

## Evidence from the distributors of possible waterbed effects on credit prices

### Introduction

1. This appendix summarizes the evidence we have received from the parties on the possible scale of waterbed effects on credit prices, should PPI income decrease. This evidence forms two parts. First, we asked the distributors what their likely reaction would be to a loss of PPI income by 10, 50 or 100 per cent. Second, we asked the parties, using their existing financial models, to calculate the extent to which non-PPI sources of income would have to rise if PPI income were to reduce.

### Key findings

2. There were a number of key findings from the distributors' responses to our information request. These were:
  - (a) The loss of PPI income would result in major changes to distributors' personal loan businesses. For other forms of credit, PPI accounts for a much smaller proportion of overall revenue.
  - (b) The majority of distributors said that they would respond to a large loss of PPI income by raising APRs, by increasing credit score cut-offs or some combination of the two.
  - (c) In personal loans and credit cards some distributors claimed that they do not believe a viable return is achievable without PPI income and would have to consider their continued participation in the market.
  - (d) Based on the distributors' profit models, possible waterbed effects in the form of increased credit prices are potentially large in personal loans. The potential size of the waterbed effect in credit cards is lower than for personal loans. The potential scale of the waterbed effect in mortgages is negligible, and most distributors did not believe that there would be a significant 'waterbed effect' for mortgages.

### **Distributors' reactions to a loss of PPI income**

3. The majority of distributors found it difficult to predict their response to a large loss in PPI income. This was particularly the case for personal loans where most distributors said that a large reduction in PPI income would prompt a strategic review of their personal loans business.
4. However, there were two common themes in the distributors' views of how they might respond to a loss in PPI income. The first was that any changes in pricing or strategy were likely to be more pronounced for personal loans than for other credit products. The second common theme was that a reduction in PPI income would affect higher-risk credit customers more than those with lower credit risk.
5. Finally, some of the distributors said that they would have to consider their continued participation in the supply of credit following a large reduction (typically more than 50 per cent) in PPI income.

### ***The relative scale of PPI income for different types of credit***

6. Most of the distributors told us that a reduction in PPI income would result in a larger change in pricing, or other elements of strategy, in personal loans than with other income streams. This is primarily because of the relative size of the PPI income stream relative to other sources of revenue for personal loans.
7. For example, [X] told us that, in [X], in 2007, PPI generated 38 per cent of the income earned on its personal loans business. This compared to 13 per cent for its credit card business. For [X] secured and unsecured loans business the figure was higher still, with 46 per cent of income generated by PPI.

8. As discussed in paragraphs 20 to 24, for those distributors that supply more than one type of credit product, the degree to which non-PPI income would need to increase to replace a reduction in PPI income was largest for personal loans, and smallest for mortgages.

***The importance of PPI for the viability of high-risk credit segments***

9. A number of the distributors commented that PPI income was an important aspect affecting the viability of the supply of credit to high-risk customer segments. This was particularly the case for personal loans where, in general, PPI is a more important income source.
  
10. For example, [X] told us that a 100 per cent reduction in PPI income would result in the net present value (NPV) of loans with credit scores below 230 becoming negative. [X] estimated that if it were to correct this situation by increasing its credit score cut-offs this would result in the loss of 37 per cent of its personal loan accounts. Table 1 shows [X] projections of the loss in customers that would result from an increase in credit score cut-offs as a result of a reduction in PPI income.

TABLE 1 [X] projections of lost customers from an increase in credit cut-offs

<i>PPI income lost</i>	<i>per cent</i>		
	<i>Customers lost at new cut-off rate</i>		
	<i>Loans</i>	<i>Credit cards</i>	<i>Mortgages</i>
100	37	9.0	0.09
50	18	4.5	0.05
10	4	0.9	0.01

Source: [X].

11. [X] also calculated, on the basis of a simple rebalancing of APRs to account for a loss of all PPI income, that personal loan APRs would need to increase by up to 4.5 per cent (450bps) over current levels for high-risk customers, and about 1.5 per cent (150bps) for low-risk customers. This would represent an increase on APRs of

approximately 2.5 per cent (250bps) across the business. This compares with 1.5 per cent (150bps) for credit cards and 0.03 per cent (3bps) for mortgages.

12. Other distributors, particularly for personal loans, noted that any rebalancing of prices following a reduction in PPI income would be more pronounced for higher-risk segments. For example, [X] estimated that APRs for high-risk personal loan customers would increase by 59 per cent.<sup>1</sup> [X] told us that a 100 per cent reduction in PPI income would necessitate at least a 2.06 per cent (206bps) increase in APRs and a 35 per cent reduction in the number of loans made. APRs for high-risk customers could increase by up to 13.5 per cent (1,350bps).

