

6. HOW TO HELP HOUSEHOLDS IN MAKING FINANCIAL DECISIONS

Keywords

financial consultancy, financial advisor, financial decision, economical education

Introduction

Modern financial market is becoming more and more complicated. It determines that every single household has to analyze a lot of information. Moreover, no one can guarantee that analyzed data are complete, that the process of analysis is done properly and that the conclusion is correct. Every mistake made at the financial market can be very dangerous in results. Some people are unaware of this risk and behave irresponsible.

Thus households need some help, which can be provided in different ways:

- As an additional education (courses, book guides, TV programs, etc.)
- As an obligatory education in school
- As an activity of professional, institutional advisors (independent or working for certain financial institution).

Problems with making financial decision

Thinking about the problem with making financial decisions we must answer the following questions:

- What are general and specific problems with making decisions?
- How to cope with these problems?
- How to make financial decision?

General problems can be connected with:

- Risk of investing or borrowing money
- Lack of information about the financial market and financial products
- Lack of professional knowledge (lack of knowledge of analysis methods)
- Psychological effects of financial decisions.

Specific problems are connected with individual situation and can be caused by (Lim, 2006, pp. 8-11):

- Unawareness of own financial situation
- Instability of employment
- Lack of control of spending money
- Lack of retirement security
- Fear of self-management
- Fear of financial activity.

Happily one can cope with these problems in many ways, i.e.

- Predicting financial consequences of decisions which helps to minimize risk
- Gaining as much information as possible which helps to optimize decision

- Education: reading or listening to guides, books or programs about methods of data analysis
- Understanding how people react in different situations, especially how reacts investor himself.

All these solutions can be presented to people by using one of education methods mentioned before. Obligatory education ought to be focused on real problems that households have to solve, like determinants of credit, saving or insurance products' attractiveness and their hierarchy. Usually, school subjects connected with economy are filled with information about enterprises, how they work and what problems they have. It is important but much more important and useful is knowledge about individuals' activity at the financial market. It is this kind of knowledge that everyone can benefit from.

As obligatory wide-spread education is unobtainable in short-term perspective, more realistic is education provided by financial institutions. Unfortunately, they are not really interested in informing people about all pros and cons of buying financial products. In fact, they sometimes earn on people's unawareness and lack of information. Thus, activity of neutral financial advisors can help those, who are not economically educated, do not trust financial institutions' representatives' intentions and don't want to take an effort of gaining special knowledge by themselves.

Predominantly, economical knowledge is collected unofficially. People read newspapers or magazines, watch TV programmes, find information in Internet or do many different things to understand interactions in economy. It's not bad but there's a risk of misinterpretation or misunderstanding. When there is nobody who can correct a person, mistakes can be repeated and cause problems.

As a result of these difficulties, there are two possibilities of making financial decision: to do it personally or by advisor. First one can be realized by those, who have enough knowledge about financial market rules, financial products and analysis of their attractiveness. Second one by those who have no economical education and knowledge.

Do it yourself – self-analysis and making decision

As most people are not economically and financially prepared, decisions they make can be ineffective. That means that they can result unsatisfactory profits or even cause financial problems, like bankruptcy. That's why help given to economically unprepared households is so important.

According to the first way of education (additional education) people could be informed about financial instruments, risk connected with them and profits they provide. This can be done by every institution which sells financial products.

First step is to make people aware that sometimes (or even often) decision, they make are irrational. Sometimes they are make impulsive, without thinking and analyzing real costs and benefits. Sometimes they are made because people are used to act in a particular way. And some decisions are socially determined when one buys financial products because it helps somebody else, e.g. humanitarian foundations. (Svoboda, 2004, pp. 103-104)

The aim of making financial decisions is to do it rationally. To achieve this person can follow one of presented rules (Antonides, Raaij, 2003, pp. 278-282):

- Linear compensation rules – according to this rule one has to decide what is the role of every single factor. It can be done thanks to the weights. Each person can create different hierarchy of determinants.
- Emotional influence – according to this rule person chooses emotionally, sometimes without thinking about the results of the decision. One is not looking for information but makes decision because he or she feels it is just the right one.

