INFORMATICA, 2001, Vol. 12, No. 4, 519–546

Attracting Students through Price Bundling. A Conjoint Study of Swedish Students' Preferences of Retail Banking Services

Merja MANKILA
Gothenburg School of Economics and Commercial Law
Box 610, 405 30 Gothenburg, Sweden
e-mail: merja.mankila@handels.gu.se

Received: September 2001

Abstract. The article investigates the Swedish retail banks' application of price bundling in order to attract new customers, students. This is done through a customer survey about students' preferences concerning retail banking services, their price sensitiveness and banking behaviour. The conjoint analysis results showed that the students had relatively heterogeneous preferences, and four distinguishing segments could be found among them, namely a) plain banking, b) cheapest banking, c) modern banking, and d) traditional banking. The central factor in attracting students is the choice of services that are included in the bundle, and not the price. There were only roughly 20 percent who currently had a student bundle.

Key words: marketing, banking, strategic planning, price bundling, conjoint analysis.

1. Introduction

Customer acquisition is one of the main strategic aims in price bundling, which is defined as a selling arrangement of two or more services at a special price (Guiltinan, 1987). Price bundling works through homogenising the demand that happens through the sharing of the consumer surplus between the products so that the willingness to buy the total offer becomes, in certain circumstances, more likely than when the products are sold individually (Adams and Yellen, 1976; Schmalensee, 1984). The demand is additionally facilitated by a specific price reduction for the bundle compared with the sum of the individual prices. The strategy, in order to attract new customers, is then most likely to succeed if the products or services in the bundle are complementary, and if the demand is relatively price elastic (Guiltinan, 1987). The former demand condition enhances the customer's evaluation of the offer and the latter demand condition increases the likelihood of a customer to respond to the price reduction. Price bundling has then, in principle, two ways of attracting new customers: the services that are included in the bundle are of type that perform better together than individually, and the price discount.

Students form an important customer segment for retail banks as they are an attractive group of customers for their future profitability (Fry *et al.*, 1986; Lewis *et al.*, 1991). Price

Table 1

Price bundles for students applied in Sweden

S-E-B	Nordbanken	FöreningsSparbanken
• Current account with giro payment service • Loan promise • International debit card • Internet banking Price: SEK 250	• Current account with giro payment service • Telephone banking • Internet banking • International debit card • Interest rate benefits on current account and traditional savings account • Information brochure Price SEK 220	• Current account + International debit card + giro payment service/Internet bank offers a 50 percent price discount on the above mentioned services. • Additional bonus: 3.5 percent interest on the current account (normal rate is 0.25 percent).

[1]

bundling is then often applied to the student market in order to acquire new customers. Most of the US banks offer special bundled accounts to students (Kara *et al.*, 1994). In the UK the competition about students is severe (Lewis *et al.*, 1991) and the banks offer student and graduate student packages. The similar kind of price bundling towards students can also be found in Sweden where three of the four main retail banks offer one or another kind of student bundles as presented below in Table 1.

The price bundles in the Swedish market revolve around the current account and the payment services (giro payments, international debit card) as well as the Internet bank. The student bundle benefit is a considerable 50 percent price reduction for the services included in the bundle.

It seems as the banks assume that the students' banking needs are relatively homogeneous and simple. However, research about the youth and student market in the UK has shown that the market can be quite heterogeneous with respect to needs and behaviour (Lewis *et al.*, 1991). It can be suspected, therefore, that the current price bundles in Sweden can be improved with respect to their attractiveness and/or uniqueness. It has been examined in Ireland that the university students' overall tendency to switch accounts is around 18 percent per year (Colgate *et al.*, 1995). When the reasons for switching was investigated it was found out that 8 percent of the switches had been motivated by the "student bundle benefits" offered by the competitor banks. Student bundles appear not to be a self-evident way to succeed in attracting new customers although the conditions in the student market should fulfil the demand side requirements (complementary services and price sensitive customers) fairy well. What might be missing is the knowledge about the students' preferences concerning the retail banking services.

The aim of this article is to investigate the Swedish banks' student bundling strategy in terms of

- students preferences of the retail banking services,

[1]The bundle information is from 1999/2000 when the investigation was done.

- students' price sensitiveness,
- students' banking behaviour and use of price bundling,

and to make suggestions in order to improve the strategy based on the information of the demand side conditions. The article starts with a methodological discussion about the survey (Section 2). The results from the survey of students' preferences investigated by conjoint analysis and cluster analysis are presented next (Sections 3 and 4). Subsequently empirical evidence about students banking behaviour is presented in Section 5. The validity and reliability of the results is discussed in Section 6. Lastly follows conclusions (Section 7) and managerial implications (Section 8).

2. Conjoint Analysis

The survey method used in the essay is conjoint analysis. It is a multivariate technique used specifically to understand how respondents' preferences are developed (Green *et al.*, 1978; Hair *et al.*, 1995). Since 1971, it has been applied to a variety of problems in consumer research (Green *et al.*, 1978; Wittink *et al.*, 1989; Wittink *et al.*, 1994). The underlying assumption in conjoint analysis is that consumers' preferences are determined by trade-offs they must make between different product/service features. The conjoint analysis offers an estimate of a marginal utility for each of the attribute levels, a part worth, as well as it shows the relative importance of each of the attributes. A conjoint study can be done for the whole sample or individually for each of the respondents. The individual part worth's can then be used as a basis for segmentation (Green and Krieger, 1991). The current study is done as a traditional "tandem approach", which means that an ordinary conjoint analysis is run first, and the utilities obtained from that analysis are further used as an input in a cluster analysis in order to find appropriate segments[2].

This way of decision making needed in the conjoint analysis is faced by consumers in real life when they compare different product/service offerings and therefore, a realistic consumer choice procedure is one of the advantages with the method. Furthermore, financial services are proposed to be especially suitable to be studied by the conjoint analysis because of their multiattribute character (Teas *et al.*, 1985; Zinkhan *et al.*, 1991; Kara *et al.*, 1994; Oppewal and Vriens, 2000). It has been used in previous studies to improve the cash management account features, to measure service quality and to plan appropriate credit card strategies for the youth market.

2.1. *Survey Design*

A conjoint design should include all the variables that can be assumed to have an effect on customers' total utility of the choice situation/alternative. However, the choice of the

[2]Several integrated conjoint segmentation methods make the estimation of the conjoint utilities and the segmentation simultaneously, and in many cases they outperform the tandem clustering procedure (DeSarbo *et al.*, 1992). However, the research is based on a metric conjoint analysis while the date used in the current study is categorical rank-order data.

variables needs to be kept relatively low (6–10 attributes) as the risk for information overload is considerable (Green and Snirivasan, 1978). The current study about the student bundles was therefore, decided to contain only the main services and the price information in terms of the bundle price as well as the current account interest rate. Furthermore, the choice of the services to be incorporated in the current study was decided partly to follow the existing price bundles, and partly the current market trends in the Swedish retail banking market, i.e., the banks' advertisements about mutual fund/pension insurance investments. An interview with S-E-B and Nordbanken was conducted about their student bundling. Since the banks claimed to have based their price bundling decisions on their own customer surveys, a further explorative customer survey was not done in order to find the attributes to the study. A pre-test of the conjoint study was then done and some slight changes in the attributes and/or their levels were made based on the students' comments. In Table 2 the attributes and the attribute levels used in the current study are presented.

