



**National Bank of Poland  
Macroeconomic and Structural  
Analyses Department**

**THE CONDITION OF THE  
NON-FINANCIAL  
ENTERPRISES IN THE FIRST  
QUARTER OF 2006**

## CONTENTS

<b>Summary</b>	<b>4</b>
<b>I.1. Demand, Orders, Output</b>	<b>7</b>
Level of demand	7
Forecasts of demand	7
Changes in demand – analysis of main categories	8
New orders	12
New order forecast	12
Changes in orders – analysis of main categories	12
Output	15
Forecasts of output	15
Changes in output – analysis of main categories	15
<b>I.2. Economic condition</b>	<b>18</b>
Current assessment of economic condition	18
Changes in output – analysis of main categories	18
Changes in economic condition at the enterprise level	19
Condition assessments vs. growth barriers	19
Forecasts of economic developments	19
Forecasts of developments – analysis of main categories	20
Corporate sentiment	20
<b>I.3. Employment</b>	<b>25</b>
Employment forecasts	25
Employment forecasts – analysis of main categories	26
Selected factors affecting employment	26
<b>I.4. Wages</b>	<b>31</b>
Forecasts of wage increases	31
Selected factors affecting wage increases	31
forecasted wage increases	32
Wage pressures	32
<b>I.5. Investment</b>	<b>34</b>
Forecast of economic activity	34
Investment activity – analysis of main categories	35
New investments in Q1	35
New investments – analysis of main categories	36
New investments – plans for 2006	36
Factors encouraging new investment	36
Investment barriers	36

Sources of funding new investment _____	38
Differences in investment financing – analysis of main categories _____	38
<b>I.6. Stocks of finished goods in industry _____</b>	<b>44</b>
Evaluations of stock level _____	44
Changes in stock level – analysis of main categories _____	44
Selected factors affecting stock level _____	45
<b>I.7. Production capacity utilisation _____</b>	<b>47</b>
Level of production capacity utilisation _____	47
Changes in production capacity utilisation – analysis of main categories _____	47
<b>I.8. Bank loans _____</b>	<b>50</b>
Debt forecasts _____	50
debt forecasts – analysis of main categories _____	50
Selected factors affecting the debt level _____	51
Loan availability _____	51
<b>I.9. Loan interest rates _____</b>	<b>54</b>
Interest rates on loans denominated in the zloty _____	54
Interest rates on foreign currency loans _____	54
Changes in loan interest rates – analysis of main categories _____	54
Changes in interest rates on loans and the NBP reference rate and interbank interest rates _____	55
Interest rate forecasts _____	55
<b>I.10. Financial liquidity of enterprises _____</b>	<b>58</b>
Liquidity assessments _____	58
Liquidity assessment – analysis of main categories _____	58
Loan debt servicing _____	58
Loan debt servicing – analysis of main categories _____	59
Non-bank debt servicing _____	59
Non-bank debt servicing - analysis of main categories _____	59
Financial liquidity and debt servicing _____	59
<b>I.11 Prices, Costs _____</b>	<b>63</b>
Cpi forecasts _____	63
Ppi forecasts _____	63
Forecasted prices of own products _____	64
Forecasted prices – analysis of main categories _____	64
Selected factors affecting the change in prices _____	65
Forecasted prices of commodities and materials _____	65
Enterprises' response to the increase in fuel prices _____	65
Fixed costs _____	69
Changes in fixed costs – analysis of main categories _____	69

<b>I.12 Exchange rate</b>	<b>71</b>
The rate of exports profitability and domestic production	71
Fluctuations of the exchange rate as a barrier to development	72
<b>I.13. Exports, imports</b>	<b>75</b>
Export activity	75
Areas of increased export activity	75
Profitability of exports	75
Profitability of exports – analysis of main categories	76
Export forecasts	76
Import	77
Changes in the import to output ratio — analysis of main categories	77
Features of the populations of exporters and importers	78
<b>I.14. Growth barriers – selected problems</b>	<b>82</b>
<b>I.15 Economic climate indices – supplementary data</b>	<b>83</b>
<b>II. Annex 1 - Methodological notes</b>	<b>84</b>
<b>III. Annex 2 – Construction of economic climate indices</b>	<b>85</b>
<b>IV. Annex 3 – Survey form</b>	<b>91</b>

In view of the results of NBP monitoring, surveys conducted by other research centres and macroeconomic data of the public statistics, used during the process of constructing the economic climate indices (see Annex 2), the following conclusions may be formulated:

- 1) 2005 Q4 was the second consecutive quarter in which improvement in the economic situation of the surveyed enterprises was observed (after a slight downward adjustment, which took place in the first half of the previous year), while the index of current situation assessments reached its record highs in the survey history (80% of all the surveyed enterprises perceived their situation as good or very good).
- 2) Liquidity ratio reached its highest level in the history of the surveys. The improvement in liquidity was reflected, inter alia, in an increase in the capacity of enterprises to settle their liabilities towards banks as well as to pay off their liabilities towards other economic agents. All the three measures of paying capacity reached their record highs in the history of the surveys. A better condition of the surveyed enterprises was also reflected in an increase in the percentage of enterprises declaring no major obstacles to their growth (28% of respondents made such declarations, i.e. 5 percentage points more than in the previous quarter).
- 3) Economic situation forecasts for Q1 remained positive (forecasts of improvement prevailed). This index, in seasonally adjusted terms, grew in relation to Q4 and reached its highest level since 2001.
- 4) Entrepreneurs' assessments of demand in December of 2005 improved slightly in relation to those from September — the percentage of enterprises reporting problems with finding customers for their products decreased. The capacity utilisation increased as well (to its record high in the survey history), whereas difficulties connected with excessive – in relation to the needs – finished product inventories decreased.
- 5) The seasonally adjusted demand forecast index points to an improvement in Q1 (in quarter-on-quarter terms), and also to an increase in relation to the corresponding period of the previous year. This observation is also supported by the analysis of changes in the permanent component of demand forecasts, which increased both in quarter-on-quarter and year-on-year terms. In spite of its decline (in relation to Q4), the output forecast index reached a positive value (forecasts of increase in output prevailed in Q1). Moreover, enterprises demonstrated a higher degree of optimism than in the first quarter of the previous year.
- 6) In Q4, the percentage of exporters grew to its highest level in the survey history, while the share of exports in the revenue remained within its highest values (since the end of 2002 the

share of exports in the revenue has remained at a fairly steady level, fluctuating around 40%<sup>1</sup>). The balance of forecasted exports remained distinctively positive. Its seasonal decline in relation to Q4 and also a slight decline in comparison to the first quarter of the previous year, suggest that export sales growth stabilised at a high level. However, the scale of problems related to an unfavourable or excessively volatile exchange rate remained unchanged — for the past six quarters it has been at the top of the list of barriers to growth. The exchange rate of the zloty in relation to foreign currencies, which remains unfavourable from exporters' viewpoint, may at a certain point begin to exert negative impact on export activities. So far, however, it has been stimulating this group of enterprises to undertake adaptation measures. These activities resulted in a decrease in the share of unprofitable exports observed over the past three months (this share dropped by 0.5 percentage point to 6.7%).

- 7) The share of imports in costs reached its record high in the history of the surveys (at 20.4%, an increase of 1.8 percentage points over the past 3 months).
- 8) The index of anticipated employment in seasonal adjustment was positive for the second consecutive time (and, simultaneously, for the second time in history). An analysis of long-term fluctuations of the index suggests a gradual improvement of these forecasts. A slight increase in employment is reported by companies in sections *Manufacturing* and *Trade & repair*. A decrease in employment is anticipated primarily in the section *Construction*, which has a clearly seasonal character, as well as in the power production industry, which should be linked with the restructuring of this sector that has been underway for a few years now.
- 9) In 2006 Q1, the percentage of enterprises planning to raise wages is lower than in the corresponding period of the previous year (23%, in comparison to 28% last year). Moreover, the size of the proposed rises will be lower than in 2005 Q1 (the average increase in wages will amount to 3.6%, in comparison to 4% in 2005 Q1).
- 10) An accelerating investment activity has been observed. New investments commenced by a larger number of investors than in the previous quarter, as well as an increase in expenditure on projects commenced prior to the survey period, may be expected. The surveyed enterprises also reported improved capability to continue commenced undertakings. Long-term plans (for the next 12 months) suggest that in the whole of 2006 new investment activities are anticipated by a half of the surveyed companies — a number similar to that in 2005. The majority of investors assume that these investments will be commenced in the first half of the year.
- 11) In 2006 Q1 more enterprises will be reducing their loan indebtedness than increasing it. Anticipated reductions are most often reported by smaller enterprises as well as companies in a very good economic condition, and respondents who are not planning new investments. An increase in debt is, on the other hand, anticipated primarily by companies planning new

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<sup>1</sup> The share of exports in the revenue has been calculated for exporters only.

investments (the majority of which are large enterprises). In this group, debt increases are forecasted even more frequently than it was observed in their plans for Q4.

- 12) The respondents forecast a slight increase in the growth rate of prices for their products and services (1% in quarter-on-quarter terms). This increase is typical for this period and — among others — stems from an increase that is anticipated in this period in prices of raw materials and supplies used in production (rise of 1.8% in quarter-on-quarter terms). However, the price growth rate (both in the case of producer prices and the prices of raw materials and supplies) is estimated to be lower than in 2005 Q1. Price increases are planned mainly by companies that sell their products in the domestic market, and in the classification by employment size — by small- and medium-sized enterprises. In spite of these increases, the companies do not expect any rise in the inflation level. Forecasts for the next 12 months indicate a drop in the price growth rate; both the CPI and PPI will fall – down to 2.3% and 2%, respectively (median of expectations).
- 13) As follows from the declarations of the respondents, over 80% of them would not increase their own prices in view of a potential increase of fuel prices (the growth in fuel prices observed in 2005 did not affect the prices of 90% of the surveyed companies). Only 3.5% of respondents intend to pass a potential rise in fuel costs entirely onto their customers. Other companies would introduce only minor increases, which would not fully compensate for the increased fuel costs. Among transport companies, many more enterprises, i.e. as many as a half, would increase prices of their services. In 15% of the companies, the price increases would fully compensate the rising fuel costs, whereas the remaining 35% of transport companies would only decide on slight adjustments of their prices.

