Credits to individuals – Analysis of the data recorded by the Central Individual Credit Register [1]

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Introduction

In the context of the control of excess debt, the Central Individual Credit Register (CICR) was converted into a "positive" central register on 1 June 2003. Since then, by recording all consumer credit and mortgage loans contracted for private purposes by individuals resident in Belgium, and any resulting payment default, the Central Register has provided a more or less exhaustive picture of credit granted to individuals [2].

At the request of the CICR Guidance Committee, the Central Register information was examined in detail during 2005 [3]. This study had two aims. First, it analysed the data on contracts and individuals in the positive and negative sections of the records, in order to arrive at an overall view of the main characteristics of the private credit market. It also prepared an initial outline of the profiles of bad payers, on the basis of aggregate data. This article focuses specifically on this second aspect of the analysis.

Although the CICR covers almost the whole of the private credit market, owing to the compulsory participation of all lending sources, it should be stressed that there are significant limitations concerning the information recorded, and these have a direct influence on the research options and/or the interpretation of the results. Owing to the characteristics of the information recorded, plus the technical features inherent in the data file, the study is subject to a number of limitations. Thus, it is based mainly on aggregate data relating to the number of credit contracts notified by the issuers and, owing to the lack of

historical series, remains structural in its nature. Moreover, the analysis of borrowing and repayment behaviour according to the borrower's characteristics is limited to the demographic variables recorded by the CICR, namely age and place of residence.

Borrowing and repayment behaviour of the reference individuals

Analysis of the profiles of bad payers is intended to reveal the differences in borrowing and repayment behaviour in terms of the borrowers' characteristics. Since payment defaults [4] refer to contracts rather than individuals – as a person may effect a number of credit contracts which are not necessarily all recorded in a negative sense, and each person need not be the sole debtor in respect of some or all of those credit contracts –, a link was established between the information on persons and the contracts: for this part of the analysis, the contracts are linked to the place of residence and age of the first debtor named, hereinafter referred to as the "reference person" for the credit.

Age

As regards the age of the reference persons, various concepts can be examined. Regardless of the age of the borrowers recorded at the time of examination of the data, the "initial age", i.e. the age of the borrowers at the time of conclusion of the credit contract, and the "payment default" age, i.e. the age when the payment default began, are very interesting.

The frequency distribution of the reference persons according to initial age varies slightly according to the type of credit, as is logical on the basis of the credit life cycle theory *(chart 1)*.

The youngest borrowers, particularly those aged 18-25 years, are by far the largest group in the financial leasing category[1]; some 40 p.c. of contracts of this type are concluded by borrowers in this age group, and the relative importance of the older age groups declines rapidly. In the case of instalment sales and instalment loans, the youngest age group is slightly more heavily represented than in the other two forms of credit, albeit to a much lesser extent than for financial leasing. As confirmed by the data published by the FPS Economy concerning the use of consumer credit, financial leasing

(1) Financial leasing is a type of credit which is dying out; the percentage represented by these contracts is negligible. From here on, this article will not analyse this type of credit separately.

and instalment sales are forms of credit eminently suited to the acquisition of cars and computers, and the above observations therefore bear out the life cycle theory. The peak age groups for mortgage loans are 26-30 years and 31-35 years, and these are also the groups borrowing the largest amounts, on average. The breakdown of borrowers by initial age is clearly unevenly balanced in the case of mortgage loans: around 90 p.c. of contracts are concluded before the age of 45 years. Conversely, as suggested by the theory, revolving credit, instalment loans and instalment sales are the forms of credit which attract a borrowing public distributed more evenly across the age groups.

