

Methodological comment – transition to the Harmonized Confidence Survey Programme

Confidence surveys of Businesses and Consumers are conducted by the Bank of Albania, every three months, starting from 2002. Their results are used to supplement the data forwarded by the official statistics and the periodic analyses of the Department of the Monetary Policy, in forming the foregoing indicators as well as short-term forecasting models of economic growth. The methodology of conducting confidence surveys is timely updated in alignment with the methodology of other more developed countries and with the unified methodology of the European Commission (EC).

Starting from May 2016, the Bank of Albania will continue to organize these surveys under the EC programme for the Harmonization of the Consumer and Business Confidence Surveys for member and candidate countries of the European Union (EU). The programme for the harmonization of the confidence surveys has been created in 1961, led by the Directorate-General for Economic and Financial Affairs. Starting from 1996 the confidence surveys are conducted in the sectors of industry, trade, construction, services and consumers, under a harmonized methodology for all the EU member countries. In collaboration with OECD, the EC aims the implementation of harmonized standards of the confidence surveys by the different countries and the use of their results for short-term economic analyses. Currently this programme includes the 28 countries of the European Union as well as the 5 candidate countries: Albania, Macedonia, Montenegro, Serbia and Turkey¹.

The main changes coming from the inclusion in the European Commission Programme are: (i) the frequency with which the surveys are conducted increases (12 times per year); (ii) the questionnaires are completely harmonized with the EC questionnaires and (iii) the methodology is more aligned with the recommendations and the best practices of the EC.

The inclusion of the Confidence Surveys of Albania in the Harmonization Programme has these advantages:

- I. **The database** with monthly frequency will be enriched, since with the new standard required from the European Commission, the confidence surveys will be conducted monthly and not every three months. The time series of the confidence and the balance indicators will start to be published soon under the surveys' rubric on the webpage of the Bank of Albania.
- II. **The better alignment with the methodology** of the other countries of the European Union will allow analyses about the synchronisation of their business cycles.
- III. **The sample selection methodology** of businesses and consumers has been further improved, by choosing one of the suggested variants in the practice of the confidence surveys' conduction. The

¹ The institutions that will conduct the harmonized surveys are chosen through a call for application from the European Commission (EC) and supported by a grant which finances up to 50% of the total cost of the surveys' conduction. The data gathered from the harmonized confidence surveys remain propriety of the institution that carries them, but the EC has the right to simultaneously use these data.

sampling method is based on the “stratified random sampling”². On one hand the random selection allows results more representative of the population (all consumers above 15 years old in the case of CCS and almost all businesses registered in the INSTAT Enterprises Statistical Registry). On the other hand, the separation of the sample in several layers has the advantage that the random selection is conducted on more homogeneous groups, with common characteristics. For businesses, the layers are chosen using the size principle (measured with the employees’ number) and the economic activity (NACE code). Enterprises with more than 250 employees are completely included in the selection. In the case of consumers, the layers’ selection criteria are geography and region density.

IV. **Survey’s results represent better the population** by weighting in two levels³. For this is used the standard *Horvitz-Thompson* (HT) formula:

$$Y^{HT} = \frac{1}{W} \sum_{i \in p} \frac{w_i}{\pi_i} y_i$$

Where Y^{HT} is the HT estimate of the population target variable Y ; p is the set of units in the selection; π_i is the inclusion probability, w_i is the weight based on the unit’s size, W is the weight of the population (the total weights’ size of all the units includes in the population).

In the first weighting phase, the answer of each business and consumer are weighted at the individual level to reach an evaluation of the population, by using *the sample weight* ($\frac{1}{\pi_i}$). These weights are revisited each month and are redistributed in case there are businesses or individuals that have not answered. In a second phase the businesses’ answers are weighted again, to better reflect the structure of the economy, by using *the weights size* (w_i). The second phase’s weighting is done to calculate indicators with high level of aggregation (at the NACE 2 code level). Groups with greater turnover are assigned a greater weight during the averaging of the estimates to achieve the aggregate indicator⁴. Hence the weight’s size falls in the formula above and is used only for the higher levels of aggregating (w_i in the formula above is 1).