The information was chosen to be presented as full profiles. Seven variables with differing levels would have lead to 576 ($2^4 * 3^2 * 4$) full profile cards to be evaluated

Table 2
Attributes and attribute levels

Attributes	Attribute levels
Current account (including giro payment services and ATM card)	0.15% 2.50%
International debit card (Visa or Master)	Yes No
Distribution channel	Internet bank Telephone bank None (i.e., branch office)
Savings[3]	Mutual funds or pension insurance Brokerage services None
Loan promise	Yes No
Personal banker	Yes No
Yearly fee for the bundle	200 260 320 380

[3]The savings alternatives were formed as giving further price incentives apart from inclusion in the bundle. For example, students were considering to be saving SEK 200 per month against 20% price reduction for the yearly bundle price. Concerning treasury services students would not have to pay for the yearly fee for such an account.

by the respondents[4]. However, a fractional factorial design, using SPSS, eliminated the number of cards from 576 to 16. This type of orthogonal creation of full profile cards means that the variables are assumed to be independent from each other. An example of one of the full profile cards used in the study is given in Appendix A.

Additionally four cards were created as a hold out sample in order to check the internal validity of the model. An analysis of the hold out cards shows the conjoint model's ability to predict the ranking/rating of the hold out profiles. Consequently, each respondent was asked to rank 20 alternatives, which is a relatively demanding task.

2.2. *Data Collection*

The data collection was done at Gothenburg University and Chalmers University of Technology during December 1999 and January–February 2000. There are 52.520 students in Gothenburg divided in seven faculties. To the current study first and second year students were chosen as respondents. An attempt to a stratified proportional sampling within the seven faculties was done. For practical reasons students were met after the lectures in order to get as many respondents as possible at one time. It was, of course, not certain if all the teachers agreed on meeting although they were being randomly selected. Another difficulty was to motivate students to participate after their lectures. The data collection therefore also became dependent on convenience. However, the original sampling plan survived relatively well concerning the sample representative ness. The distribution of students in this survey among the faculties is shown in Table 3. A total of 462 students participated in the survey.

Table 3

Sample representative ness

Faculty	**Total sample of 462 respondents**	**Total in Sweden**
Humanities and theology	15.4%	7.0%
Law and social sciences	36.4%	41.0%
Natural science	17.2%	20.0%
Techniques	15.2%	15.0%
Medicine	7.0%	4.0%
Nursing and care	0.2%	8.0%
Artistic education	8.1%	3.0%

[4]The number of attributes and attribute levels determines the number of cards and in above 576 cards is the total number of cards including all the attribute/attribute level combinations. Fortunately the design is possible to reduce by an orthogonal design procedure so that only subsets of all profiles are needed in order to estimate the part worths. The SPSS procedure uses Plackett and Burman (1946) and Addelman (1961) plans when generating an orthogonal main-effects design.

2.3. *Data Processing*

The original sample size was 462 respondents. Although those students, who participated in the survey, were willing to put an honest effort into the study, it was clear that not all the answers were serious or useful. In the initial phase 19 respondents were removed from the sample because their answers were either systematic or included too many mistakes so that the ranking order could not be identified. Their number was so small that their inclusion would not affect the average results.

The remaining 443 respondents was randomly divided into two split samples of which the first counted for the main study ($n_1 = 214$) and the second was used for cross validation of the results ($n_2 = 228$). The conjoint analysis was run with SPSS 8.0. The results for these two groups are presented in the section "conjoint results", and the results concern the average for the whole group.

An investigation of each of the respondent's individual conjoint results revealed that the obtained utilities were of differing quality – the test statistics showed low correlations – as well as the individual results were very heterogeneous – the group average did not show the right picture of the attributes under investigation. This motivated a use of tandem approach with conjoint analysis which means that a conjoint analysis is run first, and the utilities obtained are subsequently used as an input in cluster analysis in order to find appropriate segments. Therefore, in order to increase the reliability of the cluster analysis in the current study the respondents whose test statistics showed "poor" values were excluded. The inclusion was based on two different statistics: Kendall's Tau ($>$0.895) for the conjoint model and Kendall's Tau for the holdout cards ($>$0.333). This resulted that as many as 41.8% of the respondents were excluded – this will be discussed in the section "validity and reliability of results".

Furthermore, cluster analysis was carried out with two different methods: Ward's method and K-means clustering in order to validate the results since it has been recognised that different clustering methods produce relatively different cluster solutions (DeSarbo *et al.*, 1992). Ward's method usually outperforms most other hierarchical clustering methods (Punj and Steward, 1983) which is why it is chosen as the main cluster method. K-means cluster analysis is an example of a non-hierarchical method, and in this study its function is to validate the results. The solutions were searched in two to five clusters based on the amount attributes included in the study, and an assumption that no bank would segment students further than in five segments. From the analysis of the cluster centroids a solution of four clusters is chosen to be presented since it highlights the differences between the respondents' preferences better than any of the other solutions. After dividing respondents into clusters a new conjoint analysis was done for each of the clusters in order to get a summary picture of the segments.

3. Results of the Conjoint Analysis

In this section the conjoint results are presented for the sample of 443 students who, however, are divided into two sub samples "main study" and "confirmation sample" as

was described earlier. A respondent profile for the samples of the students is shown in Table 4. The main sample is equally divided between males and females and most of the students are between 20 and 24 years old. Over 30 per cent of students come from the law and social sciences faculty. Natural sciences and techniques as well as humanities are the other main faculties. The confirmation sample is dominated by female students (57.2 percent) but otherwise the structure is as in the main sample.

A summary of the conjoint results for the main study and the confirmation sample is presented in Table 5. The numbers in the brackets refer to the confirmation sample. The importance column shows the relative importance of the attribute category in relation to one another whereas the part worth's show the utility assigned to the different levels of the attributes. The total worth of any combination of the different attributes can be obtained by adding up the individual part worth's plus the model constant. According to the results, the most preferable bundle combination for the students is a current account with 2.5 percent interest rate (0.6890), international debit card (2.1177), Internet banking (0.9459), opportunity to savings in mutual funds or pension insurance (1.0121), loan promise (0.4898), personal banker (0.7252), and the bundle is priced at SEK 200 per year (1.4279).

Table 4
Profile of respondents

Demographics	**Main study $n_1 = 214$**		**Confirmation sample $n_2 = 229$**	
Sex:	*Frequency*:	*%*	*Frequency*:	*%*
• Male	106	49.5	98	42.8
• Female	107	50.0	131	57.2
	1 missing			
Age:				
• Less than 20	17	7.9	21	9.2
• 20–24	123	57.5	131	57.2
• 25–29	40	18.7	50	21.8
• Over 30	32	15.0	27	11.8
	2 missing			
Faculty				
• Humanities and theology	32	15.0	36	15.7
• Law and social sciences	72	33.6	89	38.9
• Natural science	37	17.3	40	17.5
• Techniques	37	17.3	30	13.1
• Medicine	14	6.5	17	7.4
• Nursing and care	1	0.5	1	0.4
• Artistic education	20	9.3	16	7.0
	1 missing			

Table 5
Summary of group results

Attributes	Importance[5]	Attribute levels	Part worth
Current account interest rate	9.00% (7.99%)	2.5%	0.6890 (0.5133)
		0.15%	−0.6890 (−0.5133)
International debit card	22.21% (22.62%)	Yes	2.1177 (2.2505)
		No	−2.1177 (−2.2505)
Distribution channel	16.28% (17.32%)	Internet banking	0.9459 (1.1987)
		Telephone banking	0.4727 (0.2675)
		None (i.e., branch office)	−1.4186 (−1.0859)
Savings	15.06% (15.43%)	Mutual funds or pension insurance	1.0121 (1.0298)
		Brokerage services	0.0524 (0.0560)
		None	−1.0644 (−1.0859)
Loan promise	7.67% (8.25%)	Yes	0.4898 (0.5448)
		No	−0.4898 (−0.5448)
Personal banker	8.67% (7.22%)	Yes	0.7252 (0.6517)
		No	−0.7252 (−0.6517)
Price	21.31% (21.17%)	SEK 200	1.4279 (1.5126)
		SEK 260	0.7480 (0.8794)
		SEK 320	−0.2672 (−0.3859)
		SEK 380	−1.9086 (−2.0060)
Model constant			8.0055 (7.9434)

The average importance figures follow the magnitudes of the part worth's and, therefore, it is not surprising to find out that the most important attribute for students is the international debit card. It is a convenient way of paying in Sweden, as well as being very useful when going abroad.