## I.1. Demand, Orders, Output

level of demand	<ul style="list-style-type: none"> <li>assessments of demand barrier remain at one of its lowest levels since 1999</li> <li>additionally, the scale of problems of enterprises with finding customers for their products has slightly diminished in relation to the previous survey</li> <li>similarly to the past six quarters, problems with demand ranked third among obstacles to growth</li> <li>demand barrier was most frequently reported by construction enterprises</li> </ul>
demand forecasts	<ul style="list-style-type: none"> <li>after some drop in forecast optimism in the first half of 2005, subsequent quarters brought improvement in demand forecasts (in case of seasonally adjusted data)</li> <li>raw data – a drop in forecast optimism typical for the beginning of the year</li> </ul>

### LEVEL OF DEMAND

December 2005 saw a slight decline in relation to September in the scale of difficulties in finding customers for products offered by the surveyed enterprises. The demand barrier was reported by 10% of enterprises (1.2 percentage point less than in September 2005) – cf. Fig. 1.

At the moment, the assessments of the strength of impact of the demand barrier remain at one of their lowest levels since 1999. For over a year now, these problems rank at the third place among barriers halting growth of the enterprise sector.

The demand barrier was most often encountered by enterprises in the section *Construction* (19% of the section) and enterprises providing services grouped as *Other* (16% of the section).

### FORECASTS OF DEMAND

After some drop in the forecast optimism observed in 2005 Q3 the next two quarters brought improvement. In 2006 Q1 the index of seasonally adjusted forecasts of demand reached its historical high. The analysis of the permanent component of demand, which edged up in both quarter-on-quarter and year-on-year terms, additionally confirms the thesis about the rise in the demand for products offered by enterprises (see Fig. 2).

Raw data suggest a typical for this period decline in the demand for products – opinions of a seasonal drop of demand in Q1 prevailed in the sample.

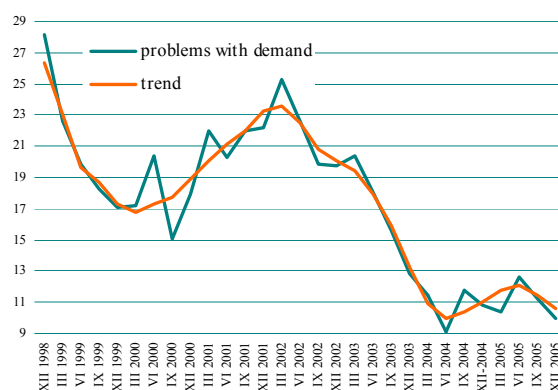


Fig. 1 Low demand as a barrier to growth (vertical axis shows the number of companies reporting problems with finding customers for their products)

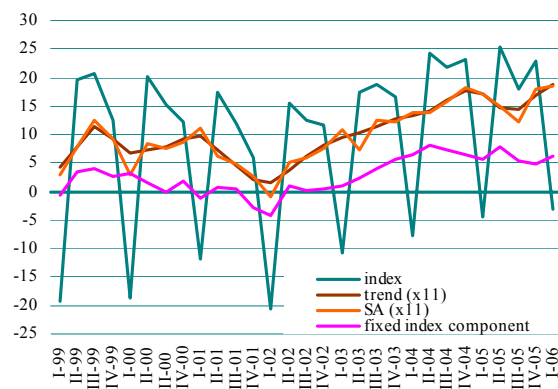


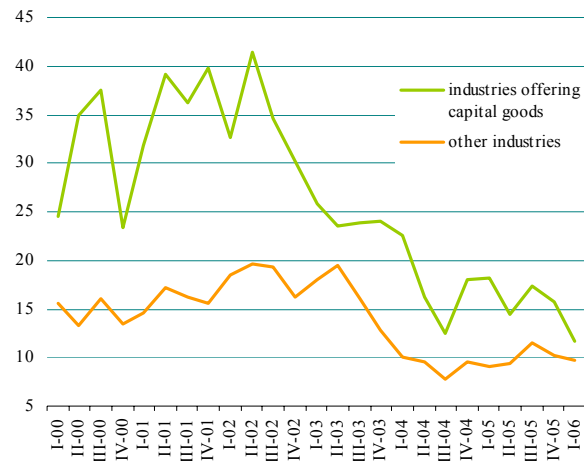
Fig. 2 Total forecast demand index (balance differences), fixed index component (balance differences) and the trend of the total forecast demand index



## CHANGES IN DEMAND – ANALYSIS OF MAIN CATEGORIES

The analysis of enterprises' declarations concerning demand barrier and their demand forecasts in main categories allows the following conclusions:

- the rising tendency in the group of exporters will continue, mainly due to non-specialised exporters (with up to 50% share of exports in the revenue), while there will be some slowdown in forecast optimism in enterprises producing only for the domestic market and also in the group of specialised exporters – cf. Fig. 5-7,
- optimism of forecasts of demand in industry is growing steadily; good sentiment also continues in trade, where the seasonally adjusted index of forecasts reached its maximum; in turn, a slight slowdown is being observed in the rate of improvement in the group of construction enterprises, the section characterised by the highest rate of growth in the recent period – cf. Fig. 8-10,
- demand outlook is positively assessed by private companies, but less optimistically by public sector enterprises, where the demand barrier started to grow at the beginning of 2005 and the index of demand forecasts was subject to large volatility – cf. Fig 12-13,
- there are certain signs of improvement in the forecast optimism in the group of small companies (with up to 49 employees) and stabilisation of demand assessment and demand forecasts in large enterprises – Fig. 11,
- increased volatility of demand forecasts is observed in the group of investment goods producers, where at the same time a clear drop in demand barrier is observed – cf. Fig. 3.



**Fig. 3 Number of companies reporting problems with finding customers for their products in industries offering capital goods and in other industries**

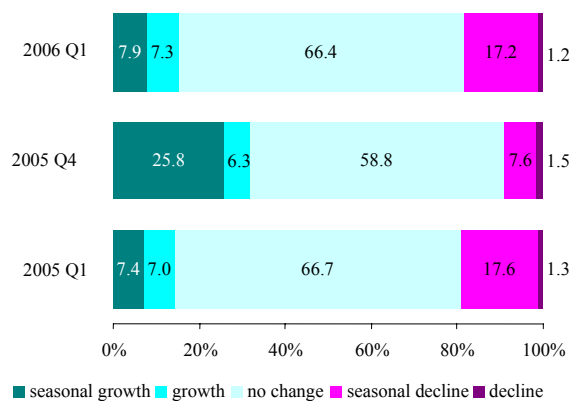


Fig. 4 Demand forecasts – structure of survey responses

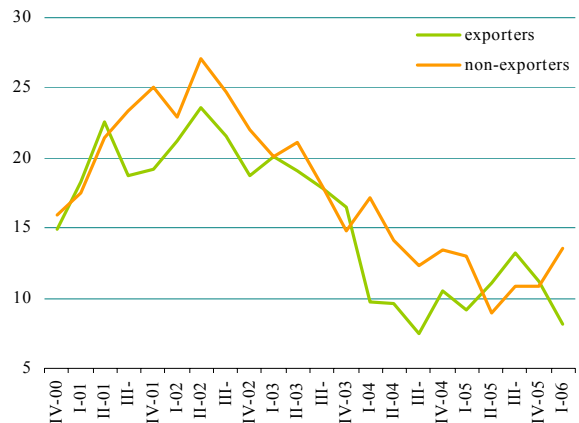


Fig. 5 Number of companies reporting problems with finding customers for their products in the classes of exporters and non-exporters



Fig. 6 Forecast demand indices (balance differences) for exporters and non-exporters (the variable trends have been obtained using the x11 method)

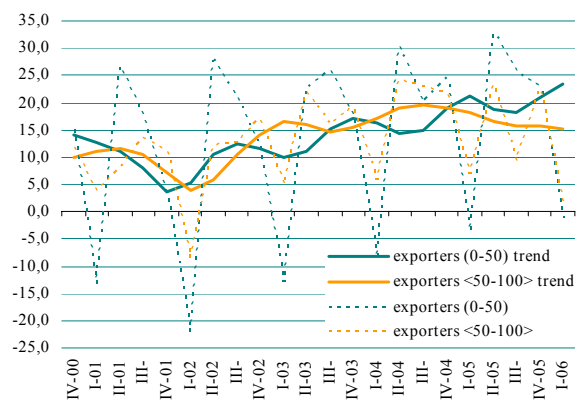


Fig. 7 Forecast demand indices (balance differences) for exporters with low (up to 50%) and high (from 50 to 100%) share of exports in total revenue (the variable trends have been obtained using the x11 method)

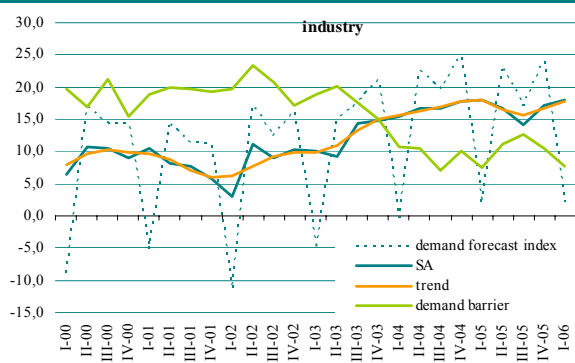


Fig. 8 Forecast demand indices (balance differences) and the number of companies reporting problems with finding customers for their products in industry (the figure shows raw and seasonally adjusted demand indices and the variable trends obtained using the x11 method)

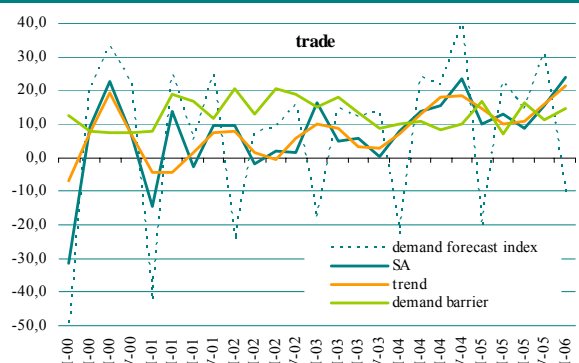
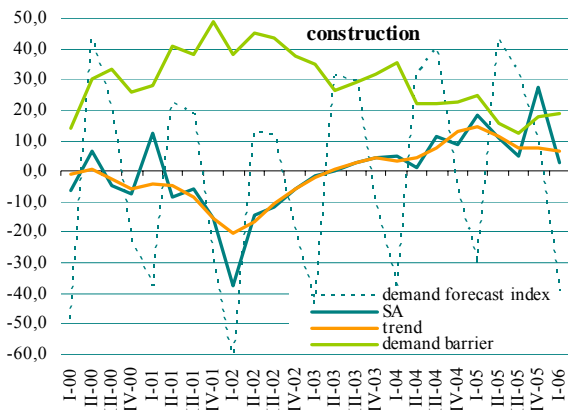
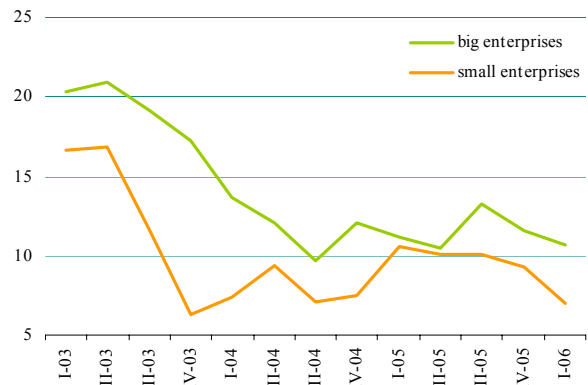