Despite the advantages comported from the inclusion in EC harmonization programme, the users of the data from the confidence surveys must consider some changes in the analyses of the result and the time series, starting from the second quarter of 2016:

- I. Firstly, **some time series of the business survey indicators are not going to be published** anymore, since the new questionnaire doesn’t include the appropriate questions. Meanwhile, new series will be built, for businesses as well as for consumers, based on new questions included in the BCS and CCS questionnaires. In the CCS questionnaires the comparison base for the

² The stratified random sampling methodology is part of probability methods that allow drawing conclusions about the population through indicators measured by the selection. The previous method of selection was “stratified purposive sampling”. This selection is suggested as well in the statistical practices of the confidence surveys, but takes into consideration the quantity limitation in surveys as well.

³ The weighting in two levels is conducted only on businesses; the consumers are weighted only in the first phase using the selection weights.

⁴ The weights are calculated based on the official statistics of the businesses turnover from the data of the Enterprise Structural Survey.

questions will be annual (it was quarterly) and expectations for the future will be extended to one year time horizon⁵.

- II. As a consequence of the changes in the first paragraph, there will be some **changes in the composition of the Confidence Indicators (CI)**⁶. The industry confidence indicator (ICI) will be the simple arithmetical average of production, inventories and new orders balances. The construction confidence indicator (CCI) will be the arithmetical average of the construction activities and orders. The services confidence indicator (SCI) will be arithmetical average business situation and demand. The trade confidence indicator (TCI) will be the arithmetical average of the balances of the business situation and expectations for employment. The criterion for the selection of the composing balances of the confidence indicator according to sectors is the same with the previous practice: higher coefficient of correlation between indicators of surveys regulated by seasonality with the reference series (the strength of the relation measured by the correlation coefficient). In the case of Albania the reference series is the annual growth of the gross domestic production. In the annex there are presented the graphics which compare CIs build with the new method with the previous CIs. As can be seen from the graphic representation, CIs represent a very similar dynamic⁷.
- III. **Methodological changes** related to the selection method, the change in samples and the new questionnaires will start to be implemented from the second quarter of 2016. The analyses in this quarter will be based on un-weighted results (paragraph IV in advantages) to avoid possible oscillations that may come as a result of the weight's application. Confidence indicators will be published without interruption drawing attention on the appropriate quarters for the abovementioned methodological changes.

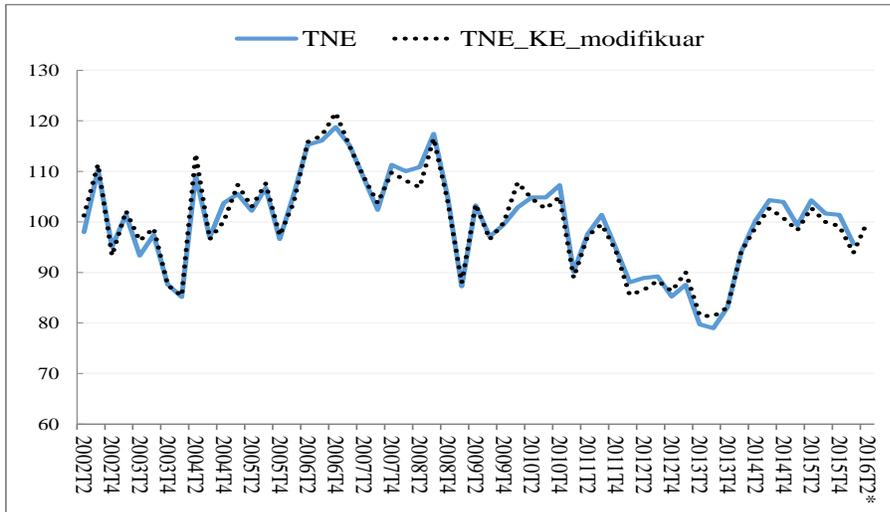
⁵ Change in the way the questions are formulated (asking for annual comparisons) will not bring disruption to the indicators' time series taken from CCS since previous analyses have shown that businesses and consumers take into account a longer period of comparison when answering (despite being required to make quarterly comparisons). The analysis of the results which are carried out to highlight the comparison period gives similar results to tests carried out by other EU countries for indicators of confidence surveys.