Students are also concerned about the price, which is the second most important attribute. From the part worth estimates in Table 5 it can be seen that although the price SEK 200 is giving the highest utility, price SEK 260 is still experienced as a moderate price with a positive utility. However, if the price is increased to SEK 320 per year the utility becomes negative. Moreover, the latter change is larger than the change from the previous price indicating higher price sensitivity with increasing prices that can be seen

[5]The part worth values and the average importance values are related. However, in certain circumstances there can be a low part worth but a higher relative importance. See, for example, attributes "current account interest rate" and "personal banker". The part worths are calculated from a single set of data using the averaged data over all the subjects. The average importance is computed separately for each of the subjects and then averaged. This is done because unlike the part worths these will often differ from those computed by averaging the data.

even more clearly when the price is changed from SEK 320 to SEK 380. It can be concluded that, in general, students are relatively price sensitive since the price is considered as the second most important factor.

The delivery channel attribute is the third most important factor for the students, and their most preferable delivery channel is the Internet bank. Telephone banking also gives a positive utility value, and a bundle without any of these services forcing the student to go to a branch office would reduce the utility considerably.

The most surprising result seems to be the fact that students are willing to save SEK 200 each month on a long term savings alternative, i.e., mutual funds or pension insurance. Savings during the student time was not a priori assumed to be interesting for the students since they are living on relatively low incomes and were supposed to make only shorter term consumption decisions. However, the result is conditioned by the formulation of the opportunity that by so doing they would get a 20% price discount on the yearly fee for the bundle. This fact also shows another example of the students' price sensitiveness at the same time as it indicates regarding the preference to save.

The three attributes that are the least important for the students are the interest rate on current account + giro payment service and ATM-card, the promise of a loan and the personal banker. It seems reasonable that the interest rate on the current account is not very important factor for the average students on average since it is unlikely that they have high balances on their transaction accounts. Moreover, that attribute is coupled with giro payment services that become unnecessary if the students use the Internet bank. The opportunity to get a loan in order to purchase a computer does not seem to be a priority for the average student. In many universities computing facilities are very good, and parents also tend to help their children when bying a computer, why this might be the case. However, if the promise of getting a loan is included in the bundle it gives a slight utility increase for the student.

The result that the personal banker is not a very important factor is not unexpected since students prefer to take care of their banking businesses through the Internet bank or the telephone bank and dislike visiting a branch office. Students' banking affairs are also likely to be of a relatively simple character, which is why an own personal banker is not needed. This result may also give an indication of independent and highly sophisticated customers who do not usually need or want personal assistance.

4. Results of the Segmentation Analysis

The main results presented in the previous section showed some variety in the utility functions on the respondent level suggesting that students' preferences are heterogeneous. This result could be expected based on the previous research about the youth market (Lewis *et al.*, 1991). Four different customer groups were found in the cluster analysis that are portrayed in Fig. 1.

The first group of students value the international debit card highest, and these students are only moderately interested in the other banking services. Price comes as the

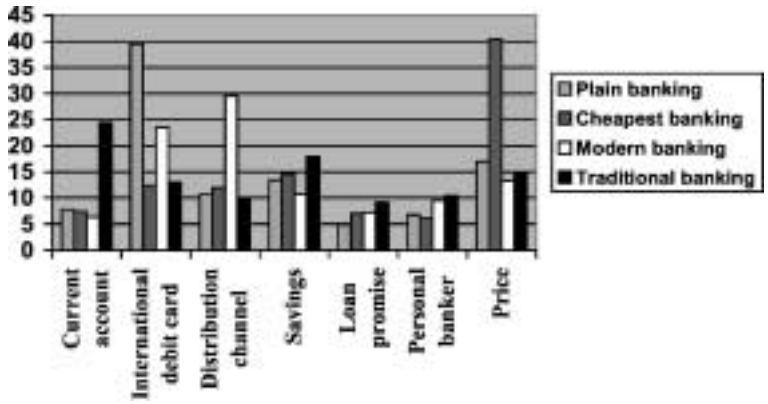

Fig. 1. Average importance in percent of the attributes by segment.

second most important factor. This group of students is called the "*plain banking*" group for their relatively simple preference structure.

The second group of students show high price sensitiveness. Roughly 40 percent of their utility originates from the price variable. The second most important feature for this group of students is the savings attribute. The savings alternative could lead to a price reduction of the bundle price and, consequently, it is likely that these price sensitive students assign it a high value. The price sensitivity that characterises this group leads to the segment label "*cheapest banking*".

The third group of students' highest priority is the distribution channel. They also value the international debit card very high. Due to these students' modern preferences the whole segment is called the "*modern banking*" group.

The students belonging to the last segment value the attribute current account coupled with the giro payments very highly as well as their being interested in the savings. For these students it is important to get a high return for their money both on the current account and through savings in mutual funds and/or pension insurance. They have a relatively low preference for the distribution channel, and a slightly higher preference for a personal banker than the other groups. This segment is, therefore, called "*traditional banking*".

4.1. *Segment 1: Plain Banking*

Around 30 percent of students (59 percent of the students in the confirmation sample) belong to this "plain banking" segment. The difference between the sample sizes indicates that the preferences found for this segment are valid for a larger group than would be indicated by the main results. There are also some differences concerning the distribution of the background variables. The differences may have some explanatory value regarding the differences in the results. Details of the respondents can be found in Appendix B1. The conjoint results are presented on the other hand in Table 6. The values in the brackets refer to the confirmation sample.

Table 6
Summary of group results for the segment "plain banking"

Attributes	Importance	Attribute levels	Part worth
Current account interest rate	7.77% (5.31%)	2.5%	0.5641 (0.2961)
		0.15%	−0.6541 (−0.2961)
International debit card	39.50% (33.12%)	Yes	3.7023 (3.2383)
		No	−3.7023 (−3.2383)
Distribution channel	10.67% (17.13%)	Internet banking	0.4364 (1.3719)
		Telephone banking	0.4759 (0.1516)
		None (i.e., branch office)	−0.9123 (−1.5234)
Savings	13.45% (15.33%)	Mutual funds or pension insurance	1.3925 (0.8802)
		Brokerage services	−0.5943 (0.3255)
		None	−0.7982 (−1.2057)
Loan promise	4.89% (6.09%)	Yes	0.3799 (0.5930)
		No	−0.3799 (−0.5930)
Personal banker	6.78% (7.15%)	Yes	0.6135 (0.6711)
		No	−0.6135 (−0.6711)
Price	16.94% (15.88%)	SEK 200	1.1365 (1.1086)
		SEK 260	0.8668 (0.6617)
		SEK 320	−0.3701 (−0.3664)
		SEK 380	−1.6332 (−1.4039)
Model constant			8.0378 (7.9378)

The students seem not to value any service, other than the international debit card and, therefore, they show relatively simple banking habits. The price paid for the student bundle is the second most important factor but the students seem to be almost as happy to pay SEK 260 for the bundle as SEK 200. Price sensitivity increases notably when the price gets nearer SEK 300. Since the distribution channel attribute does not appear to be of higher importance than roughly 10 percent, it is assumed that they contact their bank relatively seldom. The students in this group are, on the other hand, interested in saving in mutual funds/pension insurance products. This attribute has the second largest individual part worth estimate although the relative importance is less than the one for the price attribute.