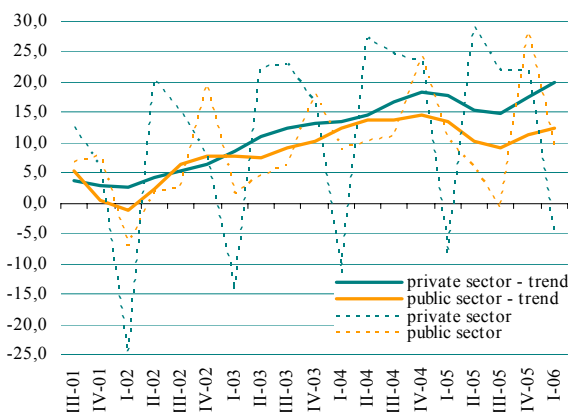
Fig. 9 Forecast demand indices (balance differences) and number of companies reporting problems with finding customers for their products in trade (the figure shows raw and seasonally adjusted demand indices and the variable trends obtained using the x11 method)



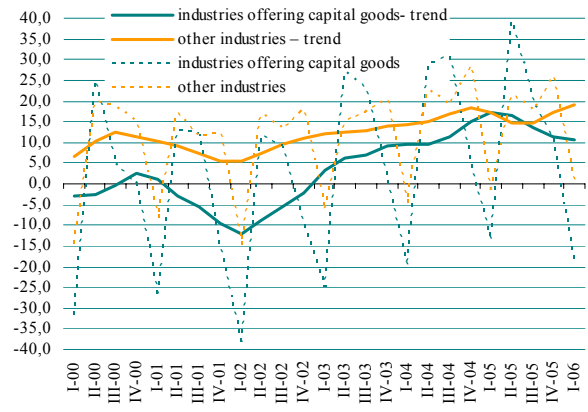
**Fig. 10** Forecast demand indices (balance differences) and number of companies reporting problems with finding customers for their products in construction (the figure shows raw and seasonally adjusted demand indices and the variable trends obtained using the x11 method)



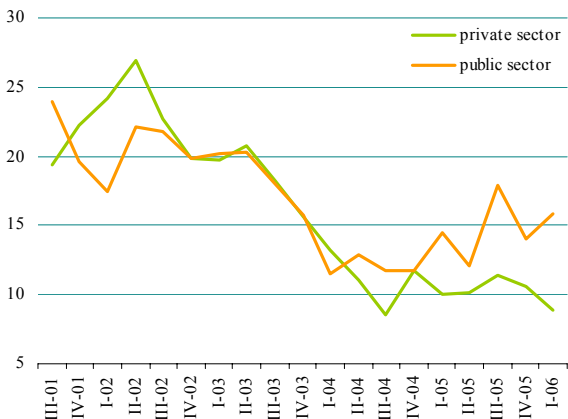
**Fig. 11** Forecast demand indices (balance differences) in large and small enterprises (the variable trends obtained using the x11 method) – top figure; and number of companies reporting problems with finding customers for their products – bottom figure.



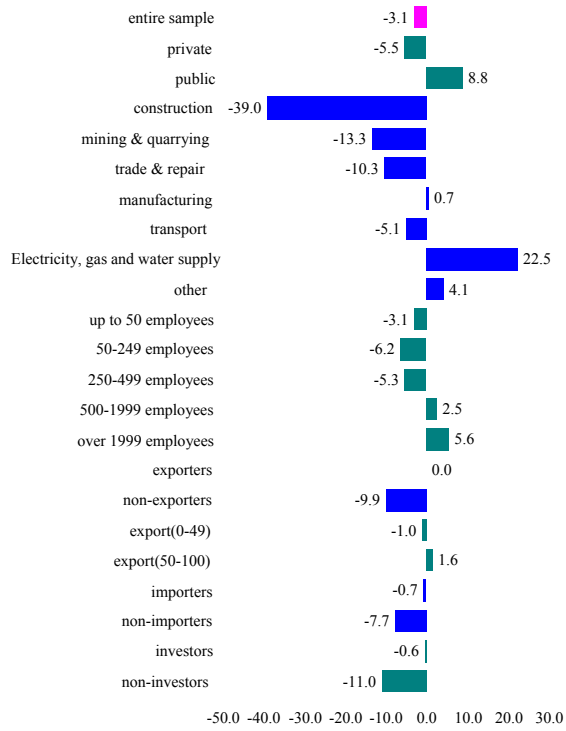
**Fig. 12** Forecast demand indices (balance differences) in the public and private sectors (the variable trends have been obtained using the x11 method)



**Fig. 14** Demand indices (balance differences) in industries offering capital goods and in other industries (the variable trends have been obtained using the x11 method)



**Fig. 13** Number of companies reporting problems with finding customers for their products in the public and private sector



**Fig. 15 Forecast demand indices (balance differences) in main classification categories – expectations for 2006 Q1**

## NEW ORDERS

forecasts for new orders	<ul style="list-style-type: none"> <li>• trend of forecasts approached a plateau</li> <li>• raw data – forecasts of rise in new orders prevailed</li> <li>• raw data – seasonal drop in relation to the preceding quarter, slight increase in relation to the corresponding period of the previous year</li> </ul>
changes in main classification categories (areas of improvement)	<ul style="list-style-type: none"> <li>• construction</li> <li>• non-exporters</li> <li>• public sector</li> </ul>
changes in main classification categories (areas of deterioration)	<ul style="list-style-type: none"> <li>• trade &amp; repair</li> <li>• transport</li> <li>• mining &amp; quarrying</li> <li>• specialised exporters</li> </ul>

## NEW ORDER FORECAST

Ever since 2003 the trend of the order forecast index has remained stable – cf. Fig. 16. Some deterioration was recorded only at the beginning of 2005, after which the index returned to its 2004 levels.

In 2006 Q1 the seasonally adjusted index of forecast orders decreased slightly. This drop is also suggested by raw data – yet it is typical for Q1 (and lower than in the corresponding period of the previous year).

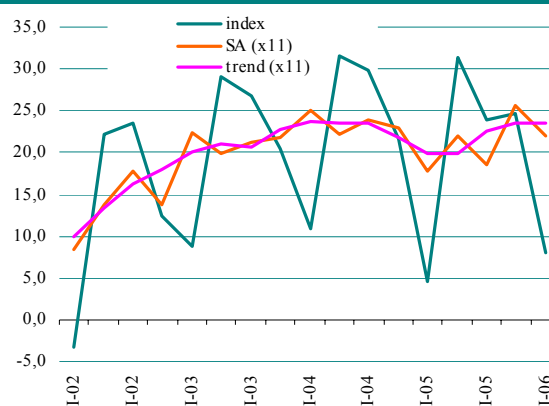


Fig. 16 Forecast new orders index (balance difference) and the index trend

## CHANGES IN ORDERS – ANALYSIS OF MAIN CATEGORIES

The growth rate of anticipated new orders varies depending on the type of business activity of enterprises. Among others, the observation of the surveyed classes revealed:

- stabilisation of forecasts of new orders in the group of exporters, particularly in enterprises specialising in export, matched by improving forecasts in the group of non-exporters – cf. Fig. 19-20,
- continuation of the stepping up in the growth rate of orders in construction, amid stabilising forecasts in trade and industry (yet because improvement in relation to the corresponding period of the previous year was recorded in both these sections, it cannot be ruled out that this tendency may be reversed in the immediate future) – cf. Fig 21,
- some deterioration in forecasts of new orders in transport companies,
- improvement in forecast optimism in public sector enterprises; the index of forecasts in the private sector is stabilising – cf. Fig 22,
- signs of improvement in the recent period in the group of large enterprises (with more than 49 employees), amid stable forecast optimism in small companies – cf. Fig. 23,

- continuously stable growth rate of the inflow of new orders in enterprises producing investment goods – cf. Fig. 24.

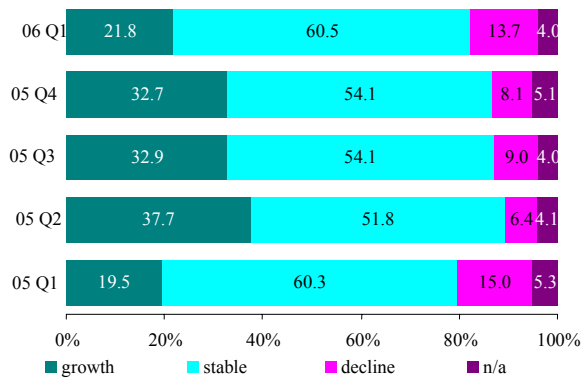


Fig. 17 Forecast number of new orders – structure of survey responses

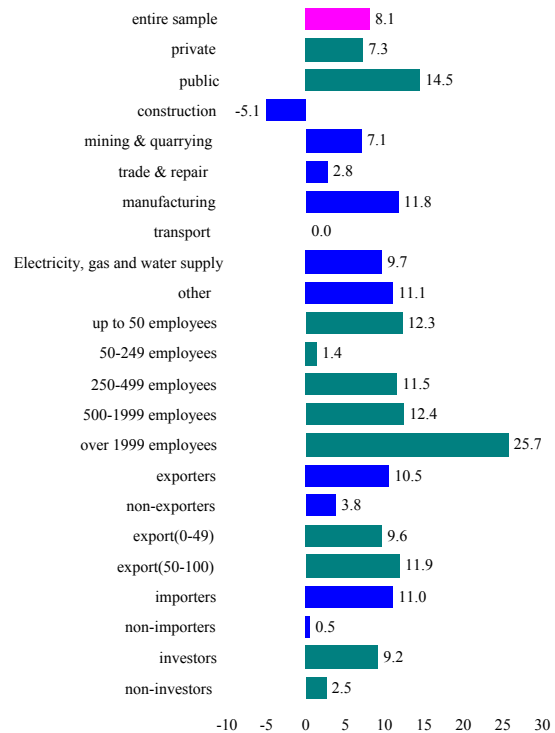


Fig. 18 Index of the forecast number of new orders (balance differences) in main classification categories — expectations for 2006 Q1

