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The Assessment of the Investment Activity of Enterprises Based on the Business Tendency Surveys

Abstract

In this paper the basic results of the business tendency surveys conducted by Central Statistical Office on investment activity of manufacturing industry and construction enterprises are presented. The data are presented for years 1999-2004 i.e. period when those surveys were fully harmonised with requirements of the European Commission.

Presented data concern such elements of investment survey as: percentage of enterprises undertaking this kind of activity, size and directions of changes of investment activity, its motives and aims as well as sources of financing. The results of the surveys show situation of manufacturing industry and construction enterprises as well as their subgroups divided according to size classes and – for manufacturing industry – kind of activity.

Results of the surveys confirm that the situation of Polish enterprises is still difficult what influences size of their investment activity. Larger units are in much better situation as well as those with foreign capital. In most cases the main reasons for investments are not the technical factors but enlargement of production to supply demand. The main aim of investment activity is modernisation of possessed fixed assets while beginning of new investment is not so important. This is the reason why investments aimed at automation and mechanisation of production are rare. On the other hand there is an evident influence of close accession to the European Union and willingness of many enterprises to cope with competition on international markets. In this paper the analysis of accuracy of enterprises' assessments of their investment activity was made through comparison with proper indicators of quantitative statistics.

Collected results show that entrepreneurs assess size and directions of investment activity rather accurately indicating main directions of changes and turning points. It was more difficult for them to assess future directions of development of investments, especially in unstable situation of economy and with quick changes of general

economic situation of the country. In this field the quality of collected results is much better for shorter term forecasts.

1. Preliminaries

The collection of statistical data on inclination of economic units to undertake investment activity and the size of those investments is one of the basic elements that allow to assess the situation of enterprises, their present financial situation and position on the market as well as their future possibilities of development and strengthening their position in comparison with competing entities.

In the system of the Polish official business statistics, surveys on investment activity are conducted quarterly and yearly. The inclusion of questions from this field to the business tendency surveys was aimed at supplementation of the quantitative data with new elements as well as collection of chosen data leading qualitative statistics.

The business tendency surveys deliver first assessment on the direction of changes of investment outlays made by enterprises in the previous and present year. For instance, primary yearly data on investment outlays are available from the qualitative statistics in April of the next year while from the business tendency surveys – one month earlier. Much more earlier first signals of the tendencies of the investment activity are obtained after the first and the third quarter of the given year.

The business tendency surveys are also a source of information on the forecasted investment activity in the present and future year so they could be used to the elaboration of the short term forecasts of the economic growth of the country.

Eventually in the business tendency surveys there are gathered data that are not collected by the quantitative statistics, for instance on factors influencing decisions on investments.

Moreover, the European system of investments surveys that is used in the business tendency surveys (wording of questions, timeliness and calculation of indicators) allows making comparisons of results elaborated for Polish enterprises with results published for other countries.

The factors mentioned above cause that the assessments of entrepreneurs of present and future investment activity collected in the business tendency surveys become more and more important in analyses of present and future economic situation. There is no doubt that the possibilities of the use of those results will increase with the lengthening of time series of the collected data.

Such increasingly wide use of the results of the business tendency surveys could be observed in Poland in the recent years, since the basic time series of information collected in those surveys are long enough to be used in the assessment of the present and future situation of enterprises (for three sectors of economy, that is manufacturing industry, construction and retail trade time series are more than ten years long). There were several CSO papers on the contents and comparability of those data with results of adequate qualitative statistics, among others (Walkowska and Zagoździńska (1999); Sękowska and Zagoździńska (2002); Walkowska (2002); Walkowska and Zagoździńska (2003).

At the present stage of those surveys it is interesting whether and on what scale the results of the surveys on investment activity of enterprises could be used in analyses of economic situation. The aim of this paper is to present basic results on investment activity of Polish manufacturing and construction enterprises collected in the business tendency surveys and assessment of their usefulness for needs of analyses of present and future situation of enterprises.

2. Methodology of investment surveys in business tendency surveys

Business tendency surveys have been conducted by Central Statistical Office since June 1992. As the first one, the business tendency survey in manufacturing industry was undertaken, one year later – surveys in construction and retail trade. Among other questions in quarterly questionnaires of manufacturing industry survey and monthly questionnaire of construction survey there were questions on investment activity of enterprises. In industry questionnaire they concerned directions of changes of investment outlays in a given quarter as well as investments forecasted for the future year and sources of their financing. In construction survey enterprises were asked if they intend to undertake the investment activity in the coming half of the year and what will be the sources of financing of this activity. The collected results were regularly published (*Business tendency survey in manufacturing industry, construction and retail trade – Quarterly Bulletin*, CSO) and used for the needs of the country analysis.