- Common rules – according to this rule it is necessary to eliminate products that don't achieve expected level at one or few characteristics. From those that left one has to choose the best using one from other rules.
- Departed rules – according to this rule person chooses one characteristic and looks for the product which achieves the best value at it. It doesn't matter what the values of other characteristics are.
- Lexicographic rules – according to this rule one has to decide which characteristics are the most, less and least important and choose firstly according to the most important, then according to the second, the third, and so on.
- Following elimination – according to this rule person must decide what is the minimum value of each characteristic. Then eliminate products which don't achieve minimum.
- Additive differences – according to this rule one chooses by pairs. From each pair he leaves better solution. He makes it until there is only one pair left.

We take under consideration problems connected with taking a mortgage loan and before making decision person has to check his current financial situation. At this step one has to consider his credit capacity. One way is to add up all monthly expenses and subtract them from take-home pay. If the difference do not cover the monthly payment, it means that the person can't afford the credit. Second way is to find out if there are any other expenses that one can cut off or if there are any regular source of savings that can be used as a loan payment. (Kapoor, Dlabay, Hughes, 1994).

General rules of credit capacity are (Kapoor, Dlabay, Hughes, 1994):

- the Debt-to-Income Ratio shouldn't overestimate the level of 20%. It is calculated by dividing monthly debt payments (excluding home payments) by net monthly income
- the Debt-to-Equity Ratio should reach ranges between 0,33 and 0,5. The bigger is the ratio the riskier is situation of borrower and lender. The ratio is calculated by dividing total liabilities by net worth of a household.

According to these ratios one can tentatively measure his credit capacity and start a reasonable searching procedure. The most objective and suitable for individual needs is the first rule, because one has to decide which determinants are more and which are less important. The example presents how to follow all rules during making decision about taking a mortgage loan.

What factors must be taken under consideration? There are some more and some less important, i.e.

- Income the household receives, because it determines its credit capacity (affordability)
- Fixed expenses, because they determine how much money the family can pay as a credit installment
- Interest rate level and its variation which determines the credit installment, credit limit and final credit cost
- Real Annual Interest Rate (RAIR) which includes costs connected with credit
- Payback period which determines the credit installment and the final credit cost
- Credit currency which determines the credit rate with further consequences and level of currency risk which arrives during paying the loan
- Charges taken by bank while giving credit which determine the final credit cost
- Insurance charge which determine the final credit cost
- Savings gained previously which influence the debt level and the final credit cost (if bank compensates them with debt)
- Credit installment's method: fixed or variable payments which determines installment and the final cost
- Frequency of paying which determines the credit interest level

- Possibility of paying more frequently or larger amounts without additional costs which determines the final credit cost
- Guaranteed grace in payments connected with different situations
- Duration of bank procedure after which client is given the money
- Client participation in financing the housing investment

Table 1. Credit offer of 5 biggest banks in Poland¹

	<i>Multibank</i>	<i>PKO BP</i>	<i>Pekao</i>	<i>BZ WBK</i>	<i>BPH</i>
Interest rate level for credit in PLN	5,3%	About 5,1%	About 4,8%	About 4,8%	5,62%
Interest rate flexibility	variable	Variable	Variable	Variable	Variable
Maximum payback period in months	540	360	360	360	378
Arrangement fee	4%	3,5%	2% At least 500,00 PLN	2%	3,5%
Insurance charge	0,2%	No information	No information	0,06%	No information
Compensation	Yes	No	No	No	No
Credit installment method	Both variable and fixed	Both variable and fixed	Both variable and fixed	Both variable and fixed	Both variable and fixed
Early repayment fees of:					
Whole debt	0,00	2% At least 200,00 PLN	2,5% At least 200,00 PLN	0,00	2% At least 200,00 PLN
Partial payments	0,00	0,00	2,5% At least 200,00 PLN	0,00	2% At least 200,00 PLN
Frequency of paying	Monthly	Monthly	Monthly	Monthly	Monthly
Grace in payments	No information	Guaranteed for 1 month per year (30 months per credit period)	Guaranteed for 12 months per credit period	Guaranteed for 36 months per credit period	Guaranteed for 18 months per credit period

Source: own compilation based on: Kredyty mieszkaniowe, <http://www.pekao.com.pl> (as of

¹ Banks were chosen according to the results of the chart of Polish banks' results in first half-year of 2006. Five banks taken to the analysis are the best at the sum of receivables from private clients and public sector which presents banks' activity at credit market. The order is as follows: 1. PKO BP, 2. BPH, 3. Pekao, 4. BZ WBK, 5. BRE Bank (Multibank is a part of BRE Bank group focused on individual clients). Więclaw E., (2006), Rekordowe zyski na prowizjach i odsetkach, Rzeczpospolita, no 190, pp. B7.