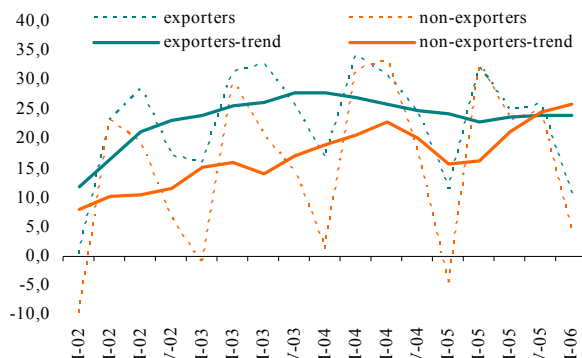


Fig. 19 Indices of the forecast number of new orders (balance differences) in the classes of exporters and non-exporters (the variable trends obtained using the x11 method)

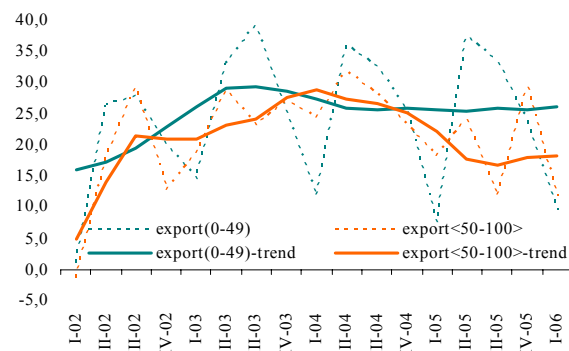
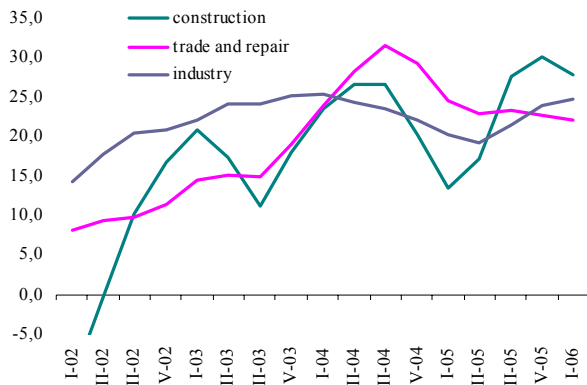
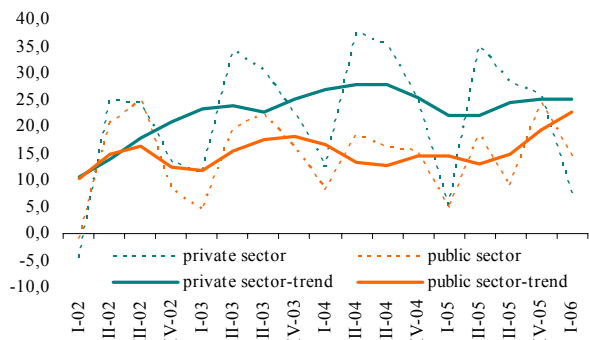


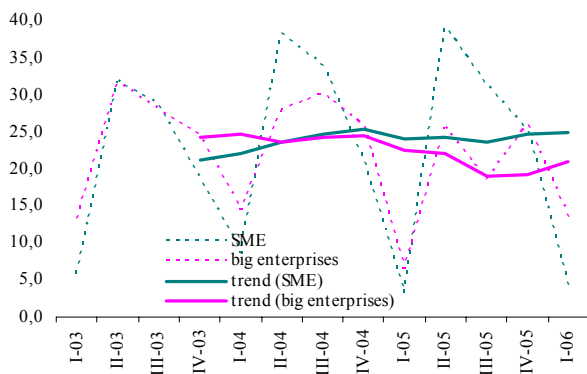
Fig. 20 Indices of the forecast number of new orders (balance differences) in the classes of specialised exporters (over 50% export share in the revenue) and non-specialised exporters (up to 50% export share in the revenue) – (the variable trends obtained using the x11 method)



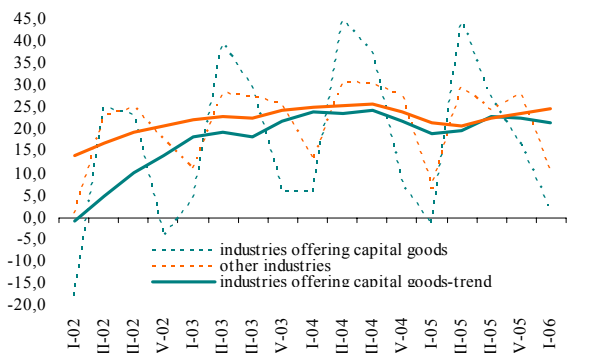
**Fig. 21** Indices of the forecast number of new orders (balance differences) in the industry, trade and construction (the figure shows the variable trends obtained using the x11 method)



**Fig. 22** Indices of the forecast number of new orders (balance differences) in ownership groups (the variable trends obtained using the x11 method)



**Fig. 23** Indices of the forecast number of new orders (balance differences) in SMEs and large enterprises (the variable trends obtained using the x11 method)



**Fig. 24** Indices of the forecast number of new orders (balance differences) in industries offering capital goods and other industries (the variable trends obtained using the x11 method)

## OUTPUT

### forecasts of output

- seasonally adjusted data – despite a slight drop in output growth rate, the level of forecasts remains good
- seasonally adjusted trend and index of output forecasts slightly lowered in relation to Q4
- raw data – slight majority of forecasts of output growth
- raw data – seasonal drop of the index in relation to the previous quarter
- raw data – slight improvement of the index in relation to the corresponding period of the previous year

### changes in main classification categories (growth areas)

- construction

## FORECASTS OF OUTPUT

The analysis of the trend of the index of output forecasts suggests a slight drop, though the index continues at a good level. Similarly, the index of seasonally adjusted forecasts has fluctuated around the level of approx. 19% over the past two years. Raw data, however, point to a clear drop in forecast optimism in quarter-on-quarter terms, mainly resulting from seasonal factors, matched by a slight improvement in forecast optimism in relation to the corresponding period of the previous year.

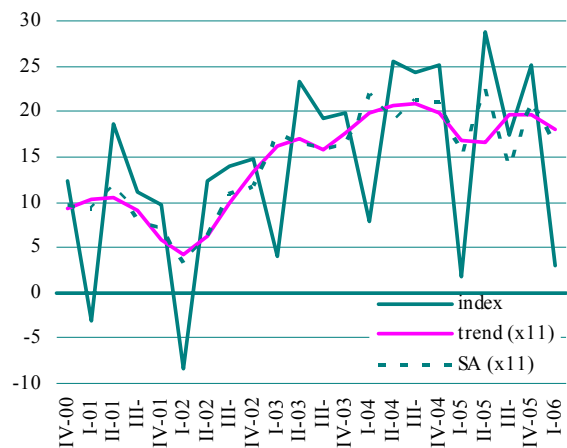


Fig. 25 Forecast output index (balance difference) and the index trend

## CHANGES IN OUTPUT – ANALYSIS OF MAIN CATEGORIES

Long-term analysis of changes in the index of output forecasts across main classification categories reveals, among others, that:

- optimism of output forecasts is gradually growing in the group of companies selling their products in the domestic market; exporters' forecasts, on the other hand, remain stable, though in the group of specialised exporters (with an over 50% share of exports in the revenue) some decline in output growth rate may be expected – cf. Fig. 28-29,
- the rising tendency in the optimism of output forecasts in the section *Construction* – seasonally adjusted index for this group reached its highest point in the survey history – cf. Fig. 30,
- over the past few quarters some improvement has also been observed in trading companies; in turn, growth rate of output may be expected to stabilise in industry – cf. Fig. 30,
- in the section *Transport* a clear drop in sales forecast optimism was observed,
- in the course of the past few quarters the trend (which had been falling since mid-2005) of the index of output forecasts in large companies (with more than 49 employees) has been reversed, while the climate of the forecasts of small companies has remained stable – cf. Fig. 31,
- output forecast optimism in the public sector is improving, accompanied by the stabilisation of these forecasts in the group of private companies – cf. Fig. 32,



- some slowdown in output forecast optimism has been observed in sections selling investment goods – cf. Fig. 33.

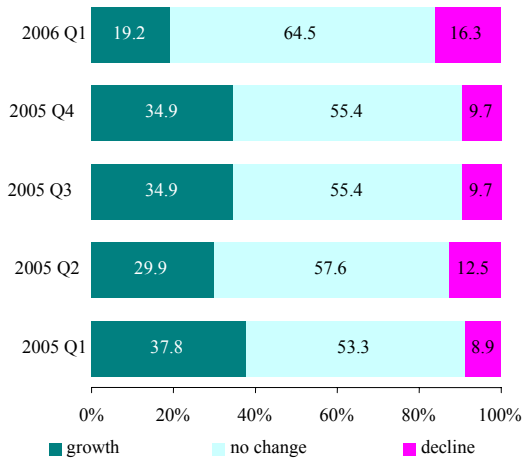


Fig. 26 Output forecasts — structure of survey responses

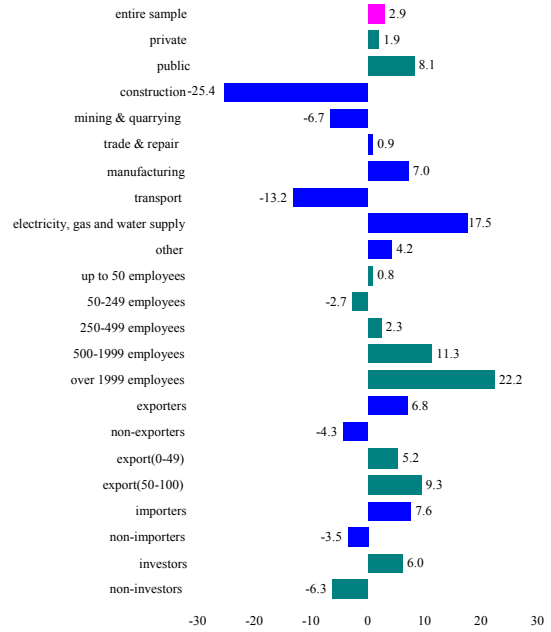


Fig. 27 Forecast output indices (balance differences) in main classification categories — plans for 2006 Q1