In 1999 within the harmonisation of the Polish business tendency surveys with the European system modification of content and timing of investment survey in the business tendency surveys was made. In spite of questions asked in the quarterly (for industry) and monthly (for construction) surveys separate bi-yearly questionnaire was introduced. This questionnaire is sent to the units taking part in the business tendency surveys in manufacturing industry and construction. In the system adapted by CSO the

sample includes enterprises with 10 and more persons employed (surveys in manufacturing industry and construction do not include so-called micro-enterprises). New questionnaire contains questions harmonised with the Joint Harmonised European Union Programme of Business and Consumer Surveys (*The Joint Harmonised EU Programme of Business and Consumer Surveys*, European Economy No 6/1997, European Commission, 1998) and additionally two "Polish" questions asked already to respondents in the previous system: on kinds of investments and on sources of their financing. Entrepreneurs respond to questions according to the timing recommended by the European Commission i.e. in the first ten days of March (four questions) and November (7 questions). Results of surveys are available according to the kind of activity conducted by the enterprise (NACE classification) and according to the size classes (which allows to assess the situation of small, medium and large enterprises).

Because of the change of the wording of questions asked to the enterprises on their investment activity as well as timeliness and the horizon of the prognostic questions made in 1999, in this paper only results for the last five years are presented.

3. Size of the investment activity from the point of view of entrepreneurs

Before the results obtained in the business tendency surveys are analysed, it is worth to show what the overall economic situation of Poland was at that time. In the table below there are shown three indicators presenting this situation: indices of the gross domestic product, domestic demand and gross fixed capital formation.

Table 1. Chosen yearly economic measures (in constant prices, previous year = 100)

Specification	1998	1999	2000	2001	2002	2003
Gross domestic product	104.8	104.1	104.0	101.0	101.4	103.8
Domestic demand	106.3	104.8	102.8	98.4	100.8	102.4
Gross fixed capital formation	114.2	106.8	102.7	91.2	94.2	99.1

This data show that in period analysed in this paper Polish economy did not develop regularly. Among others, in the first three years the slowdown of the increase in the gross fixed capital formation was recorded. In 2001 even the decrease of gross fixed capital formation took place, but in the next years the tendency was reversed. It is interesting how those tendencies were submitted by enterprises participating in the

business tendency surveys in manufacturing industry and construction. Presentation of those assessments is one of aims of this elaboration.

The primary information on situation of enterprises in the field of investment activity collected from the business tendency surveys are data on the percentage of units undertaking or intending to start this kind of activity.

In this field the results obtained for manufacturing industry and construction enterprises show that in the period under review the year 2001 was the most difficult for the Polish entrepreneurs. In manufacturing industry almost 20% of surveyed units did not undertake investment activity, in construction – even twice as much. In the following three years this percentage has been diminishing (to 10% in manufacturing industry in March 2004 and 24% in construction). It is characteristic at the same time that the assessments made at the beginning of the year are worse than assessments from the end of the same year. It might indicate that in reality since 2002 the situation of the Polish enterprises in the year comes out to be better than it was predicted by enterprises what influences the diminishing of the pessimism of respondents.

Second characteristic occurrence is much worse situation of small and medium enterprises in comparison with the situation of big ones. In 2001 every second small enterprise in manufacturing industry did not plan investment activity. In the group of medium enterprises the percentage was 30% while in the group of large ones it did not exceed 15%. In 2004 no investment activity was planned by 37% of small enterprises, 13% of medium and only 4% of big ones.

Analogical results for construction also confirm much worse situation of small units. In this sector of economy in the most difficult period every second small firm did not intend to invest as well as 38% of medium enterprises and 27% of large ones. This data additionally show that situation of construction enterprises was worse than the situation of manufacturing industry units. Its improvement in the following years was also slower than in industry because at the beginning of 2004 43% of small units did not intend to invest, 19% of medium and 17% of large ones.

In manufacturing industry the highest percentage of units that do not intend to invest is among enterprises producing wearing apparel (55%), furniture (40%), wood and products of wood (32%), radio, television and communication equipment (32%), textiles (31%), other non-metallic mineral products (30%). The improvement noticed in the following years was the most significant in units producing radio, television and communication equipment (only 2% of units did not intend to invest in 2004), wood and products of wood (12%) and furniture (15%). The highest percentage of enterprises that did not invest is for enterprises producing wearing apparel (38%).

First three questions of the business tendency survey questionnaire deliver data on the assessment of the percentage change of the investment outlays. Those questions concern three points in time:

- In the first question – posed in March of the year n – the respondents write down indices of the changes of those outlays in the year $n-1$ in comparison with the year $n-2$;
- In the second question – posed twice a year in the year n i.e. in March and November – the respondents assess the indices of the changes of those investments in the year n in comparison with the year $n-1$;
- In the third question – posed in November of the year n – the respondents assess the forecasted size of outlays for the year $n+1$ in comparison with the year n .

