société Générale* and *BNP Paribas* (2) would have had undoubtedly created Europe’s largest bank, however without improving its perspective for future performance in consulting banking.

It is conspicuous that all German head-institutions of savings banks – Landesbanken – are in the lower (mainly right) section of figure 5, meaning that they refrain from consulting banking until now compared with their competitors.

## V. Concluding Remarks

When refinancing their credit supply the West European banks are specializing increasingly for disintermediation. This might lead to an even



Source: The author's calculations on the basis of the year-end reports of 51 European banks.

Figure 5: Business Direction According to Income Statements

intensified disintermediation process.<sup>17</sup> The tendency to replace bank loans by traded debt in the financing of large firms will reduce the lending of large banks to a considerable amount.<sup>18</sup> Larger banks operate in relatively more competitive, geographically enlarged markets (e.g. wholesale markets) than smaller banks which might be local monopolists.<sup>19</sup>

This means that even if assets of the banks' balance sheets were committed to minimum reserve requirements, monetary control by the central bank would be limited once again. Aiming to control the quantity of money will become more and more inefficient. It should be noted, however, that only the data of big banks were calculated here.

<sup>17</sup> Cf. *Groeneveld* (1999): 388.

<sup>18</sup> Cf. *Danthine/Giavazzi/von Thadden* (2000): 28.

<sup>19</sup> Cf. *Bikker/Groeneveld* (2000): 81.



## References

- Bernanke, B. S./Blinder, A. S.* (1988): Credit, money, and aggregate demand, *American Economic Review, Papers and Proceedings*, Vol. 78 (May), p. 435–39. – *Bikker, J. A./Groeneveld, J. M.* (2000): Competition and concentration in the EU banking industry, *Kredit und Kapital*, Vol. 33, No. 1, p. 62–98. – *Black, St.* (1996): Which way ahead for the European financial markets: The German or the Anglo-Saxon model?, *American Institute for Contemporary German Studies, Washington, D.C.*, p. 1–27. – *Borchert, M.* (1999): The EURO and the large banks' behaviour within the EMU – entrepreneurial strategies and monetary policy –, *Banca Nazionale del Lavoro Quarterly Review*, Vol. LII, No. 208, p. 39–68. – *Danthine, J.-P./Giavazzi, F./Vives, X./von Thadden, E.-L.* (1999): “The future of European banking”, *Centre for Economic Policy Research (Monitoring European Integration 9)*, London, p. 1–118. – *Danthine, J.-P./Giavazzi, F./von Thadden, E.-L.* (2000): European financial markets after EMU: A first assessment, *Centre for Economic Policy Research, Discussion Paper No. 2413 (March)*, p. 1–53. – *Fisher, J. D. M.* (1999): Credit market imperfections and heterogeneous response of firms to monetary shocks, *Journal of Money, Credit and Banking*, Vol. 31, No. 2 (May), p. 187–211. – *Groeneveld, J. M.* (1999): The forces behind the consolidation trend in the European banking industry, *Kredit und Kapital*, Vol. 32, No. 3, p. 369–392. – *Haynes, M./Thompson, St.* (1999): The productivity effects of bank mergers: Evidence the UK building societies, *Journal of Banking & Finance*, Vol. 23, p. 825–846. – *Kashyap, A. K./Stein, J. C.* (1993): Monetary policy and bank lending, *NBER Working Paper No. 4317*, p. 1–59. – *Kashyap, A. K./Stein, J. C.* (1994): The impact of monetary policy on bank balance sheets, *NBER Working Paper No. 4821*, p. 1–61. – *Kashyap, A. K./Stein, J. C.* (2000): What do a million observations on banks say about the transmission of monetary policy, *American Economic Review*, Vol. 90 (June), p. 407–428. – *Kishan, R. P./Opiela, T. P.* (2000): Bank size, bank capital, and the bank lending channel, *Journal of Money, Credit, and Banking*, Vol. 32, No. 1 (February), p. 121–140. – *Mishkin, F.* (1999): “Financial consolidation: Dangers and opportunities”, *Journal of Banking & Finance*, Vol. 23, No. 2–4, p. 675–691. – *Morgan, D. P.* (1998): The credit effects of monetary policy: Evidence using loan commitments, *Journal of Money, Credit, and Banking*, Vol. 30, No. 1 (February), p. 102–116. – *Norton, J. J.* (1994): “The European Community banking law paradigm: A paradox in banking regulation and supervision – Reflections on the E. C. Second Banking Directive”, in: *Norton, J. J./Cheng, C.-J. and Fletcher, J.* (ed.), *International banking regulation and supervision. Change and transformation in the 1990s*, Dordrecht/Boston (M. Nijhoff), p. 49–80. – *von Thadden, E.-L.* (1999): “Liquidity creation through banks and markets: multiple insurance and limited market access.” *European Economic Review (Netherlands)*, (April), p. 991–1006. – *Walsh, P.* (1994): “Capital adequacy – a look at the recent regulatory papers”, *Irish Banking Review (Ireland)*, (spring), p. 44–56.