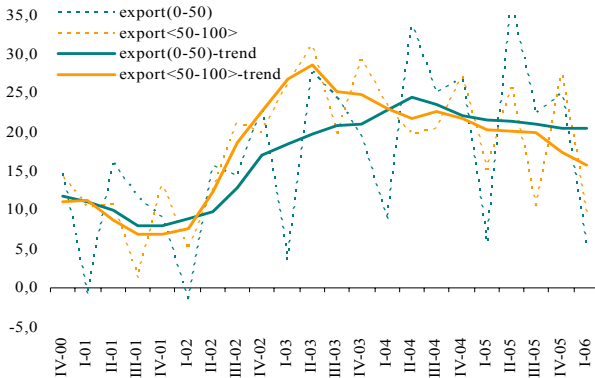


Fig. 28 Forecast output indices (balance differences) for the classes of exporters with low (up to 50%) and high (from 50 to 100%) share of exports in total revenue (the variable trends obtained using the x11 method)

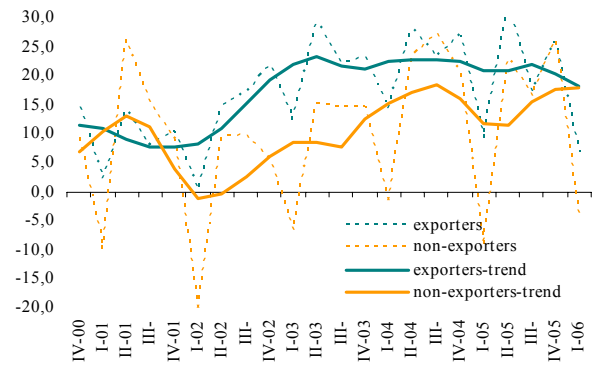


Fig. 29 Forecast output indices (balance differences) for the classes of exporters and non-exporters (the variable trends obtained using the x11 method)

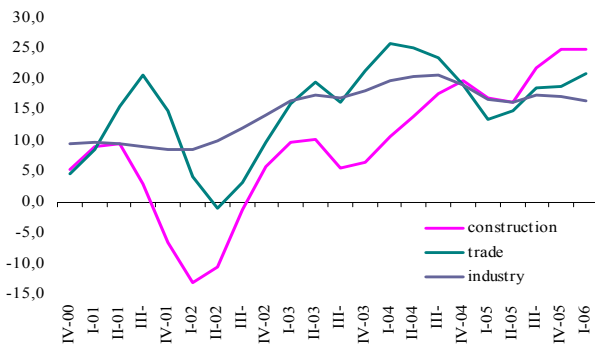


Fig. 30 Forecast output indices (balance differences) for industry, trade and construction (the figure shows the variable trends obtained using the x11 method)

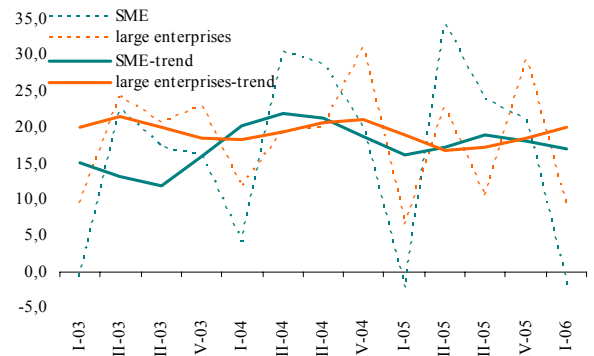
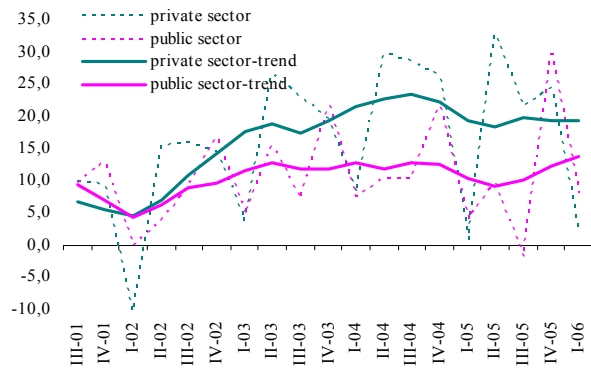
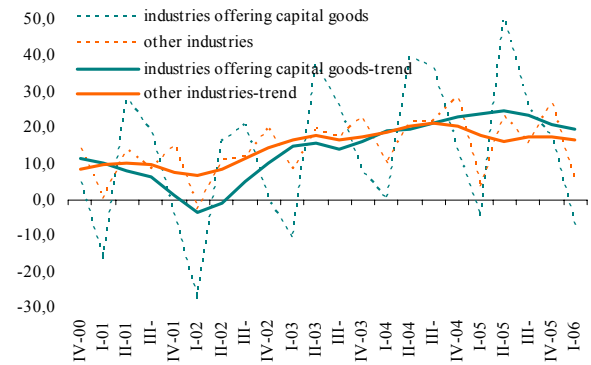


Fig. 31 Forecast output indices (balance differences) in SMEs and large enterprises



**Fig. 32 Forecast output indices (balance differences) in ownership groups (the variable trends obtained using the x11 method)**



**Fig. 33 Forecast output indices (balance differences) in industries offering capital goods and other industries (the variable trends obtained using the x11 method)**

## I.2. Economic condition

current developments	<ul style="list-style-type: none"> <li>improvement in the assessment of the current condition of companies has been recorded for the second consecutive quarter</li> <li>index of assessments reached the highest level in the survey history</li> </ul>
areas of positive situation assessments	<ul style="list-style-type: none"> <li>companies with foreign capital participation</li> <li>mining and quarrying, electricity, gas and water supply</li> <li>non-exporting importers</li> </ul>
changes in main classification categories (growth areas)	<ul style="list-style-type: none"> <li>importers, domestic-market-oriented companies</li> <li>construction, trade &amp; repair</li> <li>small and medium-sized enterprises</li> </ul>
forecast of economic condition	<ul style="list-style-type: none"> <li>seasonally adjusted data – increasing forecast optimism</li> <li>raw data – improvement in year-on-year terms</li> </ul>

### CURRENT ASSESSMENT OF ECONOMIC CONDITION

#### Respondents declared improvement in their economic standing for another consecutive quarter

– cf. Fig. 34. In December 2005, the balance of evaluations<sup>2</sup> increased by 3.7 percentage points in comparison to September 2005. The rise was also recorded in relation to the corresponding period of 2004. **The optimism of the assessments of the current situation reached its highest level in the survey history.**

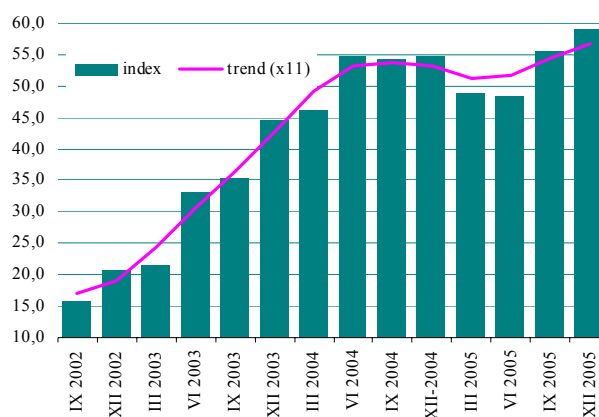


Fig. 34 Economic condition evaluation index (balance differences) and the index trend

### CHANGES IN OUTPUT – ANALYSIS OF MAIN CATEGORIES

The analysis of changes in the index of current situation assessments in main classifications over the past few years reveals that:

- the rising trend of the index of current situation assessments persists in the group of exporters; however, enterprises specialising in exports, particularly those selling their products almost exclusively in the foreign market (with at least a 90% share of exports in the revenue) declare deterioration of situation; at the same time, the initial disparity (observed in 2002) between the assessments of exporters and non-exporters has decreased significantly – cf. Fig. 38-39,
- over the past few years, the standing of construction companies has been steadily improving; moreover, the last two quarters marked a clear improvement in the condition in trade, which came after a long period of stabilisation; following a dampening of the condition at the beginning of 2005, in the subsequent quarters a gradual recovery was observed in the condition assessments of industrial companies (excluding electricity, gas and water supply, where the situation stabilised at a good level) – cf. Fig. 40,

<sup>2</sup> The difference between the percentage of very good and quite good assessments and the percentage of poor, bad and very bad evaluations.

- the situation of small and medium-sized enterprises is improving, particularly in case of the smallest companies (with up to 49 employees); the condition of large companies is stabilising – cf. Fig. 41.

#### CHANGES IN ECONOMIC CONDITION AT THE ENTERPRISE LEVEL

The analysis of economic condition at the unit level suggests its significant improvement in Q4. It was observed in almost 13% of companies, while less than 8% of enterprises assessed their condition as worse than three months earlier. The index of the condition change balance, presented in Fig. 42, increased by 2.4 percentage points in comparison to the previous quarter, and assumed a positive value at 5.1 percentage points.

#### CONDITION ASSESSMENTS VS. GROWTH BARRIERS

In December 2005 for the second consecutive quarter a significant rise was observed in the percentage of respondents declaring lack of any major problems hindering the growth of their company – from 23.5% to 28.3%, i.e. to the highest level in the survey history.

For the sixth quarter in a row, the exchange rate was the most frequently quoted barrier to growth, both in terms of its fluctuations and value. The following items occupied the subsequent positions on the list of barriers: strong competition (the scale of that type of problems decreased slightly), low demand (similarly, a decline in the percentage of declarations), increase or high level of some prices (e.g. fuel prices), changing regulations, instability and unclear tax law and payment bottlenecks. Areas of intensification of particular problems are presented in Table 1. Data presented therein suggest that:

- exchange rate causes greatest problems to exporters involved in imports,
- the strongest competition is faced by construction enterprises and service companies from the section *Other*, it is also these two sections that most often report the existence of demand barrier,
- payment bottlenecks are the largest problem for enterprises from sections *Electricity, gas and water supply* and *Construction*.