For reasons concerning data availability, and more specifically because of the shortness of the time series and the limited periods for preserving data in the positive section of the CICR, it is not currently possible to calculate representative payment default percentages – comparing the number of contracts in arrears of payment with the total outstanding credit contracts – on the basis of the concept of the initial age. However, the percentages of payment defaults by age at the time of examination of the data do show a clear, reverse correlation between age and payment default percentage for all types of credit *(chart 2)*. The figures thus confirm the widespread view that younger borrowers represent a higher risk, on average, than older borrowers. Economic factors, such as whether or not the person has an earned income or
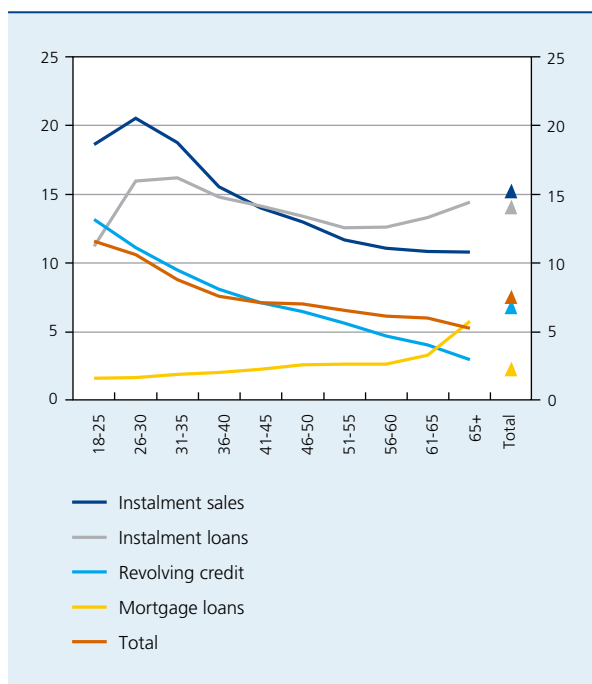

CHART 1   FREQUENCY DISTRIBUTIONS OF REFERENCE PERSONS ACCORDING TO INITIAL AGE
(Percentages)

Financial leasing
Mortgage loans

Revolving credit
Instalment loans
Instalment sales
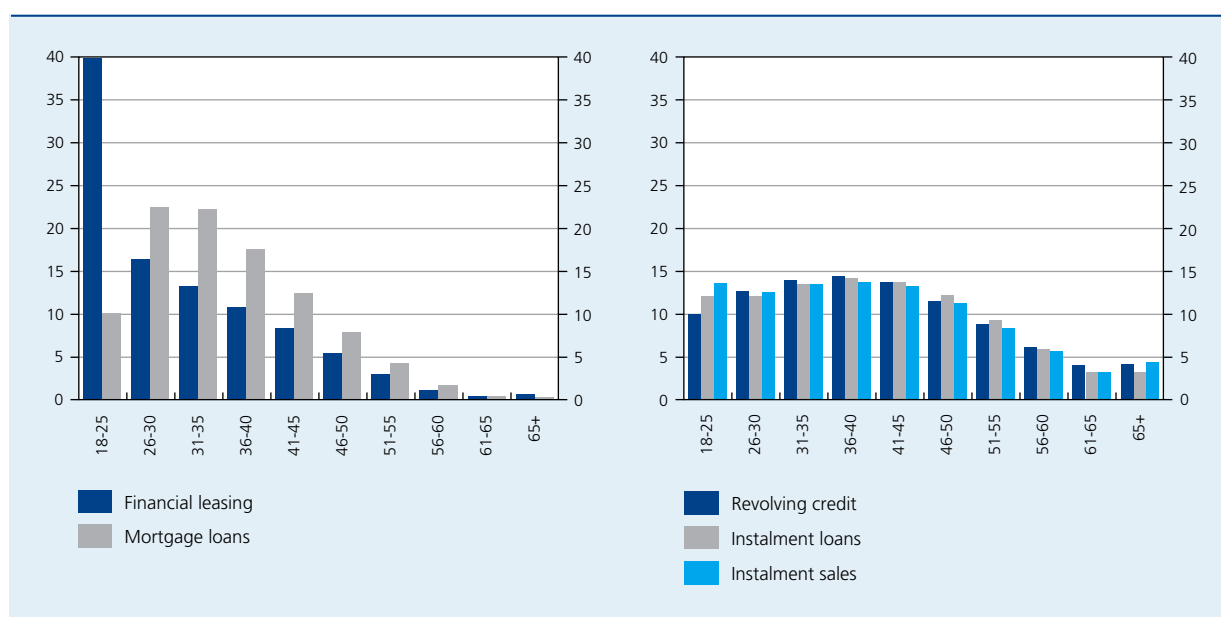
Source : CICR.