Answers obtained on the first of those questions are the first information on investments in the year ($n-1$), leading – as it was stated before – the quantitative statistics. Final indices of investment outlays in manufacturing industry and construction are shown in the table below:

Table 2. Indices of the investment outlays in the national economy (previous year = 100)

sector	1998	1999	2000	2001	2002
manufacturing activity	117.9	92.6	90.8	88.5	92.8
construction	125.6	103.7	107.4	83.7	93.8

Data collected from the business tendency surveys confirm the trend of macroeconomic situation presented above: in the first years of the period under review investment outlays of enterprises were decreasing. In manufacturing industry the lowest level of those outlays was observed in 2001 and since then the rise of tendency begun. In construction slow increase had been observed one year earlier. It should be reminded that the business tendency surveys do not include the smallest units (micro-enterprises) that are much more significant in construction than in manufacturing industry and at that time their situation was clearly worse than of the bigger ones. That is why the results above do not show the situation in the whole manufacturing industry and in the whole construction to the same degree.

Answers of the enterprises to that question could be also treated as an assessment of the correctness of replies given to the second question. The respondents' assessments of changes of investment outlays in the year n estimated in the following years, in November of that year in most cases were lower than indicators presented

half a year earlier that is three months after the end of the reporting year. It could be explained by the significant size of the investment activity in the last quarter of each year, but the scale of this occurrence shows that the situation of the Polish enterprises is not yet stabilised.

Analysing answers to those questions it is worth to consider the relation between assessments of the respondents made in March and November of a given year. In manufacturing industry first of those assessments – closer to the forecasts in their character – were usually higher than the second ones. It also confirms other dependencies between prognostic and diagnostic assessments in other fields of the business tendency surveys: higher optimism of entrepreneurs while formulating their forecasts than the later realisation of the indicator. March assessments should be then interpreted with being aware of the dependencies mentioned above.

It is also interesting that in construction there is inverse dependence: correction of the first March assessment presented in November was more optimistic. Higher prudence of those assessments could be caused by the seasonal character of the works conducted by the construction enterprises and the fact that real yearly situation of the examined units is more difficult to assess.

Data collected as answers to the third question concerning investments forecasted for the future year seem to show that it is difficult for the entrepreneurs to forecast the situation in turning points. In the analyzed period it particularly concerns forecasts formulated in manufacturing enterprises for the year 2003. Those forecasts came out to be much more prudent than the real size of the investment activity undertaken later. In case of construction, recorded period of prudent forecasts was longer what was probably connected with the longer period of difficulties in this sector of the economy.

At the end of this part of the elaboration the differences observed in the investment activity by enterprises of different size classes should be also underlined. Larger units clearly formulate better assessments of their activity in this field which confirms their better situation and position on the market than those of small units. The latter ones – in manufacturing industry as well as in construction – are those that submit the further decrease in their investment activity in comparison with the previous year even for the year 2004.

4. Factors influencing decisions on investment activity

Answers to questions on factors influencing inclination of enterprises for investing give interesting information on behaviour of entrepreneurs in comparison with their present situation and present and future overall economic situation.

In manufacturing industry main indicators influencing decision concerning undertaking the investment activity are the forecasted level of demand for produced goods and technical factors: development of technology, adaptation to technical requirements specified in proper regulations, increase in qualifications of labour force.

In case of demand, assessments made by entrepreneurs stem from of the overall economic situation of the country in the recent years: diminishing demand in the years 1998-2001 justifies decrease in importance of this factor recorded in the manufacturing industry enterprises. The next year brought clear reversion of that tendency. This direction of changes has been observed particularly in large units, and according to the kind of activity – mainly in units producing furniture, units producing wood and wood products (providers of materials for the latter ones), chemicals, chemical products and man-made fibres, other non-metallic mineral products and in enterprises conducting publishing activity.

Importance of the demand increased also in the last year in construction. It is caused by the similar tendency observed in enterprises producing other non-metallic mineral products of which construction is the main recipient. It is characteristic for construction that the forecasted increase in demand influenced more the investment activity of small and medium enterprises than those of the large ones.

Second of the most important factors – technical factor – became also much more important in the last year of the period under review. The reasons for this occurrence should be found not only in increasing demand but also in expected by entrepreneurs accession of Poland to the European Union and connected with this harmonisation to the European technical technological norms as well as eagerness to cope with international competition and entry on the Union markets. It is confirmed by the fact that this is the most underlined factor by producers of food and beverages that is those for which the implementation of the European technological and sanitary norms was the most important before 1 May 2004.