23.08.2006), Multiplan, <http://www.multibank.pl> (as of 23.08.2006), Mieszkanie lub dom?, <http://www.bzwbk.pl> (as of 23.08.2006), Kredyty mieszkaniowe, <http://www.bph.pl> (as of 23.08.2006), Kredyt mieszkaniowy Własny Kąt Hipoteczny, <http://www.pkobp.pl> (as of 23.08.2006).

According to the data presented in table 1 let's choose the best financial product using all mentioned previously methods. To use the linear compensation rule we must decide about the factors weights.

For almost all debtors the most important factor which decides about credit attractiveness is interest rate level. Thus it can be 0,3. Interest rate flexibility and maximum payback period don't differ importantly, so there's no use to give them large weights. It won't influence the final result. Weights of 0,05 for each factor would be enough. Arrangement fees are very important because they must be paid at the moment of taking credit, so let the weight be at 0,2. Insurance charges are taken by every bank, but sometimes banks don't inform about their level or include them in arrangement fee. Therefore, weight of insurance charge can be at 0,05 as less important. Possibility of compensating debt with savings is very comfortable because it allows to lower total interest payments, so the weight is 0,1. Earlier repayment fee is distinguished into two fees: connected with whole debt repayment, which is less important and appears rarely (weight 0,05) and connected with partial repayments, which appears much oftener (weight 0,1). And the last factor taken under consideration is guaranteed respite in payments and total time period of this respite. Generally, the longer the respite period, the better, because nobody can predict all financial turbulences that can appear during credit period. Otherwise, the longer grace in repaying debt, the bigger interest payments in future. Every debtor must remember about that. So the weight is 0,1.

When all weights are decided, let's compare values and give points. Each factor can be given with 1 to 5 points, when 1 means the worst value and 5 – the best. This is presented in table 2.

Table 2. Valuation of credit offer of 5 biggest banks in Poland

	Weight	<i>Multibank</i>		<i>PKO BP</i>		<i>Pekao</i>		<i>BZ WBK</i>		<i>BPH</i>	
Interest rate level for credit in PLN	0,3	2	0,6	3	0,9	5	1,5	5	1,5	1	0,3
Interest rate flexibility	0,05	5	0,25	5	0,25	5	0,25	5	0,25	5	0,25
Maximum payback period in months	0,05	5	1	3	0,6	3	0,6	3	0,6	4	0,8
Arrangement fee	0,2	1	0,2	3	0,6	4	0,8	5	1	3	0,6
Insurance charge	0,05	4	0,2	3	0,15	3	0,15	5	0,3	3	0,15
Compensation	0,1	5	0,5	1	0,1	1	0,1	1	0,1	1	0,1
Early repayment fees of:											
Whole debt	0,05	5	0,25	3	0,15	1	0,05	5	0,25	3	0,15
Partial payments	0,1	5	0,5	5	0,5	1	0,1	5	0,5	2	0,2
Respite in payments	0,1	1	0,1	4	0,4	2	0,4	5	0,5	3	0,6
SUM	1,00	33	3,60	30	3,65	25	3,65	39	5	25	2,95

Source: own compilation.

It seems that the best mortgage loan is offered by BZ WBK, then by Pekao and PKO BP, Multibank and finally by BPH. This hierarchy is based on the weighted points. Hierarchy according to nominal points would be quite different: the best still would be BZ WBK, second – Multibank, third – PKO BP and at fourth and the last position – Pekao and BPH. What does it mean? It means that e.g. Multibank has better offer than Pekao but only at the less important determinants. More important factors of Multibank’s offer, like interest rate, are less attractive.

Let’s look at the second rule of making decisions – emotional influence. It’s hard to choose according to this rule because everyone could think different and give different explanation. For example, someone could say that “Multibank is the best because my friends say so”, or “PKO BP is the best because it is very stable and safe”, or “Pekao is the best because it is located close to my house”, and so on. This rule is irrational – more or less depending on given explanation.

According to common rule choice can be done as follows. Let’s say that the most important factor is interest rate, which cannot be higher than 5%. It allows to eliminate 3 banks: Multibank with interest rate 5,3%, PKO BP – 5,1% and BPH - 5,62%. For two other banks – Pekao and BZ WBK we can use linear rule with 0-1 points system. This is presented in table 3.