CHART 2   PAYMENT DEFAULT PERCENTAGES BY
AGE GROUP

(Defaulting contracts in percentages of the total outstanding
contracts, by age group)

Source : CICR

distributions of the reference persons by age of payment default seem to confirm in every way the previous findings concerning the various types of credit. Although the data available from the CICR are insufficient to test hypotheses on this subject, there are various factors which could provide an explanation, if only in part, for the divergent results in the case of mortgage loans.

Thus, it is clear from practical experience that in the event of financial problems it is other, unsecured debts that are the first to be left unpaid, before the family home is put at risk by the suspension of mortgage repayments. Presumably, a number of "passive sources" or events triggering excess debts, in other words setbacks in life such as job loss, divorce, illness or long-term unfitness for work, affecting the borrower (or perhaps the borrower's partner) – all factors generally cited in the literature on payment defaults – are proportionately more common in the older age groups.

Place of residence

In order to gain an idea of the credit requirements of the various regions, the number of credit contracts was related to the adult population.

replacement income, the amount of that income, and job security certainly play a role here, but the attitude and behaviour of both the young and the lenders aiming at this target group must also be taken into account.

Looking at individual forms of credit, there is also an evident negative correlation between age and payment default percentage in the case of revolving credit and instalment sales, except for the 18-25 age group where instalment sales are concerned. This negative correlation is less marked in the case of instalment loans : it does not apply to the 18-25 age group, and from about the age of 55 years onwards it changes into a positive correlation. Finally, in the case of mortgage loans, the correlation between the payment default percentage and age is clearly positive, although these percentages are fairly low overall.

It was not possible to identify directly any convincing explanation for the positive correlation between age and payment default percentages in the case of mortgage loans, in contrast to revolving credit and instalment sales. In any case, this finding seems to suggest that, where delays occur in the repayments on various forms of credit, other factors play a decisive role. The frequency

CHART 3   CREDIT REQUIREMENTS BY REGION
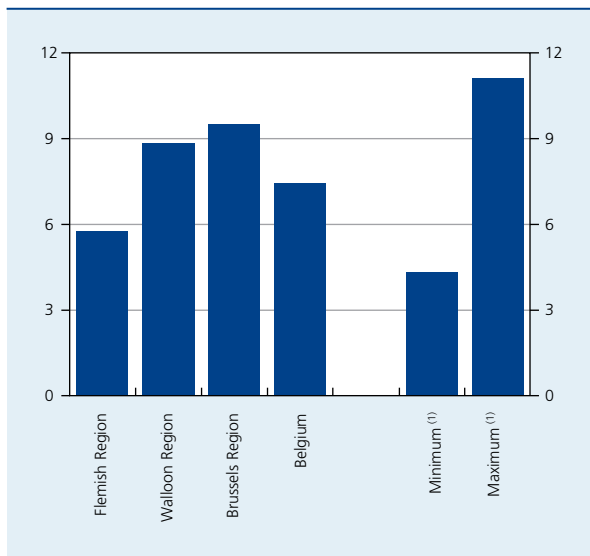
(Number of contracts per thousand persons in the adult
population [1])
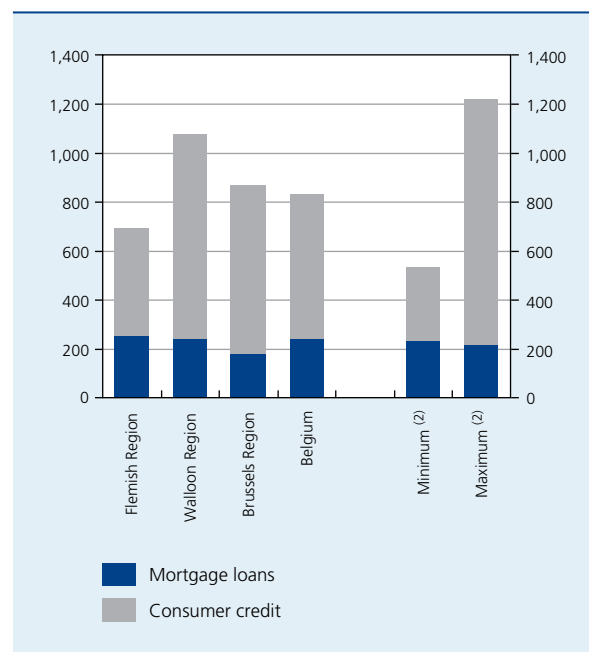
Sources : CICR and FPS Economy.
(1) Population situation as at 1 january 2004.
(2) Of the individual districts.

