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Agenda

Advancing economics in business

Accentuating the positive: sharing financial data between banks

From 2006, all major UK banks will start sharing 'positive' data on their customers, such as details relating to loans and credit availability. Until now, only 'negative' data has been shared, such as that pertaining to arrears and bankruptcies. What is the likely impact of this new policy on the banking market? Will it help to reduce over-indebtedness? And what happens in other European countries?

All the major high-street banks in the UK have made a move towards sharing positive data. While one of the banks has already started to share positive data on credit card and personal loan customers, others have agreed to follow suit from early 2006. Some of the smaller credit providers, such as building societies and specialised credit card companies, also already share positive data on their customers. See the boxes below for examples of both types of data.

Banks are able to share positive, as well as negative, data through three credit bureaux: Experian, Equifax, and Call Credit. These credit bureaux deal with financial institutions on a reciprocal basis: lenders that provide positive data on their customers can also receive positive data on other lenders' customers; if only negative data is provided, only negative data will be received.

Why share negative data?

The logic behind sharing negative data is simple. Information about the extent to which a customer has been able to repay loans in the past can be used by banks as an indication of the customer's ability to repay loans in the future. In other words, sharing this type of information reduces the information asymmetry between a bank and its (potential) customer. Overall, this is likely to result in lower default rates and hence improve market functioning.

Sharing such information may also increase competition between credit providers. It may reduce 'informational rents' that (incumbent) credit providers could otherwise extract from their customers. New entrants often do not have sufficient information on consumers and are therefore less able to offer competitive prices. Incumbents typically have more detailed knowledge of borrowers, since they know customers' history, which gives them a competitive advantage over new entrants. Pooling information with other credit providers reduces this advantage.

Furthermore, sharing information on borrowers may operate as a borrower-discipline device—every borrower knows that if they default, their reputation with other lenders is affected, potentially cutting them off from credit or making it more expensive to obtain.

Examples of negative data

- **Delinquencies: non-payment of a debt**
- **County Court Judgements**
- **Bankruptcies**
- **Charge-offs: a debt that is written off**
- **Arrears**
- **Late payments**

Examples of positive data

- **Total amount and type of loans**
- **Accounts currently open and active**
- **Balances**
- **Credit limits**
- **Details relating to credit card commitments**
  - **how much is spent on the card each month**
  - **how much is repaid each month**
- **How much cash has been taken out**
- **Recent changes to borrowing limits**

Why share positive data? The added benefits

The extent to which sharing information has a real impact on default rates and competition is likely to depend on the type of information that is shared. Negative data does not fully prevent incumbent banks from extracting 'informational rents' from their existing customers. To compete on an even footing, new entrants would also require access to positive data.

In addition, sharing positive data may reduce the risk of over-commitment by borrowers. It may prevent situations in which a borrower takes credit simultaneously from many banks, without any of these banks being aware of the total amount of credit that the borrower has taken on. In the UK, the step towards sharing more positive data is encouraged by the Department of Trade and Industry as part of its strategy on tackling over-indebtedness.[1] Sharing positive data may enable credit providers to assess more effectively the credit status of applicants, and thereby to lend only to those who can afford it.

Whether the incremental impact of sharing positive data rather than just negative data on default rates and competition is indeed positive is an empirical question. Affordability of consumers (ie, their ability to service a debt) may be a good predictor of default, but it is not clear how strong a predictor it is.

The impact of the use of positive data on default rates and on the availability of credit may be analysed by running two simulations of credit-risk-scoring models: one that uses only negative data, and one that uses both negative and positive data. Running the risk-scoring model using only negative data produces a set of default rates for a given approval rate of applications. These default rates can then be compared with the default rates produced by the simulation in which the full dataset is employed.

Such an analysis was undertaken in the USA by Chandler and Parker (1989).[2] The study documents the ability of US credit bureau data to outperform application data in predicting risk. The analysis was based on comparing credit bureau versus application data in scoring three categories of credit card applications: bank card, retail score card, and non-revolving charge card (ie, where the balance is paid off in full each month). Application data included variables such as the applicant's age, time at current/previous address, time at current/previous job, housing status, income, and number of dependants—ie, the basic data collected when credit is applied for. Credit bureau variables were grouped into three categories: the first containing negative data, and the second and third categories including several positive data variables, such as the number of new credit lines opened in the past six months, the number of accounts by category of lender, and a variable capturing the percentage of all revolving lines currently used. On the basis of application credit risk models, the study found that, as expected, the application data without credit bureau data yielded the lowest predictive power. The predictive power increased significantly at higher levels of credit bureau detail: the predictive power of the credit risk model using the most detailed data available (including the positive data) was 52% higher than the simple credit bureau treatment.