⁶ The optimal combination of questions which better follows the reference series and as a consequence is included in the calculation of the Confidence Indicator might change with time. The European Commission highlights the importance of periodic control of the information that contains the Confidence Indicators. "*The joint harmonised EU Programme of Business and Consumer Surveys*", European Commission, Instruction for users, 2015. CIs are revisited only for businesses while CCI conserve the same composing balances.

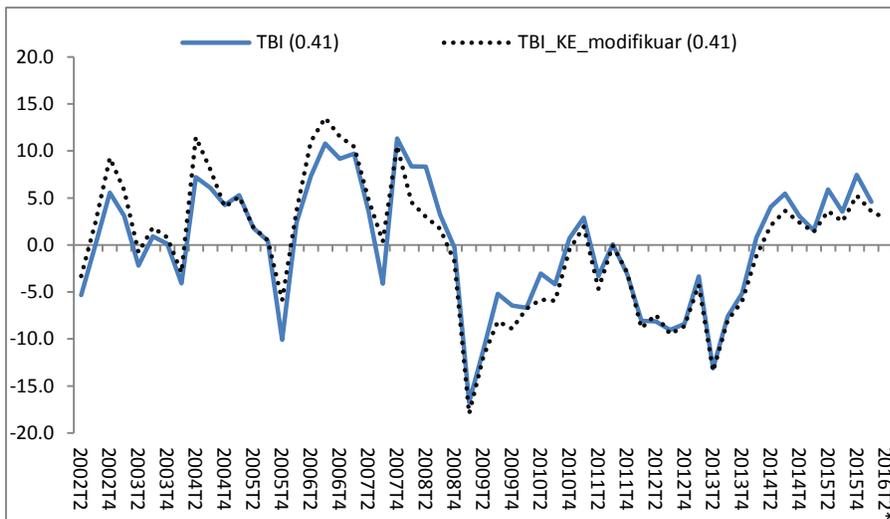
⁷ This conclusion is supported also from the results the cross-correlation analysis. The coefficient of correlation between the new and old CI oscillate between 0.86 for the trade sector and 0.97 for the construction sector.

Annex 1: Comparing graphics of the Confidence Indicators.

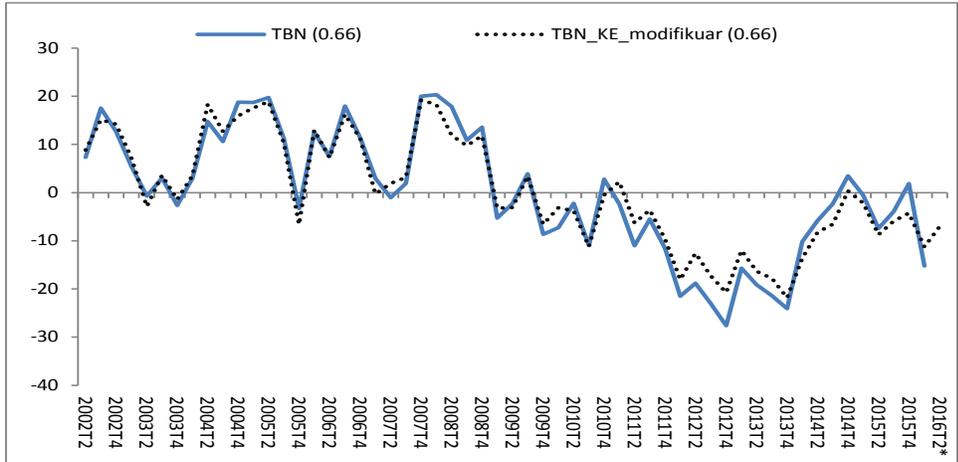
Graphic 1. New ESI compared with the previous ESI.