#### FORECASTS OF ECONOMIC DEVELOPMENTS

The trend of the index of economic situation and the seasonally adjusted index of situation forecasts suggest a possibility of further improvement in the enterprise sector's economic standing. Even though the sentiment of entrepreneurs at the beginning of the year is usually worse than in the subsequent months (raw index of forecasts deteriorated in quarter-on-quarter terms), a significant sentiment improvement was recorded as compared with the corresponding period of the preceding year – cf. Fig. 35.

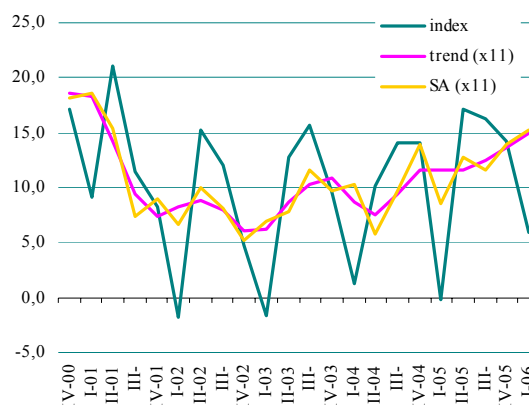


Fig. 35 Index of forecast economic condition of enterprises (balance difference) and the trend index

## FORECASTS OF DEVELOPMENTS – ANALYSIS OF MAIN CATEGORIES

The analysis of changes in the index of forecasts of enterprises' economic condition across several basic classifications reveals, among others, that:

- the largest increase in optimism over the past few quarters has been recorded by non-exporting importers and companies oriented solely at the domestic market; the index of forecasts of developments in the group of exporters remains stable, while the least optimistic sentiment is observed in enterprises specialising in exports – cf. Fig. 46-47,
- forecast optimism in the group of construction companies is improving; the analysis of the forecast index in the section *Trade & repair* also points to a gradual improvement; in the course of the last two quarters signs of improvement have also been noticed in industrial enterprises, particularly in companies in the section *Manufacturing* – cf. Fig. 48,
- forecast optimism of private companies is improving, particularly as regards domestic private companies, amid some stabilisation of these forecasts in the public sector – cf. Fig. 49,
- small and medium-sized enterprises report improvement in their outlook for the future, some improvement is also declared by larger enterprises, apart from companies employing between 500 and 1999 people – cf. Fig. 45.

The enterprises concerned about a deterioration of their economic condition, when asked about their largest problem in December 2005 quoted the exchange rate changes (30% of companies anticipating the condition to deteriorate reported such concerns) and demand barrier (16% of declarations).

## CORPORATE SENTIMENT

The analysis of corporate sentiment<sup>3</sup> (Fig. 49) suggests that **increased optimism among surveyed enterprises has continued** for the past 6 quarters. The rise is observed both in the percentage of forecasts of improvement in economic condition in relation the percentage of actual materialisations of these forecasts, and also in that the percentage of actual deteriorations is larger than the percentage of forecasts of economic condition deterioration.

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<sup>3</sup> The index was calculated in two ways. The first version of the index was calculated as the difference between the percentage of the forecasts envisaging improvement of situation and the percentage of enterprises which actually observed a significant improvement in the given quarter. In the second version, the difference was calculated between the number of enterprises whose condition significantly deteriorated and the percentage of forecasts predicting deterioration of the condition in this quarter. The behaviour of both these variables is not only an assessment of corporate sentiment, be it optimistic or pessimistic, but may also serve as a measure of forecast accuracy.

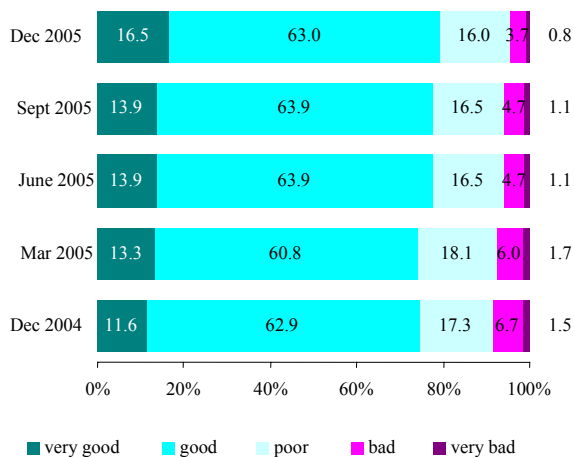


Fig. 36 Current evaluation of economic condition — structure of survey responses

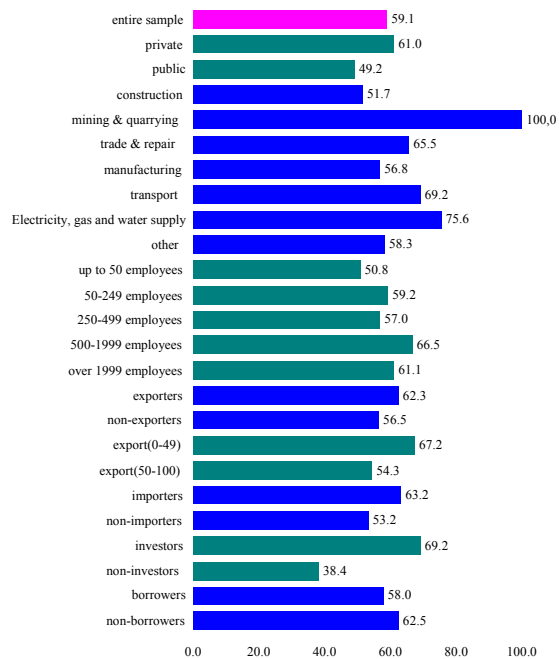


Fig. 37 Economic condition indices (balance difference) in main classification categories — December 2005 data

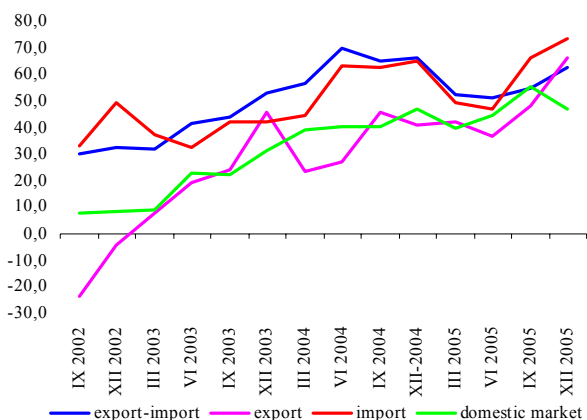


Fig. 38 Economic condition indices<sup>4</sup> for importers, exporters, non-importers and non-exporters. Explanation of abbreviations: export – exporters-non-importers; import – importers not involved in exports; export import – exporters-importers; domestic market – non-exporters with a zero share of imports in costs

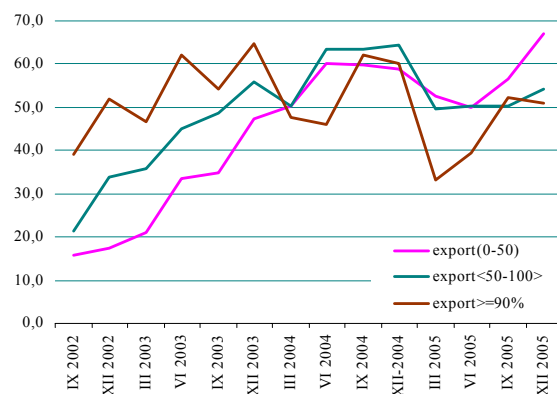


Fig. 39 Current condition evaluation index for exporters. Explanation of abbreviations: export(0-50) – exporters with less than 50% share of exports in revenue; export<50-100> – exporters with at least 50% share of exports in revenue; export>=90% – exporters with at least 90% share of exports in total revenue

<sup>4</sup> Calculated in the form of balances (the percentage of companies in at least average condition minus the percentage of companies in bad or poor condition)

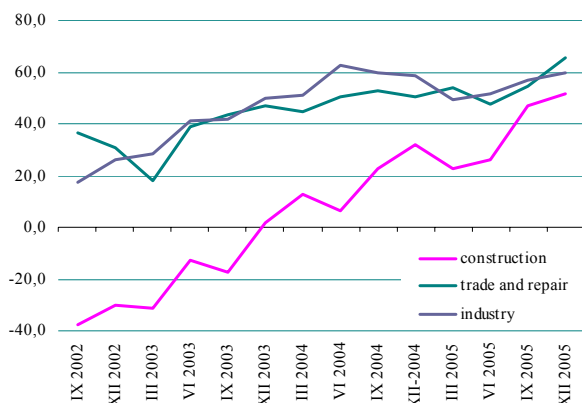


Fig. 40 Current condition evaluation index for industry, construction and trade

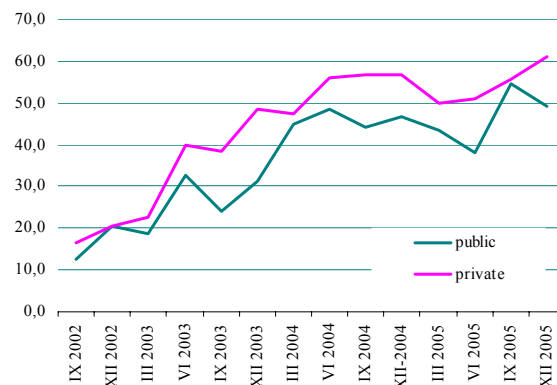


Fig. 41 Economic condition evaluation indices (balance differences) in ownership groups

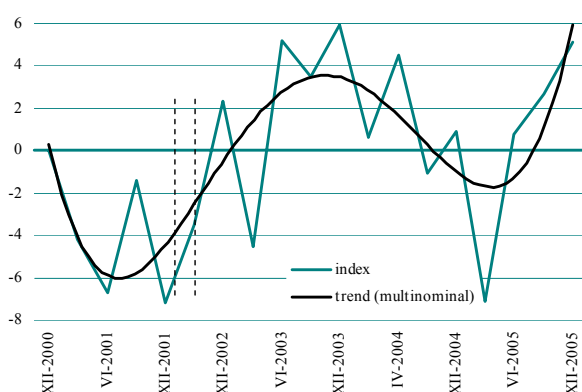


Fig. 42 Changes in the condition as compared with the previous quarter at the enterprise level (the curve marks the balance of changes, i.e. the difference between the percentage of companies observing improvement and the percentage of companies observing deterioration; lack of comparable data for March and June 2002 has been marked with two broken lines)