Banks 1999	cash & deposits with central bank	loans and advances to banks	loans and advances to customers	bonds & loan securities	other assets	total assets in (bill.) of specified currency
1. Deutsche Bank	21.88	115.45	352.37	303.21	46.96	839.87
2. BNP Paribas	6.03	159.77	213.40	153.58	165.85	698.63
3. UBS	5.07	29.91	234.86	538.52	173.21	981.57
4. HSBC Holdings plc	6.18	100.08	253.57	115.75	93.56	569.14
5. HypoVereinsbank	5.03	56.21	325.77	113.77	2.48	503.26
6. ABN AMRO Holding N.V.	6.81	47.20	259.72	111.46	32.70	457.88
7. Credit Suisse Group	3.14	164.90	104.93	264.62	185.15	722.75
8. Cr�dit Agricole	41.96	406.62	1513.65	370.38	550.28	2882.89
9. Soci�t� G�n�rale	6.68	55.20	143.64	130.17	70.85	406.54
10. Dresdner Bank	2.80	56.67	218.05	86.09	33.24	396.85
11. West LB	1.35	112.77	147.83	111.90	19.89	393.75
12. Commerzbank	8.95	50.04	203.50	107.10	2.45	372.04
13. ING Bank	4.00	41.93	205.83	73.16	24.70	349.62
14. Barclays	1.17	42.66	113.54	59.52	37.91	254.79
15. Fortis	3.21	80.39	132.35	86.55	26.62	329.12
16. NatWestGroup	1.50	28.79	89.00	39.92	26.51	185.72
17. Gruppo Intesa	2.59	84.42	312.80	113.37	75.36	588.53
18. Bayerische LB	0.41	85.66	113.06	65.84	16.27	281.23
19. Rabobank	2.33	24.60	170.49	69.61	14.19	281.22
20. Lloyds TSB	1.28	16.96	102.63	14.40	40.83	176.09
21. LB Baden-W�rttemberg	0.58	101.36	84.98	58.78	11.33	257.04
22. Caisse d'Epargne	1.77	85.86	101.28	37.14	22.70	248.75
23. DEXIA	0.93	34.97	128.53	63.05	17.16	244.64
24. DG Bank	2.96	71.83	94.73	63.51	10.19	243.22
25. Banco Bilbao Vizcaya Argentaria	8.04	38.02	113.61	46.24	32.26	238.17
26. KfW	0.05	85.75	70.15	25.81	14.88	196.64
27. Bankgesellschaft Berlin	0.87	36.59	101.48	39.79	15.06	193.79
28. Banques Populaires		40.57	83.77	35.25	26.73	186.32
29. Credit Lyonnais	3.19	11.09	86.84	34.88	36.94	172.94
30. Nord LB	0.25	58.45	64.24	33.44	14.88	171.25
31. UniCredito Italiano	1.14	20.01	101.58	14.44	30.77	168.93
32. Halifax plc.	0.36	10.77	96.57	22.94	31.44	162.08
33. KBC Group	0.58	17.19	64.63	52.09	21.73	156.22
34. Banco Santander Central Hispano	0.37	5.20	10.97	4.78	4.32	25.64
35. Royal Bank of Scotland	1.39	10.38	49.34	16.30	11.44	88.85
36. San Paolo di Torino	0.53	22.14	73.17	18.38	26.00	140.22
37. Bank Austria	0.85	29.40	74.65	29.91	5.19	140.00
38. Banca di Roma	0.89	35.83	133.50	58.26	31.60	260.08
39. Groupe Credit Mutuel	323.90					850.00
40. Landesbank SWH	0.29	28.87	52.69	30.27	3.03	115.15
41. LB Hessen-Thuringen	0.10	41.82	47.85	12.58	24.95	114.72
42. Svenska Handelsbanken	6.29	98.86	626.21	90.12	101.33	922.80
43. Abbey National plc	0.02	27.26	6.71	56.19	11.30	101.46
44. Swedbank Group	6.99	104.52	569.41	80.81	71.85	833.58
45. Bank of Scotland Group (28.02.1999)	0.61	4.81	46.58	4.80	2.99	59.80
46. Den Danske Bank Group	5.50	88.50	380.96	159.83	66.64	701.42
47. Standard Chartered	0.61	11.40	28.80	5.11	8.21	54.13
48. Banca Nazionale del Lavoro	0.47	8.72	55.68	8.22	11.86	84.95
49. Skandinaviska E. Banken Group	9.07	103.67	342.91	132.35	122.25	710.26
50. Hamburgische LB	0.39	17.23	36.78	20.26	3.74	78.40
51. La Caixa Group	0.23	1.95	7.06	1.48	1.64	12.35