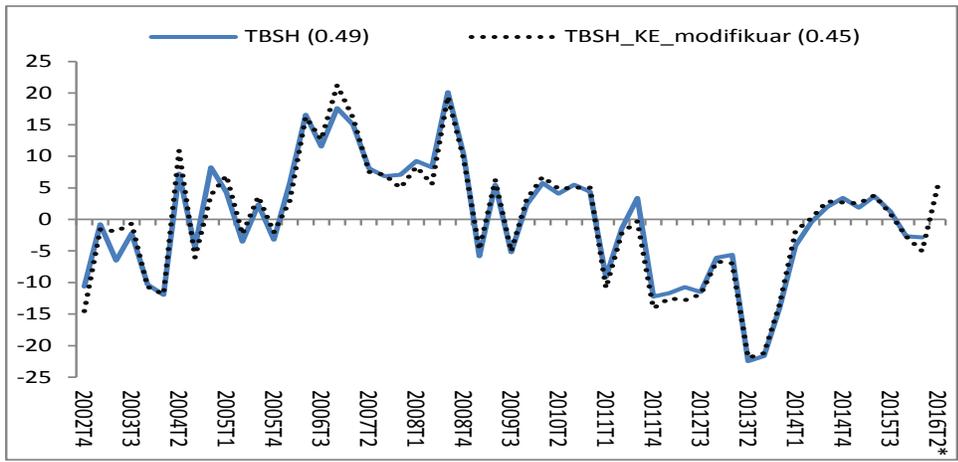
Graphic 2. New ICI compared with the previous ICI (changes from the respective long-term averages, in parenthesis the correlation coefficients with the reference series).



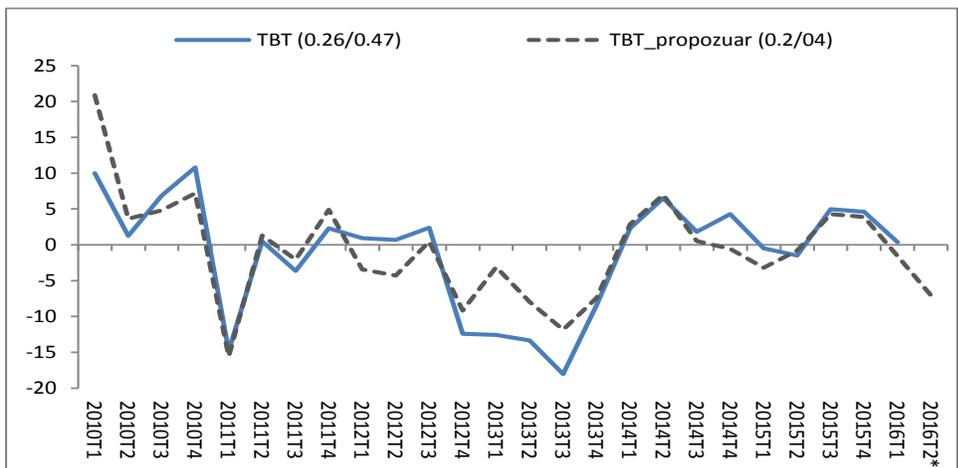
Graphic 3. New CCI compared with the previous CCI (changes from the respective long-term averages, in parenthesis the correlation coefficients with the reference series).



Graphic 4. New SCI compared with the previous SCI (changes from the respective long-term averages, in parenthesis the correlation coefficients with the reference series).



Graphic 5. New TCI compare with the previous TCI (changes from the respective long-term averages, in parenthesis the correlation coefficients with the reference series).



Annex 2: Harmonized questionnaires for BCS and CCS.

A. Industry sector

Monthly questions

1. How has been the production in your firm over the past 3 month? It has...

- 1. Increased
- 2. Remained unchanged
- 3. Decreased

2. How do you evaluate the current orders (order books)?

- 1. More than sufficient (above normal)
- 2. Sufficient (normal for the season)
- 3. Not sufficient (below normal)

3. How do you evaluate the current export orders (order books)?

- 1. More than sufficient (above normal)
- 2. Sufficient (normal for the season)
- 3. Not sufficient (below normal)
- 4. There is no export activity

4. How do you evaluate your current stocks of finished products?

- 1. Too large (above normal)
- 2. Adequate (normal for the season)
- 3. Too small (below normal)