Concerning the utility estimates for the main and confirmation samples, it can be noticed that some attributes obtain slightly opposite values. For example, the part worth differ concerning Internet banking and brokerage services. The results according to the main sample would show a clear preference in savings in mutual funds whereas brokerage services would not be as popular, while in the confirmation sample there are more

students preferring brokerage services than mutual funds. There are also differences in the marginal utility figures for the distribution channel attribute. The main results suggest that Internet banking and telephone banking are equally interesting whereas according to the confirmation sample Internet banking is clearly preferred to that of telephone banking.

These differences might be due to the differences in the distribution of the background variables between the samples. In the confirmation sample 45 percent of students come from law and social sciences as opposed to 29 percent in the main study sample. It could be assumed that business students, who formed a large group of social scientists, are more interested in the brokerage services. The same factor can also affect the stronger preference for Internet banking. Other possible explanations can be derived from the variables sex or age. In the confirmation sample there are more males than in the main study, and they could probably be more interested in brokerage services while females, on average, might prefer 'securer' mutual funds or pension insurance products. Internet banking also seems to be more preferred by males (compare these results also with the segment "modern banking" later on). Concerning the age of students it can be seen that the confirmation sample has got an older age structure than is the case for the main sample. These older students may have better finances and are therefore willing to take higher risks. In spite of these differences between the two groups, other preference values, or at least their signs, follow the same pattern.

4.2. *Segment 2: Cheapest Banking*

The second customer segment is called the "cheapest banking" group for their price sensitiveness as measured by the relative importance for the price attribute. Approximately one third of the students (25 percent for the confirmation sample) have preferences that suit the utility pattern presented in Table 7. The distribution between males and females is approximately 40 to 60 (30 to 70 for the confirmation sample) percent which points out that female students may, on average, be more price sensitive than male students. Law and social science students dominate the main study group while the largest faculty concerning the confirmation sample are natural scientists. The age distribution is relatively equal between the samples. The details for the respondent profile can be found in Appendix B2.

As the name implies, price is the most important factor and to pay the lowest possible price yields the highest utility for the students in this group. From the part worths it is seen that the students are very price sensitive throughout all the price levels as the utility drops significantly along the higher prices. The higher interest rate attribute level also shows a reasonably high individual part worth value but its relative importance is only 7.5 percent. It is the fifth most important factor.

As regards banking services, the price sensitive students value the international debit card highest. However, the average importance for the savings attribute is higher. According to the main results this group of students prefers the brokerage services to saving in mutual funds/pension insurance. This result is contradicted by the confirmation sample where mutual funds type of saving is preferred while brokerage services yield a negative

Table 7

Summary of group results for the segment "cheapest banking"

Attributes	Importance	Attribute levels	Part worth
Current account interest rate	7.47% (6.92%)	2.5% 0.15%	0.7743 (0.6066) –0.7743 (–0.6066)
International debit card	12.42% (11.30%)	Yes No	1.2986 (1.1360) –1.2986 (–1.1360)
Distribution channel	11.92% (13.07%)	Internet banking Telephone banking None (i.e., branch office)	0.4028 (0.4167) 0.8160 (0.8100) –1.2188 (–1.2267)
Savings	14.65% (14.40%)	Mutual funds or pension insurance Brokerage services None	–0.0185 (1.4853) 0.9815 (–0.8419) –0.9630 (–0.6434)
Loan promise	7.05% (6.73%)	Yes No	0.6389 (0.0478) –0.6389 (–0.0478)
Personal banker	6.11% (5.48%)	Yes No	0.5243 (0.4191) –0.5243 (–0.4191)
Price	40.38% (42.10%)	SEK 200 SEK 260 SEK 320 SEK 380	3.3958 (3.6029) 1.8611 (2.0441) –1.0278 (–0.9559) –4.2292 (–4.6912)
Model constant			8.4039 (8.0319)

marginal utility. However, when the respondent profile variables are taken into consideration these results may again be explained by the different compositions between males and females as well as by the faculty. In the main sample there are more males than in the confirmation sample, and a large share of these students study business and other social sciences. This would lead to exactly the same explanation as was previously offered for the segment "plain banking" for similar differences: males studying business could be expected to be less risk averse and, therefore, to prefer brokerage services.

It can also be noticed that the price sensitive group of students would prefer telephone banking to Internet banking. This result is consistent with both of the samples, and it disagrees with the average results for the whole student sample. However, the interest for the banking services seems not to be generally pronounced in this group, based on the low values for the individual part worths for the different service attributes. Consequently, the results indicate that for this group of students banking may be merely a necessary evil, and they want to bank as cheaply as possible.

4.3. *Segment 3: Modern Banking*

The "modern banking" group accounts for around 25 percent of the students in the main sample but only a little less than 10 percent in the confirmation sample, so here again there is a difference in the segment size between the samples. Both of the samples are dominated by males who mainly study law and social sciences. The age distribution is relatively equal between the samples. Appendix B3 shows the respondent profile details.

The conjoint results are presented in Table 8 where the values in the brackets count for the confirmation sample. This group of students have a very high preference for the distribution channel attribute, and of the distribution channel alternatives they prefer Internet banking. This preference is not only supported by the sizable part worth estimates for Internet banking attribute but it is also confirmed by the fact that telephone banking is giving a negative utility.

The students in the modern banking group also have a very strong preference to having international debit card. This group of students assign a relatively high utility on

Table 8
Summary of group results for the segment "modern banking"

Attributes	Importance	Attribute levels	Part worth
Current account interest rate	6.39% (8.72%)	2.5%	0.3633 (0.4219)
		0.15%	−0.3633 (−0.4219)
International debit card	23.49% (9.43%)	Yes	2.1719 (0.9115)
		No	−2.1719 (−0.9115)
Distribution channel	29.50% (43.60%)	Internet banking	3.1979 (5.1597)
		Telephone banking	−0.6693 (−2.1632)
		None (i.e., branch office)	−2.5286 (−2.9965)
Savings	10.78% (12.23%)	Mutual funds or pension insurance	0.5781 (0.4375)
		Brokerage services	0.4492 (0.4687)
		None	−1.0273 (−0.9063)
Loan promise	7.12% (5.65%)	Yes	0.7266 (0.2135)
		No	−0.7266 (−0.2135)
Personal banker	9.46% (6.00%)	Yes	0.9492 (0.2969)
		No	−0.9492 (−0.2969)
Price	13.26% (14.37%)	SEK 200	0.7187 (0.4844)
		SEK 260	0.2578 (0.8385)
		SEK 320	0.1563 (−0.7240)
		SEK 380	−1.1328 (−0.5990)
Model constant			7.5560 (7.0747)

having a contact person in a bank when looking at the main results, but this attribute is, in comparison with the other attributes, not very important. Moreover, the values according to the confirmation sample show slightly vague preference for a personal banker.

