A visual analysis of the correlation between home credit and mainstream credit prices

1. In this analysis we visually analyse the evolution of prices of home credit and mainstream credit products, in order to explore the extent to which prices of home credit products are correlated with prices of potentially competing mainstream credit products. It should be noted that this analysis is not intended to be used to compare the levels of prices of home credit and mainstream credit products.

2. The intuition behind this analysis is that the risk of demand- and/or supply-side substitution should limit the extent to which prices of products that are in the same market can diverge. We would therefore expect the prices of products in the same market to move together over time.

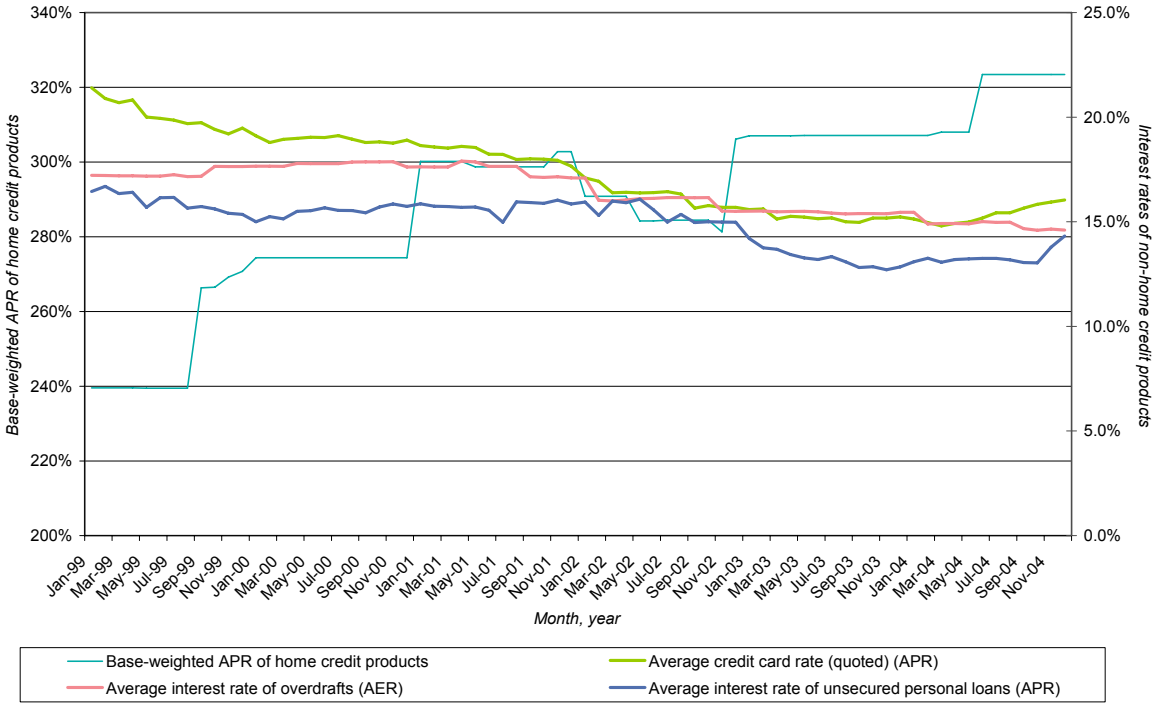
3. We found that, although there appears to be a negative relationship between home credit APRs and average interest rates of mainstream credit products, the TCC of some home credit and credit card loans appear to be positively correlated.

Evolution of headline APRs of home credit and mainstream credit products

4. Figure 1 illustrates that the average headline interest rate of mainstream credit products decreased between 1999 and 2005, while average home credit APRs (calculated as a base-weighted average headline APR—see Appendix 4.2) increased.

FIGURE 1

Evolution of headline APRs for home credit and mainstream credit products



Source: Bank of England, Home credit lenders, CC analysis.

5. Its has been put to us that during the period considered:

- APRs for some sub-prime credit products have increased;
- charges that are usually excluded from APR calculations of these products have increased; and therefore
- prices of some sub-prime credit products have increased.

Evolution of APRs and other charges of sub-prime credit cards

6. We found some evidence suggesting that sub-prime credit card APRs have increased during the analysis period. [✂].

FIGURE 2

[✂]

Source: [✂]

7. We also found evidence that some charges that are excluded from the APR of credit cards have also increased during the analysis period. [✂]

FIGURE 3

[✂]

Source: [✂]

Total cost of credit of home credit and sub-prime credit card loans

8. We conducted further analysis to compare movements in the TCC of Provident's one year PPC home credit loan with movements of a TCC for [✂] credit card, based on a hypothetical scenario. [✂]

9. We use APRs and other charges [✂] credit card to generate a hypothetical TCC. We included the following credit card charges into our TCC analysis: APRs on purchases, APRs on cash transactions, late payment charges, and annual charges.

10. To generate a TCC time series for credit cards we calculated charges based on the following hypothetical scenario:

- A customer borrows £400[12] at the beginning of month one, aiming to repay the loan within twelve months;
- He pays £50 every month, except in periods four and eight where he makes no payment, incurring two late payment charges;
- The customer settles the outstanding balance in the twelfth period.

11. Figure 4 illustrates that the TCC [✂] increased in this example from £[✂] in 1999 to £[✂] in 2004.

FIGURE 4

[✂]

Source: [✂]

12. Figures 5 and 6 illustrate that, in our illustrative scenario, the TCC of Provident's PPC one year product and [✂] credit card product are both trending upwards[3].

FIGURE 5

[✂]

Source: [✂]

FIGURE 6

[✂]

Source: [✂]

Interpretation

13. Based on the adopted scenario, the TCCs of Provident's one year PPC home credit product and [✂] credit card product appear to be positively correlated. While a negative correlation can be considered as strong evidence of a lack of a competitive constraint between two products, a positive one is consistent with either:

- a competitive constraint between the products, so that both products should be included in the same relevant market; or

[1]The average size of Provident's (PPC) one year cash loan in 2004 was £406.
[2]We assume that the customer splits the loan, taking out half of the money in cash, using the other half to purchase goods.
[3]Note that the purpose of this analysis is to analyse the correlation between prices of home credit and other credit products, and not the difference in price levels between products.

- no constraint, but correlation coincidental and/or driven by other factors (e.g. common costs).

14. Three further factors are worth noting in interpretation of this analysis.

15. First, the products considered might exhibit common costs. In this case, one would expect the two products' TCC to be positively correlated anyway. Alternatively, the finding that both time series are trending in the same direction (and therefore the finding of a positive correlation) might be temporary and/or coincidental.

16. Second, although the two products' prices appear to be positively correlated, it is the extent of the correlation that might be indicative of the two products being in the same market. Economic theory does specify a clear cut-off point in terms of the degree of correlation necessary to conclude that two products are in the same market.

17. Third, this analysis should be considered in the context of all the available evidence relating to product market definition.

18. Given these factors, we do not consider this finding of a positive correlation between the two products as strong evidence that credit cards pose a competitive constraint on home credit loans.