Table 3. Valuation of credit offer of Pekao and BZ WBK

	Range	<i>Pekao</i>		<i>BZ WBK</i>	
Interest rate level for credit in PLN	0,3	1	0,3	1	0,3
Interest rate flexibility	0,05	1	0,05	1	0,05
Maximum payback period in months	0,05	1	0,05	1	0,05
Arrangement fee	0,2	0	0,0	1	0,2
Insurance charge	0,05	0	0,0	1	0,05
Compensation	0,1	0	0,0	0	0,0
Early repayment fees of:					
Whole debt	0,05	0	0,0	1	0,05
Partial payments	0,1	0	0,0	1	0,1
Respite in payments	0,1	0	0,0	1	0,1
SUM	1,00	3	0,4	8	0,9

Source: own compilation.

This shows that the best offer comes from BZ WBK.

To choose according to lexicographic rule we must order all determinants and proceed from the most important to the least one. Using weights from the linear rule we can realize that the most important factors are interest rate and arrangement fee. As a third determinant we have to choose from three that have the same weight: compensation possibility, early repayment fee of partial payments and respite in payments. Let's assume that the order is: early repayment fee of partial payments, compensation possibility and respite in payments. Then we order next four determinants: early repayment fee of whole debt payment, maximum payback period in months, insurance charge and interest rate flexibility. In our example choice is quite easy because at the second step we can isolate the best offer, which is BZ WBK’s.

Table 4. Credit determinants' rank

	Position	Chosen banks
Interest rate level for credit in PLN	1	BZ WBK, Pekao
Arrangement fee	2	BZ WBK
Early repayment fee of partial payments	3	BZ WBK
Compensation	4	BZ WBK
Respite in payments	5	BZ WBK
Early repayment fee of whole debt payment	6	BZ WBK
Maximum payback period in months	7	BZ WBK
Insurance charge	8	BZ WBK
Interest rate flexibility	9	BZ WBK

Source: own compilation.

Departed rule is quite similar. One decides about the best choice according to only one characteristic. In our example it is interest rate. Unfortunately, there are two banks that offer the lowest interest rate. Thus, person has to choose another characteristic to make a choice, e.g. arrangement fee. It allows to choose BZ WBK as the best one, because the fee is lower than in Pekao.

Next rule, following elimination, is connected with valuating. Person has to decide what is the expected value of each determinant and eliminate these that don't achieve it. Values and elimination process is presented in table 5.

Table 5. Credit determinants' expected valuation

	Expected value	<i>Multibank</i>	<i>PKO BP</i>	<i>Pekao</i>	<i>BZ WBK</i>	<i>BPH</i>
Interest rate level for credit in PLN	5,0% Maximum	-	-	+	+	-
Interest rate flexibility	Variable	+	+	+	+	+
Maximum payback period in months	300 Minimum	+	+	+	+	+
Arrangement fee	3,0% Maximum	-	-	+	+	-
Insurance charge	0,1% Maximum	-	-	-	+	-
Compensation	Yes	+	-	-	-	-
Credit installment method	Both	+	+	+	+	+
Early repayment fees of:						

Whole debt	1% Maximum	+	-	-	+	-
Partial payments	1% Maximum	+	+	-	+	-
Frequency of paying	Monthly	+	+	+	+	+
Grace in payments	6 months Minimum	-	+	+	+	+

Source: own compilation.

According to this rule the offer of BZ WBK is the best because it achieved expected value at 10 determinants. Finally, the additive differences rule which resembles football championships eliminations. Person has to compare two offers, choose better one, and then compare it with another offer, etc. To do this one has to follow one from other rules to decide what characteristics can be compared and how.

Concluding the part describing rules of making decisions we must assume that the best offer is presented by BZ WBK and all rational methods provide to such conclusion.

Be lazy conformist – hire an advisor

As presented earlier everyone, even not having professional education, can provide choosing procedure himself and find the best product, fulfilling all his preferences. It's possible but takes time. Thus some people don't want to do it alone. They prefer external help offered by professionals. From 93 people asked about the importance of consultancy during making decision of choosing the savings' allocation form² only 4,3% answered that it is unimportant, 5,4% that is not very important, 24,7% that is quite important, 20,4% that it is important and 44,1% that it is very important. One person (1,1%) didn't give any answer. It proves that there is majority of people who think that consultancy is rather important than unimportant. The most frequently given answer was "very important" and average answer was "important" (about 4 points).