Savings is also, for this group of students, of some interest and the interest is divided equally between mutual funds and brokerage services. Concerning the price variable it is very interesting to notice that even the price level of SEK 320 per year is assigned a positive utility. However, the price sensitivity increases considerably if the price is increased to SEK 380. The result for the confirmation sample, on the other hand, shows somewhat irrational price behaviour. The most preferred price level is SEK 260, and the highest price SEK 380 has acquired a less negative utility than the previous price level. This could also be a sign of the lesser importance of the price attribute in general and, therefore, it would result in ad hoc choices concerning the price attribute. This, in turn, would confirm the conclusion about a relatively low price sensitivity for this group of students. However, the size of the confirmation sample segment may have an effect on the results. One further indication of a low price sensitivity may be obtained from the utility values for the current account interest rate attribute since that attribute is the least important for these students.

4.4. *Segment 4: Traditional Banking*

The "traditional banking" group mainly consists of female students who study the humanities and theology. There are also a large proportion of fine arts students within this group. There are notable differeces concerning the faculty compared with the earlier segments. Another difference is that the sample sizes are small for both groups. Only 14 percent of the students belong to this traditional banking segment and the comparable size for the confirmation sample is 7 percent. Further respondent details are given Appendix B4.

The conjoint results for this group are presented in Table 9. The name "traditional banking" segment does not literally describe "traditionality" since these students prefer, for example, telephone banking to visiting a branch office and they also want to have the international debit card. The name is merely derived from the interest for interest rates and the way of payments.

The traditional banking type of students looks mainly at the current account interest rates and, quite logically, they prefer more to less. The attribute is also coupled with the giro payment service, which is perhaps an even more significant factor increasing the importance of this attribute. Making payments through the giro service is the traditional way, and the only payment alternative, is really the Internet bank if the student does not visit the branch office. And these students do not assign much utility to the Internet bank.

The students in this group also have great interest in saving in mutual funds or pension insurance products as shown by the individual part worth values and the relative importance figure for the savings attribute as a whole. Brokerage services are, however, apparently too risky since its utility value is negative. The fact that most of the respondents were women supports these preferences according to the earlier results when the brokerage services were preferred by segments dominated by males.

Table 9
Summary of group results for the "traditional banking" group

Attributes	Importance	Attribute levels	Part worth
Current account interest rate	24.43% (27.80%)	2.5%	2.3750 (2.7917)
		0.15%	−2.3750 (−2.7917)
International debit card	13.01% (8.21%)	Yes	1.1618 (0.7361)
		No	−1.1618 (−0.7361)
Distribution channel	10.04% (14.51%)	Internet banking	−0.1078 (0.2037)
		Telephone banking	0.6422 (1.1898)
		None (i.e., branch office)	−0.5343 (−1.3935)
Savings	17.95% (13.74%)	Mutual funds or pension insurance	1.7941 (1.2963)
		Brokerage services	−0.7353 (0.0463)
		None	−1.0588 (−1.3426)
Loan promise	9.21% (15.90%)	Yes	−0.0368 (1.3056)
		No	0.0368 (−1.3056)
Personal banker	10.48% (6.25%)	Yes	0.1029 (0.6667)
		No	−0.1029 (−0.6667)
Price	14.88% (21.17%)	SEK 200	0.6838 (0.7778)
		SEK 260	0.4779 (0.1389)
		SEK 320	−0.3162 (0.3056)
		SEK 380	−0.8456 (−1.2222)
Model constant			8.0270 (8.1250)

Price is the third most important factor for this segment, and the results seem to be following the same pattern as for the segment "plain banking". The price SEK 260 appears as a normal price, and whether the bundle costs SEK 200 or SEK 260 seems not to affect the students' utility level very much. These students are, therefore, not very price sensitive at the price level below SEK 300.

The results regarding the loan promise demonstrate how preferences differ largely between the individuals in this segment. This is true for the attributes that are not so important whereas the most important factors are evaluated similarly. However, it is surprising to notice that a loan promise can also be experienced as a negative factor if it is included in the bundle. It is possible that if these students are careful and cautious about their money, as is indicated by their interest for interest rates and savings, an incentive to take a loan may be too aggressive an offer. However, once again, the result is quite the contradictory for the confirmation sample concerning this variable why there is not much support for this finding – other than that it demonstrates the remaining heterogeneity of students' preferences even after clustering them into the "homogeneous" segments.

5. Students Banking Behaviour in Sweden

In addition to the ranking assignment in conjoint analysis, students were asked to give answers to some questions about their prevous and future banking behaviour. Their replies are shown in Table 10 now joining the split samples from the cluster analysis together, i.e., the figures are based on 258 respondents' answers.

There are not any dramatic differences in the banking behaviour between students in the different segments. However, several numbers, for example, concerning the cheapest banking segment show that these students' profound price sensitiveness is to a certain degree confirmed by their behaviour. 67.1 percent of these customers only use one bank,

Table 10
Statistics about students' banking behaviour

	Simple banking: 46% of students	**Cheapest banking: 27% of students**	**Modern banking: 17% of students**	**Traditional banking: 10% of students**
How many banks do you bank with currently?				
1. One bank	73.7%	67.1%	72.7%	80.8%
2. Two banks	22.0%	27.1%	20.5%	15.4%
3. More than two banks	4.2%	5.7%	6.8%	3.8%
Which banks?				
1. FöreningsSparbanken	36.9%	48.3%	33.3%	50.0%
2. Handelsbanken	17.4%	10.1%	14.0%	10.7%
3. Nordbanken	18.8%	16.9%	17.5%	25.0%
4. S-E-B	21.5%	14.6%	29.8%	10.7%
5. Niche bank	5.4%	10.1%	5.3%	3.6%
How many times have you changed banks?				
1. Never	64.4%	67.1%	68.2%	65.4%
2. Once	25.4%	21.4%	22.7%	26.9%
3. More than once	8.5%	11.4%	9.1%	3.8%
Do you intend to change banks?				
1. Yes	7.6%	10.0%	6.8%	–
2. No	54.2%	45.7%	70.5%	65.4%
3. I am not sure	38.1%	44.3%	22.7%	34.6%
Do you have a student bundle currently?				
1. Yes	22.9%	11.4%	25.0%	–
2. No	77.1%	88.6%	75.0%	100%

which is the lowest figure compared with the other segments. 10.1 percent of the cheapest banking students use niche banks that profile as a cheap alternative to the existing large banks and that share is twice as big as the other segments'. The students in this segment have larger intentions to switch banks in the future than any of the other segments: 10 percent are sure about switching and 44.3 percent are not sure whether to stay or to switch. Based on these numbers they can be assumed to have shopped for price in the past and they seem to continue shopping for better deals in the future. However, the absolute numbers show that even the most price sensitive students are relatively inert to switch banks, after all 67.1 percent of them have never changed banks which is in line with the other segments. Only 11.4 percent of price sensitive customers have a student bundle which indicates that the price sensitive customers' demand is not very much affected by the considerable price discounts shown in the bundles.

"Modern banking" group, in turn, shows a higher use of student bundles. 25 percent of them use it. They seem also to be satisfied with their current banks since their intentions to switch banks are the lowest of all the segments. Although students' use of banks is relatively well distributed within the segments it is notable that nearly 30 percent of these students use S-E-B which has been the most aggressive bank with its student bundling, and it was the first to start in Sweden.