5. How do you expect the production trend in your firm to be over the next 3 month? It will...

- 1. Increase
- 2. Remain unchanged
- 3. Decrease

6. How do you expect that your product prices to change over the next 3 months? They will...

- 1. Increase
- 2. Remain unchanged
- 3. Decrease

7. How do you expect your firm's level of employment to change over the next 3 months? It will...

- 1. Increase
- 2. Remain unchanged
- 3. Decrease

Quarterly questions

8. What main factors are currently limiting your production? (*you may choose more than 1 alternative*)

- 1. None
- 2. Insufficient demand
- 3. Shortage of labour force
- 4. Shortage of material and/or machineries
- 5. Financial constrains
- 6. Other, specify _____

9. Considering the current order books and the expected change in demand over the coming months, how do you assess your current production capability?

1. More than sufficient

2. Sufficient

3. Not sufficient

10. How many months of production are assured by your current order books?

Our production is assured for _____ months

11. How have your orders (order books) developed over the past 3 months? They have...

1. Increased

2. Remained unchanged

3. Decreased

12. How do you expect your export orders (order books) to develop over the next 3 months? They will...

1. Increase

2. Remain unchanged

3. Decrease

4. There is no export activity

13. In what measure are you exploiting your current production capacity?

_____ % of full capacity

14. How has your competitive position on the domestic market developed over the past 3 months? It has...

1. Improved

2. Remained unchanged

3. Deteriorated

15. How has your competitive position on foreign markets inside the EU developed over the past 3 months? It has...

1. Improved

2. Remained Unchanged

3. Deteriorated

16. How has your competitive position on foreign markets outside the EU developed over the past 3 months? It has...

1. Improved

2. Remained Unchanged

3. Deteriorated

17. How has been your firm's financial situation over the past 3 months? It has...

1. Improved

2. Remained unchanged

3. Deteriorated

18. How do you think that the annual inflation will change after a year? It will...

1. Increase 0-2%

2. Increase 2-4%

3. Increase over 4%

4. Decrease

B. Construction sector

Monthly questions

1. How has your building activity developed over the past 3 months? It has...

- 1. Increased
- 2. Remained unchanged
- 3. Decreased

2. What main factors are currently limiting your building activity? (you may choose more than 1 alternative)?

- 1. None
- 2. Insufficient demand
- 3. Weather conditions
- 4. Shortage of labour force
- 5. Shortage in materials and/or equipment
- 6. Financial constrains
- 7. Other, specify _____

3. How do you consider your current orders (order books) to be...?

- 1. More than sufficient (above normal)
- 2. Sufficient (normal for the season)
- 3. Not sufficient (below normal)

4. How do you expect your firm's level of employment to change over the next 3 months? It will... 1. Increase

- 2. Remain unchanged
- 3. Decrease

5. How do you expect the prices you charge to change over the next 3 months? They will...

- 1. Increase
- 2. Remain unchanged
- 3. Decrease

Quarterly questions

6. Assuming normal working hours, about howmany months' work is accounted for by the work in hand and the work already contracted for?

Number of months _____

7. In what measure you are currently exploiting you production capacity?

_____ % of full capacity

8. How has changed your firm's level of employment over tha past 3 months? It has...

- 1. Increased
- 2. Remained unchanged
- 3. Decreased

9. How has been your firm's financial situation over the past 3 months?

- 1. Better
- 2. Unchanged
- 3. Worse

10. How do you think that the annual inflation will change after a year? It will...

- 1. Increase0-2%
- 2. Increase2-4%
- 3. Increaseover 4%
- 4. Decrease

C. Services sector

Monthly questions

1. How has your business situation developed over the past 3 months? It has...

1. Increased
 2. Remained unchanged
 3. Decreased

2. How has demand (turnover) for your company's services changed over the past 3 months? It has...

1. Increased
 2. Remained unchanged
 3. Decreased

3. How do you expect the demand (turnover) for your company's services to change over the next 3 months? It will...

1. Increase
 2. Remain unchanged
 3. Decrease

4. How has your firm's level of employment changed over the past 3 months? It has...

1. Increased
 2. Remained unchanged
 3. Decreased

5. How do you expect your firm's level of employment to change over the next 3 months? It will...

1. Increase
 2. Remain unchanged
 3. Decrease

6. How do you expect the prices you charge to change over the next 3 months? They will...

1. Increase
 2. Remain unchanged
 3. Decrease

Quarterly questions

7. What main factors are currently limiting your business? (you may choose more than 1 alternative)

1. None
 2. Insufficient demand
 3. Shortage of labour force
 4. Shortage of spaces and/or equipment
 5. Financial constraints
 6. Other, specify _____