***The importance of PPI income for the viability of the supply of credit as a whole***

13. A small number of distributors said that a large reduction in PPI profits may cause them to reconsider their participation in various credit markets in the UK.
14. For example, [X] told us that a 100 per cent reduction in PPI income would require it to consider carefully whether the personal loans market was sufficiently profitable for it to remain part of, given that there would be increases in impairment costs (as future loans would be unprotected), significant reduction in income and an anticipated reduction in demand for unsecured personal loans as a result of increased headline rates.
15. [X] said that it has to generate sufficient returns relative to the [X] group as a whole to justify access to group funding. A significant reduction in PPI income would impact on [X] profitability and could constrain the availability of funding for future growth

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<sup>1</sup>Based on an illustrative comparison of the pricing of two example loans in certain scenarios. A 100 per cent reduction in PPI income from a higher-risk customer taking out a specific £3,000, three-year loan could require a relative APR increase of 59 per cent in order to offset the decline in PPI income.

opportunities. It was also conceivable that in the event of any significant contraction in the size and/or profitability of the [X] business, [X] could reconsider its commitment [X].

16. [X] told us that it expected both the credit product and the PPI to make a positive contribution. If PPI income was reduced by 10, 50 or even 100 per cent, [X] personal loans and [X] credit cards would continue to make a positive contribution.

### **The potential scale of waterbed effects**

17. We asked the distributors to estimate, using their existing financial models, the extent to which non-PPI income would need to increase in order to achieve (i) the same rate of return as in their original projections and (ii) an acceptable rate of return that would enable them to continue to offer the credit product.
18. Under a full waterbed scenario, where all of the distributors' PPI profits are competed away in the credit market, we would expect distributors' overall system profits to be the same regardless of the level of PPI income. The first part of the modelling exercise therefore gives an estimate of the upper bound of the scale of any distortion in credit prices as a result of PPI income.
19. Under a less-than-full waterbed scenario, where firms retain some PPI profit and distribute it to shareholders, we would expect some reduction in overall profits following a reduction in PPI income. The purpose of part (ii) of the modelling exercise was therefore to provide an estimate of a lower bound to the size of the distortion credit prices as a result of PPI income.
20. The distributors' answers to part (i) of the modelling exercise showed a relatively clear pattern. For personal loans, a 100 per cent reduction in PPI income would

necessitate a large increase in non-PPI income, and for most distributors there would also be a reduction in their risk appetite, leading to a reduction in credit lending volumes.

21. Estimates of the increases in APRs necessary, across the personal loans portfolio,<sup>2</sup> ranged between 206bps ([REDACTED]) and 520bps ([REDACTED]).<sup>3</sup> Estimates of the extent to which non-PPI personal loan income would need to rise to achieve the same level of profitability, given a 100 per cent reduction in PPI income, ranged from 13 per cent ([REDACTED]) to 93 per cent ([REDACTED]).
22. For credit cards, the estimates of the increase in non-PPI income that would be required to achieve the same level of rate of return were much lower. Estimates ranged from 1.02 per cent ([REDACTED]) to 22 per cent ([REDACTED]).<sup>4</sup> In all cases, distributors gave a lower figure for credit cards than for personal loans in their responses.
23. Only three distributors were able to provide a response relating to second-charge mortgages: [REDACTED], [REDACTED] and [REDACTED]. [REDACTED] said that a 100 per cent reduction in PPI income would necessitate an increase in its typical APR of between six and nine percentage points above current levels. This estimate was smaller than its projected increase for unsecured personal loans. [REDACTED] estimated that a 100 per cent reduction in PPI income would necessitate an increase in its APR of 8 per cent. This was lower than its estimate for personal loans (13 per cent). Finally, [REDACTED] estimated that, for [REDACTED] a

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<sup>2</sup>We were told that some customers, closest to the credit cut-off point, would face higher increases in APR than the reported figures for the portfolio as a whole.

<sup>3</sup>A 'basis point' (bps) represents one-hundredth of 1 per cent. A 500bps increase on a 10 per cent APR would therefore mean a 15 per cent APR after the reduction in PPI income.

<sup>4</sup>Based on an illustrative calculation showing the impact of an elimination of PPI income for a higher-risk customer with a £5,000 balance and a higher-risk customer with a £10,000 balance. This showed that a relative APR increase of 22 per cent could be required in order to offset the decline in PPI income.

100 per cent reduction in PPI income could necessitate an increase in APRs of up to 49 per cent above current levels.<sup>5</sup>

24. Most distributors did not say that a reduction in PPI income would have a significant effect on the pricing of their first-charge mortgage products. For example, [✂] estimated that non-PPI income would need to increase by 4.7 per cent to recover lost PPI income, equivalent to a 0.03 per cent increase in the APR.
25. The majority of distributors were unable to answer part (ii) of the modelling exercise. We were told that the decision to cease trading in a particular credit product would be taken after a full strategic review, which would encompass wider strategic considerations as well as the profitability of the individual product line in question. Therefore this question cannot be reliably answered with financial modelling alone.
26. In addition, the majority of distributors considered that their current levels of profitability, over the system of PPI and credit, were already below target rates, and that any further reduction would not be acceptable.

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<sup>5</sup>Based on an illustrative example of the pricing of two example loans in certain scenarios. To offset a 100 per cent reduction in PPI income from a higher-risk customer taking out a specific £5,000, five-year loan, a relative increase of 49 per cent could be required.