Students in the "traditional banking" segment seem to be the most "loyal" customers if the loyalty is measured as a concentration of the banking business to only one bank: 80.8 percent of these customers bank only with one bank. In addition, none of the students have definite intentions to switch banks in the future and 65.4 percent are sure of staying. It is perhaps not surprising that not any of these students use the price bundles banks currently offer since, as illustrated in Table 1, the bundles circle around Internet banking whereas the "traditional banking" customers prefer the telephone bank and they were most interested in savings in mutual funds.

Concerning the "plain banking" segment, which is the largest segment, 22.9 percent use price bundles. This figure is high compared with the other segments although the share is not large in the absolute terms.

It is noteworthy that student bundling is not more popular among the students than the figures point out. It leads easily to a conclusion that price bundling has not been very efficient way of attracting customers in Sweden. More insight into this question is obtained when the use of student bundles is compared with the students' overall bank switching behaviour. Table 11 illustrates a situation when the students have been divided into two groups: those having a student bundle and those not having a student bundle. The numbers in the brackets in Table 11 refer to the number of students.

Chi-Square test statistics for group differences shows a statistically significant effect of student bundling to bank switching behaviour. Pearson Chi-Square value is 7.373. The conclusion is that the retail banks' student bundling strategy has had an effect on bank switching.

Table 11
Students' bank switching behaviour vs. use of student bundles[6]

	Never changed bank	**Once changed bank**	**More than once changed banks**
Student bundle YES	54.7% (41)	34.7% (26)	10.7% (8)
Student bundle NO	70.5% (253)	21.4% (77)	8.1% (29)

6. Reliability and Validity of the Results

6.1. *Conjoint Models*

The statistics about the validity of the models is presented in Table 12. Kendall's tau measures the correlation between the observed and the estimated preferences when a rank-order data is in question, which is the case in the current study. The second column shows a cross-validity test about the model's ability to predict the ranking of the hold out profiles. The test statistics show very high overall correlations for all the conjoint models, which is proof of very good model fits[7]. The P-values are given in the brackets.

The reliability of the results is additionally supported by the fact that the two split samples led approximately to the same results with the different analysis between the samples. There were slight differences regarding some attributes and their levels in the segmentation results but the most significant attributes showed very similar values. The differences illustrate only the fact that students' preferences are not totally homogeneous within the segments and that the conjoint results are only averages to the group of students with a considerably similar, but not identical, preference structure. Additional explanations of the differences could be obtained from the background variables.

The Kendall's tau statistics for the four holdout cards confirm the general picture of very reliable models. There are, however, three models where the cross-validity is slightly lacking, namely simple banking confirmation sample and both of the traditional banking samples. The correlation for these models range from 0.333 to 0.6777 and the figures are not statistically significant at the 5 percent level, which is the usual limit in order to accept statistical results. There is, nevertheless, a positive correlation between the rankings of the observed cards and the order of the holdout cards so the three models are not totally unacceptable. Moreover, the holdout cards are not used when the utilities are estimated so this lack of cross-validity does not affect the conjoint estimates as such. The results indicate, however, that some caution should be taken into consideration when the three models are analysed. It should also be emphasised that the discrepancy is not due to the individual respondents poor values.

[6]The table is based on the whole sample of 443 students. 10 is missing data.

[7]In conjoint analysis the number of parameters is relatively close to the number of rankings why the high Kendall's tau values may be inflated to a certain degree.

Table 12
Validity of the models

	Kendall's tau	**Kendall's tau for the 4 holdouts**
The main sample ($n_1 = 214$)	0.967 (0.000)	1.000 (0.0208)
The confirmation sample ($n_2 = 229$)	0.950 (0.000)	1.000 (0.0208)
Simple banking main study ($n = 38$)	0.983 (0.000)	1.000 (0.0208)
Simple banking confirmation ($n = 80$)	0.950 (0.000)	0.667 (0.0871)
Cheapest banking main study ($n = 36$)	0.983 (0.000)	1.000 (0.0208)
Cheapest banking confirmation ($n = 34$)	0.983 (0.000)	1.000 (0.0208)
Modern banking main study ($n = 32$)	0.950 (0.000)	1.000 (0.0208)
Modern banking confirmation ($n = 12$)	0.983 (0.000)	1.000 (0.0208)
Traditional banking main study ($n = 17$)	0.950 (0.000)	0.667 (0.0871)
Traditional banking confirmation ($n = 9$)	0.962 (0.000)	0.333 (0.2485)

6.2. *Cluster Analysis*

The existence of many different cluster solutions is the main argument against the "tandem approach" in conjoint analysis due to the sensitivity of cluster analysis on the underlying data and many possible clustering algorithms that in principle could be used. The validity of the cluster analysis was attempted to improve through the inclusion procedure of the respondents whose test statistic values showed poorer values than those explained in the section " data processing". The inclusion of as many as 41.8% of respondents did not affect the average results of the conjoint analysis which was tested by a replication of the conjoint analysis with the "clean" smaller sub samples. In addition, the background variables remained stable concerning the sex, age, and faculty distribution. Therefore, there is no reason to believe that the cluster analysis, when based on only 60 percent of the maximum amount of the respondents would yield totally different results than those that would have been obtained if all the respondents' answers could have used. Addi-

tionally, the cluster analysis was done with tow different methods in order to test the reliability of the results. They produced reasonably similar cluster sizes and cluster centroids for the two samples. Because the cluster analysis is never an exact science, it was judged that the obtained cluster solutions were satisfactorily similar. Therefore, the presented cluster solution is determined to be reliable especially since the results have been able to confirm with the split sampling procedure.

6.3. *Respondents*

Together with the conjoint analysis the respondents were also asked several questions about their opinion of the survey, if something was missing, how they had done the ranking, what they felt during the survey, and how they evaluated the difficultness of the survey. This information was considered as an important check for the trustworthiness of the use of conjoint method since no study becomes better than the input it is based on. It seems confident to notice that the respondents have had all kinds of feelings, even negative. Most of the respondents felt helpful, interested, rational, motivated and useful when doing the ranking. This is natural since the students who participated in the survey did it voluntarily. Still many respondents in the group were also irritated and confused. Only a small fraction of students have felt used or been suspicious.

The most recurring answers indicated that the ranking of the 20 cards was a difficult task, and the respondents were not sure whether they were able to be as consistent as they would like to have been. Students' seemed not to miss any further information or other relevant decision variables. In some cases students complained about the time frame in which they had to do the ranking, and would liked to have spent more time with it. An average time for the ranking was 30 minutes but the students were allowed to stay as long as they wanted. Table 13 shows how the students assessed the difficulty of the ranking procedure.

Over half of the respondents thought that the ranking was moderately difficult or very difficult, which is quite natural in a process where 20 cards are to be set in order of preference. Those evaluating it to be easy or moderately easy can be suspected as not having taken the assignment seriously. However, these results confirm the earlier findings about the validity: the respondents' answers can be deemed to be consistent to a satisfactory degree and they have done theirs best in the ranking process.

Table 13

Respondents' assessments of the difficulty of the ranking process[8]

1: very easy	**2: moderately easy**	**3: neither easy nor difficult**	**4: moderately difficult**	**5: very difficult**
2.3%	20.4%	28.1%	41.4%	7.8%

[8]Based on the 443 respondents' answers

The lottery ticket that was given to the students as a reward (worth SEK 10) is not assumed to have affected the conjoint results as students did not have the possibility of being able to figure out what kind of results the researcher may have wanted. The lottery ticket was necessary to get the students to participate in the study.