8. If the demand expanded, could you increase your volume of your activity with your present resources?

1. Yes → go to 8.1
 2. No → go to 9

8.1 If yes, how much? _____%

9. In what measure you are currently exploiting your business capacity?

_____ % of full capacity

10. How has been your firm's financial situation over the past 3 months?

- 1. Better
- 2. Unchanged
- 3. Worse

11. How do you think that the annual inflation will change after a year? It will...

- 1. Increase 0-2%
- 2. Increase 2-4%
- 3. Increase over 4%
- 4. Decrease

D. Trade sector

Monthly questions

1. How has your business activity (sales) developed over the past 3 months? It has...

- 1. Improved (increased)
- 2. Has remained unchanged
- 3. Deteriorated (decreased)

2. Do you consider the volume of stock you currently hold to be...?

- 1. Too large (above normal)
- 2. Adequate (normal for the season)
- 3. Too small (below normal)

3. How do you expect your orders placed with suppliers to change over the next 3 months? They will...

- 1. Increase
- 2. Remain unchanged
- 3. Decrease

4. How do you expect your business activity (sales) to change over the next 3 months? It will...

- 1. Improve (increase)
- 2. Remain unchanged
- 3. Deteriorate (decrease)

5. How do you expect your firm's level of employment to change over the next 3 months? It will...

- 1. Increase
- 2. Remain unchanged
- 3. Decrease

6. How do you expect the prices you charge to change over the next 3 months? They will...

- 1. Increase
- 2. Remain unchanged
- 3. Decrease

Quarterly questions

7. What are the main factors currently limiting your activity? (*you may choose more than 1 alternative*)

- 1. None
- 2. Insufficient demand
- 3. Shortage of labour force
- 4. Shortage of spaces and/or equipment
- 5. Financial constrains
- 6. Other, specify _____

8. In what measure you are currently exploiting your capacity?

_____ % of full capacity

9. How has been your firm's financial situation over the past 3 months?

- 1. Better
- 2. Same
- 3. Worse

10. How has your firm's level of employment changed over the past 3 months? It has...

- 1. Increased
- 2. Remained unchanged
- 3. Decreased

11. How do you expect the annual inflation to change after a year? It will...

- 1. Increase 0-2%
- 2. Increase 2-4%
- 3. Increase over 4%
- 4. Decrease

E. The consumers' questionnaire

Monthly questions

1. How has the financial situation of your household changed over the last 12 months? It has...

- 1. Got a lot better
- 2. Got a little better
- 3. Stayed the same
- 4. Got a little worse
- 5. Got a lot worse
- 9. Don't know

2. How do you expect the financial situation of your house hold to change over the next 12 months? It will...

- 1. Get a lot better
- 2. Get a little better
- 3. Stay the same
- 4. Get a little worse
- 5. Get a lot worse
- 9. Don't know

3. How do you think the general economic situation in the country has changed over the past 12 months? It has...

- 1. Got a lot better
- 2. Got a little better
- 3. Stayed the same
- 4. Got a little worse
- 5. Got a lot worse
- 9. Don't know

4. How do you expect the general economic situation in the country to develop over the next 12 months? It will...

- 1. Get a lot better
- 2. Get a little better
- 3. Stay the same
- 4. Get a little worse
- 5. Get a lot worse
- 9. Don't know

5. How do you think that prices have developed over the past 12 months? They have

- 1. Risen a lot → go to 5.1.A
- 2. Risen moderately → go to 5.1.A
- 3. Risen slightly → go to 5.1.A
- 4. Stayed about the same → go to 6
- 5. Fallen → go to 5.1.B
- 9. Don't know → go to 6

5.1. If the answer to question 5 is 1, 2, 3 or 5, by what percentage do you think the consumer prices have increased/decreased during the past 12 months?