currency unit (bill.) 1 bill = 10 <sup>9</sup> 1 trill = 10 <sup>12</sup>	deposits by banks	customer accounts	including demand deposits	other deposits/debt securities in issue	share capital	other liabilities	total liabilities in (bill.) of specified currency	total assets in bill. EUR
EUR	174.66	291.04	116.74	164.06	23.15	186.96	839.87	839.87
EUR	231.07	149.00		77.10	21.16	220.30	698.63	698.63
CHF	76.37	279.96	201.32	571.80	34.84	18.18	981.57	613.10
US-\$	38.10	359.97	158.95	93.36	33.41	44.29	569.14	562.95
EUR	85.08	143.05	31.93	214.30	12.44	48.39	503.26	503.26
EUR	80.99	229.99		96.34	16.93	33.63	457.88	457.88
CHF	198.32	226.26	45.93	80.18	34.37	183.62	722.75	451.43
FF	456.87	1621.72	5.05	570.92	156.29	77.08	2882.89	439.39
EUR	87.28	157.84		136.08	11.90	13.44	406.54	406.54
EUR	71.88	142.16	45.17	115.35	11.57	55.66	396.85	396.85
EUR	154.90	97.72	16.40	116.98	8.31	15.84	393.75	393.75
EUR	72.66	91.04	26.36	156.97	11.14	40.23	372.04	372.04
EUR	75.27	161.83		77.66	22.69	12.16	349.62	349.62
£	44.49	123.97	45.00	59.85	8.84	17.66	254.79	338.15
EUR	117.35	135.48	41.14	46.07	7.40	22.82	329.12	329.12
£	27.45	98.12	50.45	38.93	9.34	11.88	185.72	296.20
trill. Lira	159.88	204.39	156.14	116.79	5.41	102.06	588.53	294.10
EUR	114.11	51.66	5.83	97.95	6.93	10.59	281.23	281.23
EUR	59.11	127.53	85.71	62.24	14.97	17.37	281.22	281.22
£	17.69	92.85	68.75	17.79	8.69	39.07	176.09	280.85
EUR	83.13	43.35	5.62	116.25	5.75	8.57	257.04	257.04
EUR	18.68	157.86	105.70	51.36	9.75	11.11	248.75	248.75
EUR	40.41	49.92	13.40	136.35	5.50	12.46	244.64	244.64
EUR	87.02	60.37	11.47	77.31	3.16	15.37	243.22	243.22
EUR	68.61	108.38		31.55	10.25	19.38	238.17	238.17
EUR	46.00	84.87	0.08	53.61	5.70	6.46	196.64	196.64
EUR	58.16	62.51	11.13	61.28	4.37	7.47	193.79	193.79
EUR	48.24	67.52			1.84	68.71	186.32	186.32
EUR	25.66	68.48	24.36	48.85	7.92	22.04	172.94	172.94
EUR	68.74	35.35	5.09	58.88	3.94	4.34	171.25	171.25
EUR	35.74	72.96		34.11	6.36	19.77	168.93	168.93
EUR	11.87	87.85	77.67	24.77	6.25	31.33	162.08	162.08
EUR	28.87	71.88	16.00	31.03	4.22	20.22	156.22	156.22
trill. pes	8.42	10.50	4.12	0.87	0.31	5.54	25.64	154.12
£	6.42	55.18	35.93	16.82	2.85	11.78	88.85	141.71
EUR	28.01	43.19	31.82	35.72	3.93	29.37	140.22	140.22
EUR	53.43	41.89	13.00	25.93	4.44	14.31	140.00	140.00
trill. Lira	84.27	74.27	64.26	60.71	2.68	38.15	260.08	132.47
FF	623.10				53.10		850.00	129.158
EUR	48.83	22.11	2.80	36.90	2.91	4.40	115.15	115.15
EUR	34.78	22.09	2.69	42.05	3.00	42.81	114.72	114.72
SEK	186.50	185.29	154.18	476.23	38.57	36.20	922.80	107.43
EUR	33.08	8.51	2.64	52.61	1.88	5.38	101.46	101.46
SEK	127.95	210.54	185.56	381.89	31.01	82.20	833.58	97.04
£	6.15	28.57	15.94	18.88	4.87	1.32	59.80	95.37
DKR	157.62	266.10	130.14	247.16	30.54	0.00	701.42	94.28
£	5.56	35.15	10.58	7.28	3.17	2.99	54.13	86.33
EUR	19.88	29.99	25.37	26.20	3.86	5.02	84.95	84.95
SEK	117.77	229.53	197.78	225.52	33.01	104.42	710.26	82.68
EUR	33.85	20.68	2.76	15.68	3.64	1.79	78.40	78.40
trill. pes	1.57	8.90	1.57	0.35	0.80	0.73	12.35	74.22