6.4. *Sampling Method and Generalisability of the Results*

Yet another point worth mentioning concerns the data gathering method. Since the sampling procedure could not, for practical reasons, be totally random and have those who were chosen not all chose to take part in the study. It could be estimated that around 25 percent of the students stayed on average. There is a question whether the graduating students who left would have had totally different preferences than the ones taking part in the study. It seems more likely that the "missing" students were less interested in retail banking services, or were in a hurry etc in general than that their preferences would be totally different from the ones obtained in this study. Of course this cannot be argued with full confidence but there would not be any way to force a person to do the conjoint evaluations, if they did not want to, which is why this is impossible to test empirically.

The last point concerns the generalisability of the results. The data was collected at Gothenburg University and Chalmers University of Technology in Sweden. The students in the sample come from different faculties and that distribution follows relatively well the situation in Sweden as a whole. The graduating students use of the different banks is almost proportionally equal in all the samples. Since many students move to a large student town such as Gotenburg, from nay parts of Sweden, it is likely that the results obtained in this study would not only apply to students, in general, in Gotenburg but also to a considerable degree for the whole country. Internationally the results could be most valid in the retail banking markets that have similar characteristics to Sweden. However, the results are valid only for the student market and they would not be generalisable to other customer groups in retail banking.

Sometimes the segments were dominated by one faculty or another. There were also differences between the segments in the distribution of the variable sex. Such background factors offer further depth in the analysis of the obtained results. Although some general conclusions were drawn, suvh as females being more interested in the mutual funds/pension insurance products than men, whereas men were more into brokerage services, these differences are not proved to be statistically significant. In all the groups there were always both female and male students, as well as their coming from all the faculties. The results concerning the background variables should, therefore, be taken more as hypotheses and studied more carefully in the subsequent projects.

7. Conclusions

The survey results indicated that the customer attraction has not been very successful through the Swedish retail banks' price bundling strategy if measured in absolute terms. It was found out that only approximately 20 percent of the students use the student bundles

that are offered to them. On the other hand, a closer look at the students' actual switching behaviour between the groups having a student bundle and not having the student bundle showed a statistically significant difference between the groups. The conclusion is that students who have the student bundle have been more active in bank switching. This is a sign of some success of price bundling with respect to customer acquisition.

The low use of price bundles by the students could be caused by a combination of the following reasons:

- not attractive price bundle offers in terms of the bundle contents and the price;
- similarity between the banks' price bundles;
- unsatisfactory marketing and selling efforts by the banks combined with lack of interest among the students.

The bundle contents and price discount. The conjoint analysis showed that the students' preferences concerning the retail banking services are heterogeneous and four distinctive preference patterns could be identified. This diversity is not captured in the current student bundles offered by the Swedish banks. Firstly, only one price bundle is offered to the whole market by each of the banks. Secondly, some services that were highly valued by the students such as mutual funds or brokerage services are not currently offered in the student bundles. On the other hand, promise of a loan is offered by S-E-B and Nordbanken but that attribute was one of the least preferred by the students across the segments. Thirdly, the current price level is seen as a "normal" price which does not attract the students in any particular way.

The "modern banking" group of students used the student bundles most. Their preferences concerning the banking services compares best with S-E-B's price bundle. In the "modern banking" group the share of students banking with S-E-B was highest. Based on the fact that the students in the modern banking group were the least price sensitive it is concluded that the student bundle that matches the students' preference pattern of the services will be the success factor in student bundling. The price discount is of secondary importance. This conclusion is additionally supported by the behaviour of the "cheapest banking" segment whose use of the student bundles is proportionally smaller in spite of their profound price sensitiveness.

Similarity between the retail banks' price bundles. The low use of student bundles is also likely to be due to the non-uniqueness of the student offers which does not give many incentives for the students to change banks.

Unsatisfactory marketing and selling effort. The results may also imply that the Swedish retail banks' marketing and selling efforts may need to be improved. Although the student bundles are similar between the banks, which would not motivate to change banks, it could be assumed that the students enjoyed the 50 percent price discount offered in the student bundle at their own bank. This is obviously not the case currently because only around 20 percent of the students use the student bundle. Some problems that the financial services consumers face are lack of understanding and lack of interest (Ennew and McKechnie, 1998). These factors could also play a major role of the low possession of student bundles. The use of conjoint analysis as a survey method showed the importance of a clear bundle offer that shows the benefits in a simple and understandable way

for the students so that the offers can be compared in order to make a decision. At the same time the participation rate indicated about the lack of interest.

8. Managerial Implications

The results also offer some managerial implications in order to improve the price bundling strategy to attract student customers in Sweden. Two principal suggestions are advocated: 1) to offer several price bundles to the specific segments or 2) to offer one flexible bundle structure that allows for individual differences.

1) Several Price Bundles to Different Segments
The international debit card was the most preferred service according to the students and its inclusion in any student bundle is given. The conjoint results showed several possibilities to differentiate the student bundle:

- delivery channel: Internet bank – telephone bank;
- saving: mutual funds/pension insurance – brokerage services;
- interest rate on the current account: 2.5%–0.15%;
- price.

Two of the segments preferred the Internet bank, namely the "plain banking" and the "modern banking" groups. The remaining two segments, "cheapest banking" and "traditional banking", preferred the telephone bank. The delivery channel attribute would offer a possibility to make two different price bundles starting from the choice of the preferred delivery channel.

Savings were preferred by all the segments but the preference varied between the mutual funds/pension insurance and the brokerage services. Due to these differences the results imply that the savings alternative is to be included in the price bundle but the savings form should be left open. It is also emphasised that the savings alternative was combined with additional price reductions for the bundle price, which is a likely factor to have affected the popularity to save although both types of savings are also popular on their own right. This in turn is an apparent example of how price bundling works in order to enhance the demand when the price discount is directed to a specific purpose.

The interest rate for the current account is another possibility to differentiate the student bundles. However, the interest rate (+giro payment service + ATM-card) was only clearly significant for the "traditional banking" segment and moderately significant for the "cheapest banking" segment. A difference in the interest rate could, nevertheless, motivate a dissimilarity in the total price for the bundle.

Concerning the price attribute it was observed that also the price sensitiveness varied between the students. If the price is used as a differentiator it is necessary that the bundle contents are adequately dissimilar to motivate the price differences. Only about 30 percent of the students revealed a high price sensitiveness throughout the price levels presented in the study. Therefore, further price reductions do not seem to offer great possibilities of attracting students apart from the price sensitive group. On the other hand it would

be difficult to set a price higher than SEK 300 per year although the "modern banking" segment gave some implications about its acceptability.

2) A Flexible Price Bundle Model

An alternative to offer two (or more) different price bundles for the student market could be a flexible price bundle model where the students are allowed to pick up the services they desire from a specific student bundle frame that defines the service options available for the students. The price would be dependent on the service choice along a prespecified formula. This suggestion is based on the fact that the segment results implied that the obtained models could not capture *all* the differences between the respondents although the results were greatly improved through the segmentation procedure. Therefore, the attributes as were the loan demand or personal banker which throughout the segments were the least preferred services on average, might still be highly preferred by some and worth offering to those who value them highly.