In construction importance of technical factor for all examined period is on similar and significant level.

5. Aims of investment activity

Important information on present situation of enterprises and on possibilities of their future development is the answer to question about aims of planned investment activity.

In the examined period among investing enterprises much more units undertake activity aimed at modernisation of already possessed assets than at new investments.

In manufacturing industry a little more than 80% of enterprises bear expenditures on modernization. New investments were planned in 2004 by about 70% of units while this percentage was increasing systematically since 2002 (in 2001 it amounted to the lowest – 45% – level in the whole period under review). This tendency confirms reported above gradual improvement of the situation of manufacturing industry enterprises in the last few years.

Also in this case collected data show faster improvement of the situation of large units in comparison with small and medium ones. In 2004 new investments were planned by 80% of large units, 65% of medium and only 50% of small ones.

In particular sectors of industry in 2004 the highest percentage of units planning investments aimed at modernisation was among enterprises producing food and beverages, chemicals and chemical products, other non-metallic mineral products, metals and metal products, electrical machinery and equipment. Only in three divisions of industry more units plan new investments than modernising investments: producers of wood and wood products, electrical machinery and equipment and radio, television and communication equipment. New investments will constitute the most significant percentage for producers of wood and wood products, chemicals and chemical products and radio, television and communication equipment.

In construction – where overall situation of enterprises is worse than in manufacturing industry – modernising investments were undertaken by about 70% of units in the whole examined period. New investments were started by fewer enterprises till 2003 but this difference was becoming gradually smaller and in 2004 totally disappeared.

Also in this field of economy the development plans of the greatest enterprises were more optimistic than of the smaller ones. First of all it is shown by higher percentage of units planning modernising investments in the first group (in 2004 there were 60% of small units, 67% – medium and 72% large ones) as well as new ones (accordingly – 53%, 66% and 80%). It should be also noticed that in the group of big units the interest in new investments increases more visibly than the interest in the modernising investments.

The supplement to the information on the aims of investment activity presented above is the answer to subsequent question of the questionnaire harmonised with the system passed by the European Commission. They confirm that both manufacturing industry and construction enterprises (total and divided to the size classes) plan the exchange of used or disused machinery and equipment more often than automation, mechanisation or introduction of new techniques.

6. Sources of financing investment activity

Both in manufacturing industry and construction enterprises dominant source of financing investment activity are own resources of enterprise. They are indicated by more than 90% of respondents. It should be also underlined that this source is dominant in all groups of enterprises independently of size class and kind of activity.

The second source is domestic bank credit used by less than 40% of enterprises in both sectors of economy. In this case this source is a little more important in larger and stronger financially units to which banks grant credits more willingly.

Foreign credit is only a marginal source of financing investment activity both for construction and manufacturing enterprises. In the latter ones it is used mainly by units from divisions to which the foreign capital poured in, including producing wood and products of wood, chemicals and chemical products and motor vehicles.

Those results are confirmed by the quantitative statistics. In the total amount of investment outlays borne by the enterprises own sources of investor and domestic bank credit significantly prevail foreign bank credit.

Table 3. Financing of investment outlays, financial elements of fixed assets and intangible assets in units with more than 50 employees – sources of financing (in %)

Year	total investment outlays	of which:		
		own sources of investor	domestic bank credit	foreign bank credit
1999	100	61.3	16.8	2.9
2000	100	69.3	14.3	3.1
2001	100	66.2	17.7	2.2
2002	100	71.3	11.8	3.3

7. Summary

To sum up first it should be stated that the analysis made with use of data on investment activity gathered in the business tendency surveys indicates that it is a good, additional source of information on situation of enterprises and general economic situation. Respondents are able to assess size and directions of present and future investment activity with good approximation. They had some difficulties with this assessment in a not stabilised general economic situation of the country, especially in turning points. That is why forecasts of investment activity formulated by entrepreneurs (similarly as other forecasts) are more accurate for shorter periods on present stage of economic development of Poland.

Second conclusion coming from the analysis concerns situation of enterprises in sections according to size classes and kind of activity. Both in manufacturing industry and construction situation of smaller units is significantly more difficult than of large ones. It causes that they are not able to develop their activity on expected scale, it is more difficult for them to find sources of investments and to improve their position towards competition.

A significant percentage of larger units undertake investment activity and those investments are more often new investments that should lead to implementation of new production techniques than modernisation, they have also easier access to bank credits to finance their investment activity.

In sections divided according to kind of activity it is obvious that units connected with foreign markets, especially those with foreign investors are stronger. It should be also remembered that in the first phase of inflow of foreign capital to Poland investors were mainly interested in the strongest units with prospects for future development also on international scale.

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