## Summary

### Will West European Banks Affect Monetary Control?

The objective of this study is to analyze the business direction of the largest European banks in order to extract possible impacts regarding the efficacy of monetary control. In a cross-section analysis (using data of the largest 51 European banks) the influencing variables for granting loans by banks have been correlated, followed by a factor analysis (a) of balance sheet items in order to extract the importance of asset items, and (b) of income statements in order to extract the importance of off-balance items. As a result, loans will be refinanced increasingly by items not under monetary control. (JEL E 44, G 21)

## Zusammenfassung

### Werden westeuropäische Banken ein Geldmengenkontrolle umsetzen?

Ziel dieser Studie ist es, die Geschäftsausrichtung der größten europäischen Banken zu analysieren, um daraus Erkenntnisse in bezug auf die mögliche Wirksamkeit einer Geldmengenkontrolle zu gewinnen. In einer Querschnittsanalyse werden (unter Verwendung von Daten der 51 größten europäischen Banken) die auf die Darlehensgewährung der Banken einen Einfluß ausübenden Variablen miteinander in Beziehung gesetzt; hierauf erfolgt eine Analyse von Faktoren in bezug auf (a) Bilanzpositionen, um die Bedeutung von Aktiva bei der Kreditvergabe herauszukristallisieren, und (b) Positionen der Gewinn- und Verlustrechnung, um die Bedeutung von Einflußfaktoren außerhalb der Bilanz bei der Kreditbeschaffung zu ermitteln. Es erweist sich, daß Kredite zunehmend durch Komponenten refinanziert werden, die nicht der Geldmengenkontrolle unterliegen.

## Résumé

### Les grandes banques européennes influent-elles le contrôle monétaire?

L'objectif de cette étude est d'analyser les tendances commerciales des plus grandes banques européennes en vue d'en déduire les impacts possibles concernant l'efficacité du contrôle monétaire. Dans une analyse transversale utilisant des données des 51 plus grandes banques européennes, les variables qui influencent les prêts octroyés par les banques ont été corrélées, suivies d'un facteur d'analyse (a) des postes du bilan pour déterminer l'importance des postes de l'actif et (b) des comptes de pertes et profits pour déterminer l'importance des postes hors-bilan. Il en résulte que les prêts bancaires seront refinancés de plus en plus par les postes non soumis au contrôle monétaire.