Another more recent study confirms these results (Barron and Staten, 2003).[3] This study undertakes a similar analysis by comparing the power of a specific model using only negative variables with a model using both positive and negative data. The risk-scoring models were built using US credit report data provided by one of the credit bureaux. First, a model was estimated using all variables. The variables that would not be present in a set of negative data variables were then dropped and the model was rebuilt on the remaining variables. This method allowed for the construction of the best possible model from among the available variables. The effects of using positive data are shown in Tables 1 and 2.

– *Lower default rates*—as shown in Table 1, at a targeted approval rate of 60% (ie, 60% of applications would be approved), the negative-only model produces a 3.35% default rate among accepted applicants compared with a 1.9% default rate for the full model. In other words, at the given 60% approval

Table 1 Comparison between the two models of estimated default rates

	Default rates (%)		
	Both negative and positive data	Negative data only	Difference (%)
Target approval rate (%)			
60	1.90	3.35	76.30
75	3.04	4.07	33.90

Source: Barron and Staten (2003), op. cit, p. 297.

Table 2 Comparison between the two models of the proportion of customers able to obtain a loan

	Proportion of customers able to obtain a loan in the two models (%)		
	Both negative and positive data	Negative data only	Difference
Target default rate (%)			
3	74.8	39.8	–46.8
4	83.2	73.7	–11.4

Source: Barron and Staten (2003), op. cit, p. 298.

rate, the default rate using the negative-only model is 76.3% higher than if the full dataset model were used.

– *Greater availability of credit*—as shown in Table 2, at a target default rate of 4%, the full model would approve 83.2% of applications, while the negative-only model would approve only 73.7% of applications, a 11.4% reduction in loans provided. In other words, at a default rate of 4%, for every 100,000 applicants, use of the negative-only model would result in 11,000 fewer consumer loans.

These findings suggest that sharing positive data rather than only negative data not only enables credit providers to lend more responsibly, but also makes it more likely to result in greater competition, lower-cost loans (as a result of better estimates of the likelihood that a loan will be repaid), and greater availability of credit.

Data sharing in Europe

It is interesting to look at the extent to which positive and negative data is shared in other European countries. In all EU Member States, credit providers are able to access databases that contain information about consumers. Table 3 shows the ways in which credit bureaux are organised in selected EU countries. These vary between a state-owned model, as in Finland and France, and independent private providers, as in the Netherlands and the UK. Some countries have a hybrid system, in which credit information is collected by both a state-owned institution, such as a central bank, and one or more private companies. Some countries have one credit bureau (eg, Finland, Sweden, Germany, Ireland and France), while others have two or more providers (eg, UK, Italy and Belgium).

Table 3 Types of information that can be shared by credit bureaux in selected Member States

Country	Type of information provided that can be shared	Ownership	Main credit bureaux
Austria	Negative + positive	Consortium of credit providers	KSV
Belgium	Negative + positive	Consortium of credit providers	National Bank of Belgium; UPC
Finland	Negative	State-owned	Suomen Asiakastieto
France	Negative (currently considering sharing positive)	State-owned	Bank of France
Germany	Negative + positive	Private company owned by financial institutions	Schufa Holding
Greece	Negative + positive	Owned by major Greek banks	Tiresias
Ireland	Negative + positive	Private company owned by financial institutions	Irish Credit Bureau
Italy	Negative; negative + positive	Consortium of credit providers; private company owned by financial institutions	CTC; CRIF
The Netherlands	Negative + positive	Private company	BKR (Bureau Krediet Registratie)
Portugal	Negative + positive	State-owned; private company	Bank of Portugal; Creditinformacoes (joint venture between ASFAC and Equifax)
Spain	Negative + positive	State-owned; private company	Bank of Spain; private joint venture between Equifax and ASNEF
Sweden	Negative + positive	Private company owned by financial institutions	UC AB
UK	Negative + positive	Private company	Equifax; Experian; Call Credit

Source: European Credit Research Institute (2002), 'Credit Bureaus in Today's Credit Markets', updated by Oxera.

Most countries have a credit bureau which has the ability to share both negative and positive data, although there are exceptions (eg, France and Finland) . However, in most countries where a credit bureau offers the infrastructure for sharing positive data, credit providers (particularly the larger incumbents) often provide only negative data, making it more difficult for new entrants to obtain access to a large part of the market. Sharing positive data would make entry into markets by foreign credit providers easier, as it would enable them to access customer data on an equal basis with local incumbent credit providers.

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[1] Department of Trade and Industry (2004), 'Tackling Over-Indebtedness: Action Plan', launched July 20th.
[2] Chandler, G. and Parker, L. (1989), 'Predictive Value of Credit Bureau Reports', *Journal of Retail Banking*, **XI**:4, Winter.
[3] Barron, J.M. and Staten, M., 'The Value of Comprehensive Credit Reports: Lessons from the US Experience' in M. Miller (2003), *Credit Reporting Systems and the International Economy*, Cambridge, Massachusetts: MIT Press.