The ranking of the individual districts presents the same picture, broadly speaking : the highest default percentages are recorded in the south of the country, particularly in the Hainaut districts and in Liège, and the lowest percentages in the north, primarily Flemish Brabant. However, both areas of the country have some notable exceptions : in Flanders, the district of Ostend has a relatively high score, while in Wallonia the district of Nivelles ranks particularly low.

Various national and international studies on the default phenomenon point, on the one hand, to demographic factors (age, standard of education, divorce, property ownership, etc.) as relevant for repayment behaviour. On the other hand, there are of course also economic factors (income, employment / unemployment) which may play a significant role here. However, since the information on borrowers recorded in the CICR is strictly confined to date of birth, sex and place of residence, it is not possible to test those potential factors on a microeconomic basis. The clear north-south divide in terms of payment defaults nevertheless suggests that regional characteristics, which

This shows that total credit requirements are not evenly distributed across all the regions *(chart 3)*. Wallonia has a relatively higher level of borrowing than Flanders, and Brussels falls between the other two regions. The ranking of the total credit requirements according to the individual districts within the regions tallies entirely with this geographical division of the country.
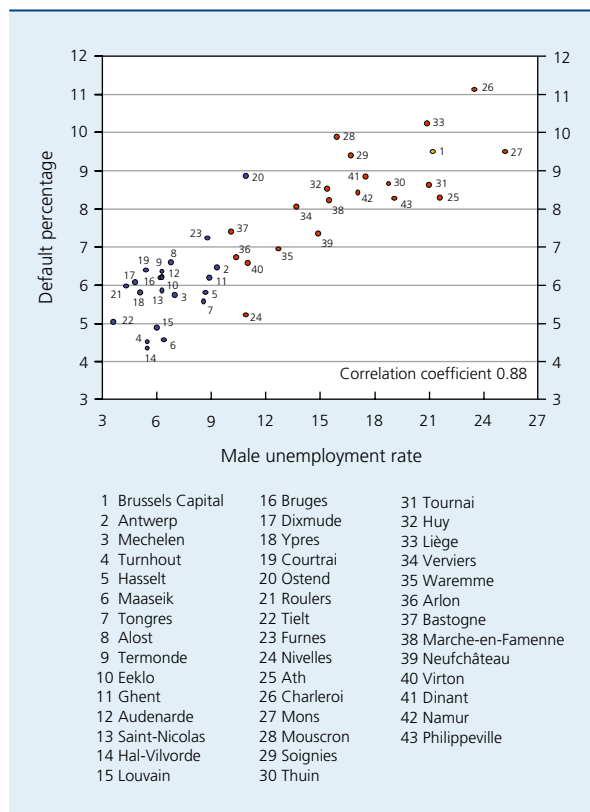
The higher credit requirements in Wallonia more specifically concern consumer credit, both as regards such credit in general, and for all forms of consumer credit viewed individually. As regards mortgage loans, the number of contracts effected is relatively greater in the Flemish Region. Finally, in the case of consumer credit, the Brussels Capital Region falls between the two regions, but comes at the bottom of the ranking of the various districts in terms of mortgage loan requirements.