Appendix A: An example of a conjoint full profile card

Card 3

Number of respondent

Student bundle

- ☐ Current account with 0.15% interest rate, giro payment service and ATM-card
- ☐ International debit card with Visa/Master
- ☐ If you save at least SEK 200 each month to a long term savings account (mutual funds or pension insurances), you will get 20% reduction of the yearly fee for the bundle.
- ☐ Loan promise for buying a computer, SEK 25.000.

Price: SEK 380 per year

Ranking

Appendix B: Profile of respondents

Table B1

Profile of respondents in the segment "plain banking"

Demographics	**Main study $n = 38$**		**Confirmation sample $n = 80$**	
Sex:	*Frequency*:	*%*	*Frequency*:	*%*
• Male	16	42.1	40	50.0
• Female	22	57.9	40	50.0
Age:				
• Less than 20	2	5.3	7	8.8
• 20–24	28	73.7	48	60.0
• 25–29	3	7.9	20	25.0
• Over 30	5	13.2	5	6.3
Faculty				
• Humanities and theology	5	13.8	9	11.3
• Law and social sciences	11	28.9	36	45.0
• Natural science	6	15.8	15	18.8
• Techniques	9	23.7	10	12.5
• Medicine	2	5.3	2	2.5
• Nursing and care	1	2.6	1	1.3
• Artistic education	4	10.5	7	8.8

Table B2

Profile of respondents in the segment "cheapest banking"

Demographics	**Main study $n = 36$**		**Confirmation sample $n = 34$**	
Sex:	*Frequency*:	*%*	*Frequency*:	*%*
• Male	15	41.7	10	29.4
• Female	21	58.3	24	70.6
Age:				
• Less than 20	3	8.3	4	9.2
• 20–24	18	50.0	17	57.2
• 25–29	7	19.4	8	21.8
• Over 30	8	22.2	5	11.8
Faculty				
• Humanities and theology	2	5.6	4	11.8
• Law and social sciences	13	36.1	4	11.8
• Natural science	3	8.3	11	32.4
• Techniques	7	19.4	7	20.6
• Medicine	5	13.9	4	11.8
• Nursing and care • Artistic education	6	16.7	4	11.8
	missing 1			

Table B3

Profile of respondents in the segment "modern banking"

Demographics	**Main study $n = 32$**		**Confirmation sample $n = 12$**	
Sex:	*Frequency*:	*%*	*Frequency*:	*%*
• Male	22	68.8	7	58.3
• Female	10	31.3	5	41.7
Age:				
• Less than 20	2	6.3	2	16.7
• 20–24	18	56.3	6	50.0
• 25–29	8	25.0	2	16.7
• Over 30	4	12.5	2	16.7
Faculty				
• Humanities and theology	2	6.3	2	16.7
• Law and social sciences	14	43.8	7	58.3
• Natural science	7	21.9	1	8.3
• Techniques	4	12.5	1	8.3
• Medicine	3	9.4		
• Nursing and care • Artistic education	2	6.3	1	8.3

Table B4

Profile of respondents in the segment "traditional banking"

Demographics	**Main study $n = 17$**		**Confirmation sample $n = 9$**	
Sex:	*Frequency*:	*%*	*Frequency*:	*%*
• Male	7	41.2	3	33.3
• Female	10	58.8	6	66.7
Age:				
• Less than 20	1	5.9	1	11.1
• 20–24	8	47.1	4	44.4
• 25–29	5	29.4	2	22.2
• Over 30	3	17.6	2	22.2
Faculty				
• Humanities and theology	5	29.4	5	55.6
• Law and social sciences	1	5.9	3	33.3
• Natural science	3	17.6		
• Techniques	4	23.5	1	11.1
• Medicine				
• Nursing and care • Artistic education	4	23.5		

References

Adams, W. J., J.L. Yellen (1976). Commodity bundling and the burden of monopoly. *Quarterly Journal of Economics*, **90**, 475–495.

Fry, J.N., D.C. Shaw, C. Haehling von Lanzenauer, C.R. Dipchand (1986). Customer loyalty to banks: a longitudinal study. *Journal of Business*, **12**, 517–525.

Ennew, C., S. McKechnie (1998). The financial services consumer. In M. Gabbot, G. Hogg (Eds.), *Consumers and Services*, pp. 185–207.

Green, P.E., V. Srinivasan (1978). Conjoint analysis in consumer research: issues and outlook. *Journal of Consumer Research*, **5**, 103–123.

Green, P.E., A.M. Krieger (1991). Segmenting markets with conjoint analysis. *Journal of Marketing*, **55**, 20–31.

Guiltinan, J. (1987). The price bundling of services. *Journal of Marketing*, **51**, 74–85.

Golcate, M., K. Steward, R. Kinsella (1996). Customer defection: a study of the student market in Ireland. *International Journal of Bank Marketing*, **14**(3), 23–29.

Hair, J.F., R.E. Anderson, R.L. Tatham, W.C. Black (1995). *Multivariate Data Analysis with Readings*. Prentice Hall.

Kara, A., E. Kaynak, O. Kucukemiroglu (1994). Credit card development strategies for the youth market: the use of conjoint analysis. *International Journal of Bank Marketing*, **12**(6), 30–36.

Lewis, B.R., G.H. Bingham (1991). The youth market for financial services. *International Journal of Bank Marketing*, **9**(2), 3–11.

Oppewal, H., M. Vriens (2000). Measuring perceived service quality using intergrated conjoint experiments. *International Journal of Bank Marketing*, **18**(4), 154–169.

Punj, G., D.W. Steward (1983). Cluster analysis in marketing research: a review and suggestions for applications. *Journal of Marketing Research*, **27**, 418–427.

DeSarbo, W.S., M. Wedel, M. Vriens, M. Ramaswamy (1992). Latent class metric conjoint analysis. *Marketing Letters*, **3**, 273–288.

Schmalensee, R. (1984). Pricing of product bundles, Gaussian demand and commodity bundling. *Journal of Business*, **57**(1), 211–230.

Teas, K. R., W.L. Dellva (1985). Conjoint measurement of consumer preferences for multiattribute financial services. *Journal of Bank Research*, Summer, 99–112.

Wittink, D.R., P. Cattin (1989). Commercial use of conjoint analysis: an update. *Journal of Marketing*, **53**, 91–96.

Wittink, D.R., M. Vriens, W. Burhenne (1994). Commercial use of conjoint analysis in Europe: results and critical reflections. *International Journal of Research in Marketing*, **11**, 41–52.

Zinkhan, F. C., G.M. Zinkhan (1991). Using conjoint analysis to design financial services. *International Journal of Bank Marketing*, **8**(1), 31–34.

M. Mankila is a doctoral candidate at the School of Economics and Commercial Law in Gothenburg, Sweden. Her dissertation deals with retail bank pricing strategies, most notably, strategic price bundling, and how to improve the customer relationship management through it. Her other work on this subject will be published in a fortcoming issue of *European Journal of Operational Resarch* (Retaining students through price bundling) and in *Perspectivas del Sistema Financiero* (Application of price bundling strategies in retail banking in Europe). Her other research interests include consumer behaviour in eCommerce and customer loyalty issues in different areas.

Studentų pritraukimas kainų grupavimu. Apibendrinta Švedijos studentų mažmeninio bankinio aptarnavimo preferencijų studija

Merja MANKILA

Straipsnyje tiriama Švedijos bankų patirtis pritraukiant naujus klientus – studentus, pritaikius kainų grupavimą.