So, who is an advisor? It is a person who advises, gives directions to solve problems of a person who asks about it. It can be an institutionally independent person, employed in one of the financial institutions, like banks, insurance offices, or hired by independent consultancy corporation.

The procedure of advising consists of five stages (Doradztwo, <http://www.xelion.pl/doradztwo> (as of 11.05.2006)):

- Psychological analysis – it is an informal stage, which is realized during the other stages. Advisor collects information about person while talking, trying to prepare psychological characteristic.
- Financial situation analysis – this stage is necessary to find out what are financial possibilities of investor, what are sources of income and how he spends the money.
- Conception – advisor prepares a set (or few sets) of products which is the most suitable for investor based on financial market offer and investor's preferences.
- Implementation – advisor presents prepared sets of products, investor chooses the one that he finds optimal and buys suggested products.
- Control – advisor monitors and verifies the chosen solution and reacts if something goes

² Surveyed people were asked to give points: 1 if they find consultancy unimportant, 2 – not very important, 3 – quite important, 4 – important and 5 – very important.

wrong.

The whole advising procedure can be lead by one advisor, who joins entitles of different advisors, like:

- Investment advisor
- Tax advisor
- Accountancy advisor
- Bank advisor
- Insurance advisor
- Asset advisor.

It means that financial advisor is a kind of super-advisor who must have very wide knowledge at finance, banking, insurance, accountancy, psychology, management, etc. Moreover, advisor must be able to work under pressure, because everyone expects him to provide the best results for all his clients, which is quite important, in fact. Negative results of his activity affects not only advisor himself, but also all or part of his clients. The more popular advisor and having more clients the more dangerous are his misfired financial decisions.

Financial advisor's activity also cause a risk of not informing clients about all financial market's attitudes or disadvantages. Especially, when advisor is hired by one of financial institutions. So, it's not obvious that offer presented by advisor is objectively the best one.

Conclusion

Every man would like to succeed at financial market. Thus, make many decisions that could help in achieving his financial stability. Unfortunately not all have enough skills to do this professionally, rationally and effectively. Moreover, some people are totally unaware of risks connected with wrong financial behavior. They need some help which can be offered as an additional education, obligatory education in school or activity of professional advisors. Each one has strengths and weaknesses, so everyone must decide which one is the best in his situation.

Hints for teachers

The article presents very practical and useful topic. This paper could be used as a guide for those who want to improve their making decisions skills or as scenario for academic classes, which could be as follows:

1. Data collection - students should collect necessary data themselves before classes.
2. Theory - theoretical part should be focused on making decisions rules and financial advisors activity. It is an introduction to the main part of the classes.
3. Discussion - during classes teacher can discuss suggested determinants of different financial products and their ranges. Teacher can ask following questions:
 - What are determinants of credit's attractiveness?
 - What are determinants of saving product's attractiveness?
 - What are determinants of insurance product's attractiveness?
 - Could you think about situation which affects the weights given in the example?
 - Could you lead the procedure of choosing a financial product according to your preferences?
4. Practice - students should provide their measurements using collected data and theoretical information.
5. Results' presentation – students present results of their work.
6. Final conclusion – general conclusion about personal finance problems are almost al-

ways the same: these are the problems that every person can meet and should know how to overcome.

References

1. Antonides G., Raaij L., (2003), *Zachowanie konsumenta*. Podręcznik akademicki, Wydawnictwo Naukowe PWN, Warszawa.
2. Doradztwo, <http://www.xelion.pl/doradztwo> (as of 11.05.2006).
3. Kapoor J., Dlabay L, Hughes R., (1994), *Personal finance*, Irwin, Illinois.
4. Kredyt mieszkaniowy Własny Kąt Hipoteczny, <http://www.pkobp.pl> (as of 23.08.2006).
5. Kredyty mieszkaniowe, <http://www.pekao.com.pl> (as of 23.08.2006).
6. Kredyty mieszkaniowe, <http://www.bph.pl> (as of 23.08.2006).
7. Lim S., (2006), *Jak kontrolować swoje finanse*, Helion, Gliwice.
8. Mieszkanie lub dom?, <http://www.bzwbk.pl> (as of 23.08.2006).
9. Multiplan, <http://www.multibank.pl> (as of 23.08.2006).
10. Svoboda U., (2004), *Bankowość detaliczna*, CeDeWu, Warszawa.
11. Więclaw E., (2006), *Rekordowe zyski na prowizjach i odsetkach*, Rzeczpospolita, no 190.