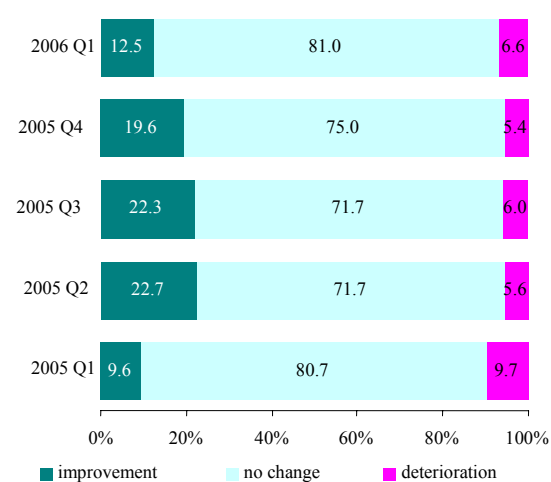
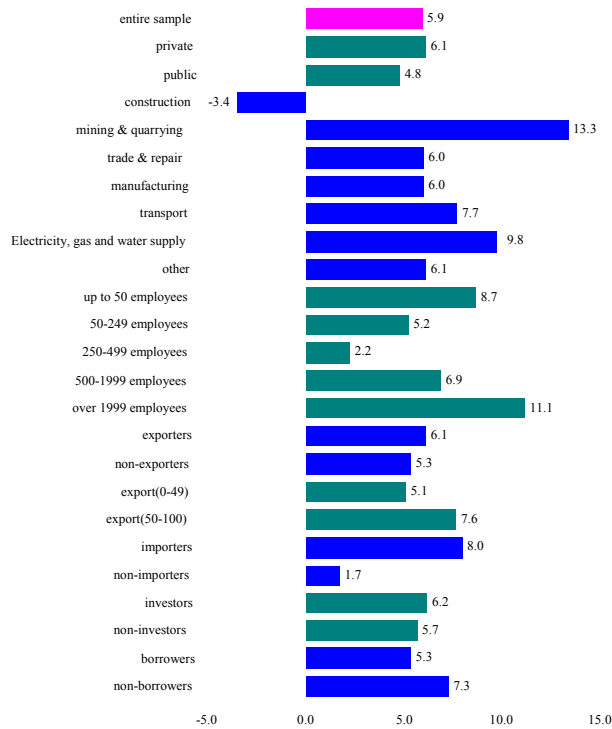


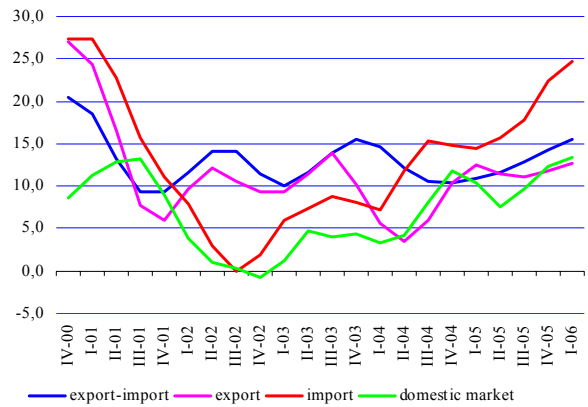
Fig. 43 Economic condition forecast – structure of responses

Tab. 1 Areas of the most serious problems

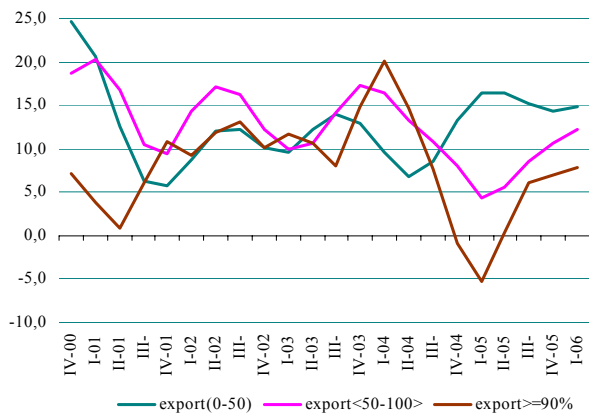
class	exchange rate	competition	demand	price increase	payment bottlenecks
ownership sector			public (15.9%)	public (11.1%)	public (8%)
	state legal person (28%)	state legal person (19%)		state legal person (19%)	local government (10.5%)
NACE (PKD) section	manufacturing (31%)	construction (20%) other (20%)	construction (19%) other (16%) trade (15%)	manufacturing (11%) transport (10%)	power production and supply (15%) construction (14%)
exports/importers	exporters (31%) exporters-importers (33%)	non-importers (14%)	non-exporters (14%)	exporters (10%)	non-exporters (9%)
other classes	large/over 49 (24%) borrowers (24%)	small/under 49 (13%)	large/over 49 (11%)		



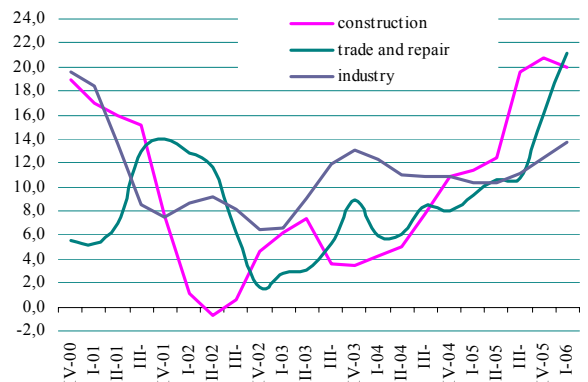
**Fig. 44 Index of forecast economic situation of the enterprises (balance differences) in main classifications —2006 Q1 expectations**



**Fig. 45 Index of forecast economic situation (balance differences) in the classes of importers, exporters, non-importers, non-exporters (the figure shows the variable trend obtained using the x11 method). Explanation of abbreviations: export – exporters not involved in imports; import – importers not involved in exports; export import – exporters–importers; domestic market – non-exporters with a zero share of imports in costs**

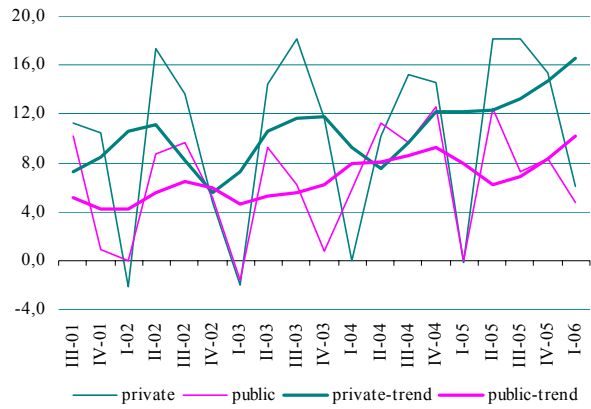


**Fig. 46 Index of forecast economic condition (balance differences) in selected classes of exporters (the figure shows the variable trend obtained using the x11 method) export49 – exporters with less than 50% share of exports in revenue; export50 – exporters with at least 50% share of exports in revenue; export90 – exporters with at least 90% share of exports in revenue**

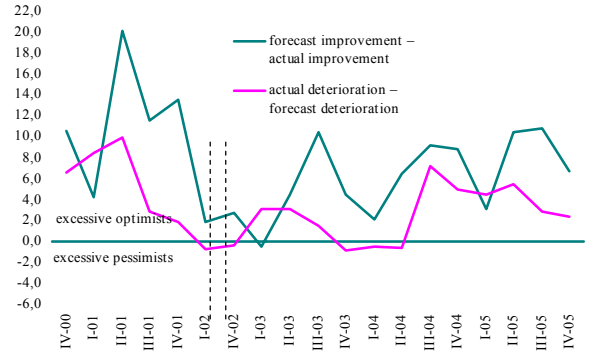


**Fig. 47 Index of forecast economic condition (balance differences) in construction, trade & repairs and industry (the figure shows the variable trend obtained using the x11 method)**





**Fig. 48** Index of forecast economic condition (balance differences) in ownership groups



**Fig. 49** Index of tendencies among enterprises (lack of comparable data for 2002 Q2 and Q3 — broken lines)

### I.3. Employment

employment forecast	<ul style="list-style-type: none"> <li>• since 2002 a gradual growth in optimism of employment forecasts has been observed</li> <li>• the seasonally adjusted employment index has a positive value and is the highest in the survey history; the improvement is also signalled by the trend of the development</li> <li>• raw data – slightly more forecasts of fall than forecasts of rise in employment – the index of employment decreased in quarter-on-quarter terms, but rose in annual terms</li> </ul>
areas of employment growth	<ul style="list-style-type: none"> <li>• companies with majority of foreign capital</li> <li>• exporters</li> <li>• enterprises:             <ul style="list-style-type: none"> <li>○ in a very good economic condition</li> <li>○ expecting a rise in demand, output and new orders</li> <li>○ planning the expansion of commenced investments and also the commencement of new projects</li> <li>○ mostly producing for foreign markets (specialised exporters)</li> <li>○ forecasting a rise in exports and also in the number of export contracts</li> <li>○ achieving full profitability of exports</li> </ul> </li> </ul>

#### EMPLOYMENT FORECASTS

Since 2002 a gradual growth in optimism of employment forecasts has been observed. **Seasonally adjusted employment forecasts are currently the best in the survey history.** Positive level of the seasonally adjusted index has been observed for the second consecutive quarter. In year-on-year terms there was a growth from 7.7% to 10.3% share of companies planning to increase their employment and a decrease from 19.3% to 13.2% share of enterprises intending to reduce their workforce. As regards raw data, a seasonal drop in employment in 2006 Q1 has to be emphasised – cf. Fig. 50.

Data suggest that many enterprises intend to carry out changes in employment (the reduction or the increase) over the next two quarters (Table 2) – (in 35% of companies the plans for increasing the workforce appeared both in 2005 Q4 and in 2006 Q1, while in 43% the same was true about planned reductions). In the longer term, however, i.e. in three quarters' time, this phenomenon is fading away: in this time horizon only as little as 2% of enterprises continue to plan either reduction or increase in their employment levels.