The assessment of the regional results regarding payment defaults is based on the concept of the "default percentage" which links the contracts in arrears in a particular region to the total outstanding contracts in that region *(chart 4)*. These default percentages vary considerably between the regions : the Brussels Capital Region comes first, with 9.5 p.c., followed by the Walloon Region with 8.8 p.c., while the Flemish Region – at 5.8 p.c. – scores well below the national average of 7.5 p.c.

1 Brussels Capital	16 Bruges	31 Tournai
2 Antwerp	17 Dixmude	32 Huy
3 Mechelen	18 Ypres	33 Liège
4 Turnhout	19 Courtrai	34 Verviers
5 Hasselt	20 Ostend	35 Waremme
6 Maaseik	21 Roulers	36 Arlon
7 Tongres	22 Tielt	37 Bastogne
8 Alost	23 Furnes	38 Marche-en-Famenne
9 Termonde	24 Nivelles	39 Neufchâteau
10 Eeklo	25 Ath	40 Virton
11 Ghent	26 Charleroi	41 Dinant
12 Audenarde	27 Mons	42 Namur
13 Saint-Nicolas	28 Mouscron	43 Philippeville
14 Hal-Vilvorde	29 Soignies	
15 Louvain	30 Thuin	

tend to be economic, may explain these differences to some extent.

In all respects, a number of regional demographic and income-related variables seem to show a close correlation with the default percentages. Marital status, translated into the percentage of the population who are divorced or married, displays a significant correlation even at district level. In particular, however, the variations in the male unemployment rate exhibit very close links with the variations in the default percentages between districts *(chart 5)*: the correlation between the two series is no less than 88 p.c.

Conclusion

Examination of the information on contracts and persons recorded in a positive and negative sense in the CICR has provided an initial stimulus for research on the profiles of bad payers; the Bank hopes to continue down this road in the future, as part of the effort to combat excessive debt.

On the basis of aggregate data, the study established variations in borrowing and repayment behaviour on the part of borrowers, depending on the age group to which they belong or their place of residence.

The frequency distributions of reference borrowers according to age when first recorded by the Central Register vary according to the type of credit. Thus, certain types of credit are contracted by significantly younger borrowers,

in line with the life cycle theory. In the case of consumer credit, the default percentages by age category display a negative correlation with the borrower's age; conversely, in the case of mortgage loans the correlation is positive. Although no convincing explanation can be identified, these divergent results suggest that, for each type of credit, other factors have some influence over the default process, so that differentiation is necessary.

Where place of residence is concerned, the study also identifies clear differences in both borrowing and repayment behaviour on the part of borrowers. Not only do credit requirements vary considerably between regions, the composition of the loan portfolio and the relative use of the various categories of lender reveal significant differences between the north and south of the country. These regional variations are expressed not only at regional level, but also at district level. The north-south divide is also evident in the default percentages. It is not attributable only to the variations in the loan portfolio, as indicated by the percentages of the main forms of individual credit. A number of regional socio-economic variables (unemployment rate, disposable income per head, marital status) in fact show a close correlation with the default percentages per district.

The limitations of the CICR data, particularly those relating to people's characteristics, prevent any deeper analysis. However, a more detailed study is needed to acquire a better understanding of the default process and to produce more accurate and reliable profiles of persons experiencing payment problems.