- A. Increased by _____% or
- B. Decreased by _____%

6. Compared with the past 12 months, how do you expect the consumer prices in the country will develop in the next 12 months? They will...

- 1. Increase more rapidly → go to 6.1.A
- 2. Increase at the same rate → go to 6.1.A
- 3. Increase at a slower rate → go to 6.1.A
- 4. Stay about the same → go to 7
- 5. Fall → go to 6.1.B
- 9. Don't know → go to 7

6.1. If the answer of the question 6 is 1, 2, 3, or 5, by how many per cent do you expect the consumer prices will increase/decrease over the next 12 months? They will...

- A. Increase by _____% or
- B. Decrease by _____%

7. How do you expect the number of people unemployed in the country to change over the next 12 months? The number will...

- 1. Increase sharply
- 2. Increase slightly
- 3. Remain the same
- 4. Fall slightly
- 5. Fall sharply
- 9. Don't know

8. In view of the general economic situation, do you think that now is the right moment to do major purchases (i.e. furniture, electrical/electronic devices, etc.)?

- 1. Yes, now is the right moment
- 2. It is neither the right nor the wrong moment
- 3. No, it is not the right moment
- 9. Don't know

9. Compared to the past 12 months, do you expect to spend more or less money on major purchases (i.e. furniture, electrical/electronic devices, etc.) over the next 12 months? I will spend

- 1. Much more
- 2. A little more
- 3. About the same
- 4. A little less
- 5. Much less
- 9. Don't know

10. In view of the general economic situation in the country, do you think that now is:

- 1. A very good moment to save
- 2. A fairly good moment to save
- 3. Not a good moment to save
- 4. A very bad moment to save
- 9. Don't know

11. Over the next 12 months how likely is it that you save any money?

- 1. Very likely
- 2. Fairly likely
- 3. Not likely
- 4. Not at all likely
- 9. Don't know

12. Which of these statements best describes the current financial situation of your household?

- 1. We are saving a lot
- 2. We are saving a little
- 3. We are just managing to make ends meet on our income
- 4. We are having to draw on our savings
- 5. We are running into debt
- 9. Don't know

Quarterly questions

13. How likely are you to buy a car in the next 12 months?

- 1. Very likely
- 2. likely
- 3. Not likely
- 4. Not at all likely
- 9. Don't know

14. Are you planning to build a house during the next 12 months (for you to live, for a member of the family, as a holiday house, to rent it away, etc.)?

- 1. Yes, definitely
- 2. Possibly
- 3. Probably not
- 4. No
- 9. Don't know

15. How likely are you to spend large sum of money for improvements or renovations of your house over the next 12 months?

- 1. Very likely
- 2. Likely
- 3. Not likely
- 4. Not at all likely
- 9. Don't know

16. How much do you expect the prices to change during the next 12 months? They will...

- 1. Increase 0-2%
- 2. Increase 2-4%
- 3. Increase over 4%
- 4. Decrease

General data

A. The monthly average revenue of your household is...
(please write an approximate value)

- 1. ALL----- per month → go to C
- 9. Don't know → go to B

B. Choose one of the intervals of income which includes the monthly average income of your household:

- 1. ALL 0 – 18 000
- 2. ALL 18 001 – 35 000
- 3. ALL 35 001 – 87 000
- 4. More than ALL 87 000

C. Gender of the person that answered the questionnaire:

- 1. Male
- 2. Female

D. Age of the person that answered the questionnaire:

- 1. 16-29 years old
- 2. 30-49 years old
- 3. 50-64 years old
- 4. 65+ years old

E. Education of the person that answered the questionnaire:

- 1. 8-years or less
- 2. High school
- 3. College or more

F. Status in the job market:

(for details and concrete examples please refer to the guidelines)

- 11. Directors and specialists
- 12. Technicians and specialized assistants
- 13. Office clerks and service workers
- 14. Skilled agricultural workers and artisans
- 15. Employees in the industry, fitters and workers
- 21. Unemployed
- 22. Retired, disability
- 23. Other commitments (student, other)
- 9. Don't know

G. Type of job of the person:

- 1. Full-time job
- 2. Part-time job