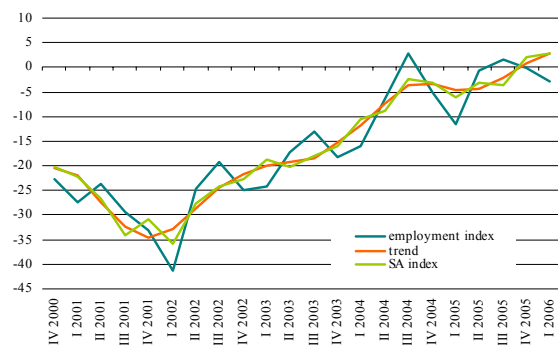


Fig. 50 Employment forecast index (balance differences) and the index trend

<sup>4</sup> The observed phenomenon may also be an indication that enterprises are postponing already planned changes.

## EMPLOYMENT FORECASTS – ANALYSIS OF MAIN CATEGORIES

**In comparison to the situation one year before in all the classes** presented in Fig. 51 **the index of employment forecasts has improved** – there has been a rise in the percentage of forecasts of employment increase (except for mining and quarrying) and a reduction in the expectations of its decrease (except for transport and section *Other*). In most classes, however, employment forecasts deteriorated seasonally in relation to the previous quarter. Such deterioration is particularly visible in those sections which are recording a seasonal drop of activity in Q1.

The forecasts of employment increase prevailed over expectations of its fall in the following groups:

- companies with majority foreign capital
- exporters
- importers
- companies not using bank loans.

It is also worth to observe:

- an improvement in the employment forecast optimism in the group of the largest enterprises
- a deterioration in employment forecast optimism in enterprises producing investment goods and in construction companies.

## SELECTED FACTORS AFFECTING EMPLOYMENT

Employment forecasts are closely related to the current and predicted situation of the company (cf. Fig. 53 – Fig. 57). The plans of employment growth prevailed over the forecasts of its reduction in the group of enterprises assessing their situation as very good, while the remaining companies envisaged a drop in employment more often than its growth. Interestingly enough, employment forecast optimism of the enterprises which expect improvement in their standing was not higher than in the case of companies not expecting changes in their situation. Employment rise is predicted in enterprises expecting growth in demand, particularly long-term growth, coupled with growth in orders and output. The weakest employment forecasts are recorded in companies in the weakest condition and with the worst forecasts of demand, orders or output, even though they have improved since the last quarter.

Employment increases are also reported by exporters who declare growth in export volume. The optimism of the forecasts of employment is growing together with exports' contribution to the revenue; it is also greater in the group of companies whose exports are fully profitable (Fig 58 – Fig. 62).

Changes in employment are to a large extent dependent on the investments implemented by a given company (Fig. 63, Fig. 64). In the group of enterprises planning to increase their investment activity, a growth in the employment level clearly predominates over its decline. Those investors who do not intend to change the scope of investments declare employment growth equally often as its decline, while reduction in employment is signalled by non-investors.

There is also certain interdependence between the plans concerning changes in the employment level and the degree of production capacity utilisation. The higher the level of capacity utilisation, the better forecasts of employment (Fig. 65).

Employment rate is also affected by the liquidity situation of the company. Longer-term problems with payments are often accompanied with employment reductions – cf. Fig. 66.

It is worth pointing out that respondents intending to increase employment more rarely than others declared the existence of barriers to their company growth. These companies, however, slightly more often than other enterprises (though such responses were not numerous) reported problems with finding adequately qualified workforce and also problems connected with often changing or unclear regulations.

Lack of qualified labour force has intensified since the last quarter (such difficulties were reported not only by enterprises planning to increase their employment, but also by those expressing intentions to reduce their workforce). Approx. 2% of enterprises listed problems with finding workers with right qualifications among their fundamental problems. These were almost exclusively private and usually domestic companies.

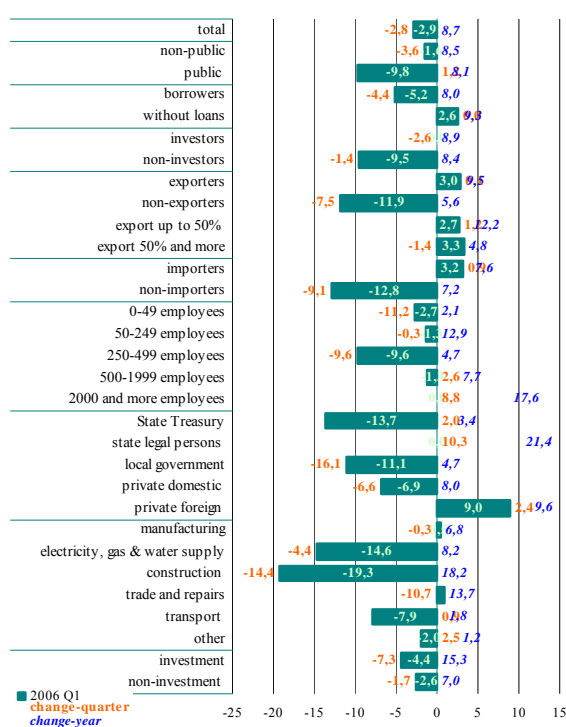


Fig. 51 Balance of employment forecasts (“growth” - “decline”) – and change against the previous quarter and the previous year. Negative figures mean higher number of employment decline forecasts over employment growth forecasts

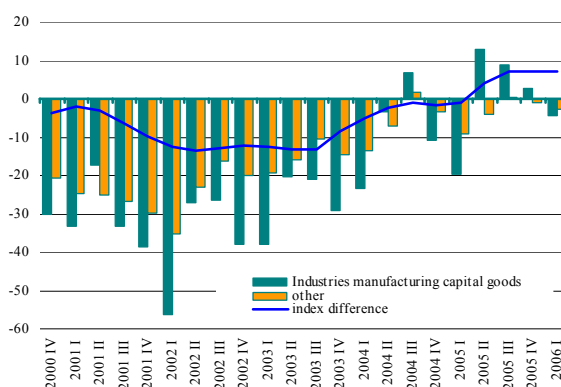


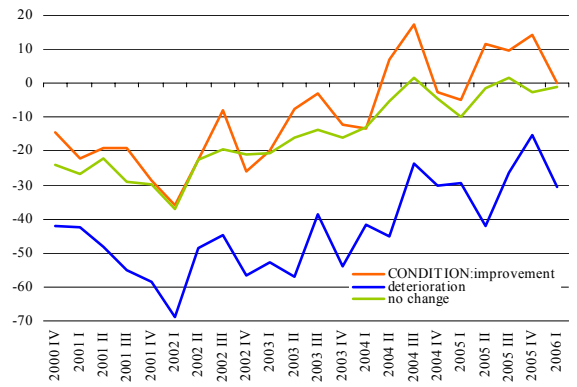
Fig. 52 Employment index (“growth” - “decline”) in industries manufacturing capital goods and in other industries

Tab. 2 Forecast changes in the employment level in 2005 Q4 vs. 2006 Q1 forecasts — figures in lines add up to 100%, except for the last column, which presents the share of the class in the overall figure (the sample is limited to the enterprises participating in both surveys)

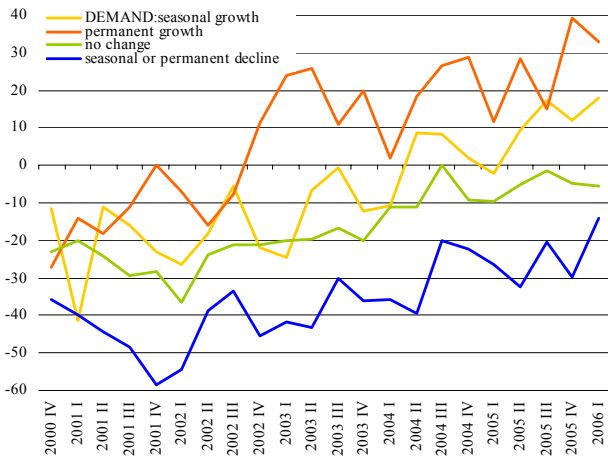
2005 Q4	Q1 2006			total
	no change	decrease	increase	
no change	84.6	9.1	6.4	75.6
decrease	51.2	42.7	6.1	12.8
increase	52.0	13.3	34.7	11.7
<b>total</b>	<b>76.5</b>	<b>13.8</b>	<b>9.6</b>	<b>100.0</b>



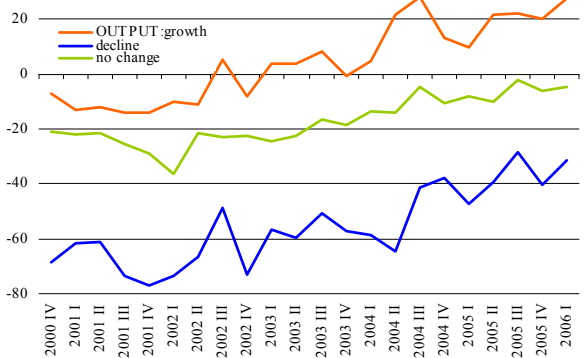
**Fig. 53 Interdependence between the employment forecast and the company economic condition (percentage of responses in classes by company condition)**



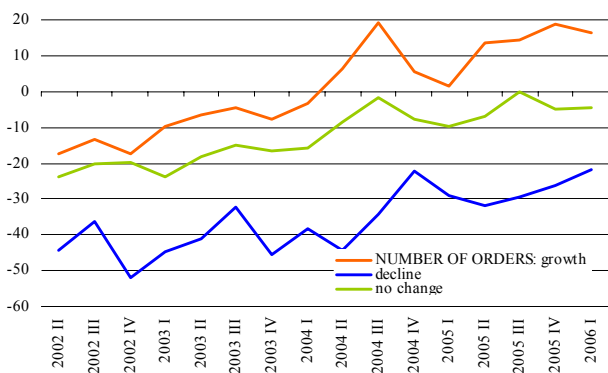
**Fig. 54 Forecast changes in the employment level vs. forecast changes in the economic condition (percentage of responses in classes by company condition forecasts)**



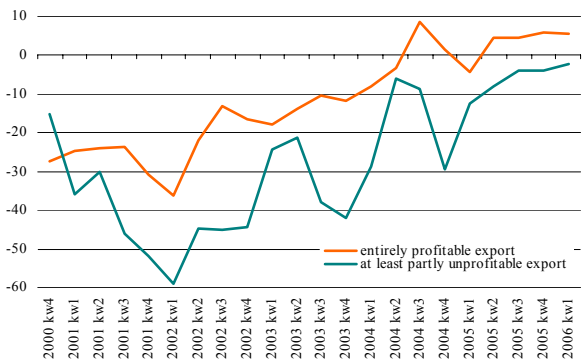
**Fig. 55 Forecast changes in the employment level vs. forecast changes in demand (percentage of responses in classes by demand)**



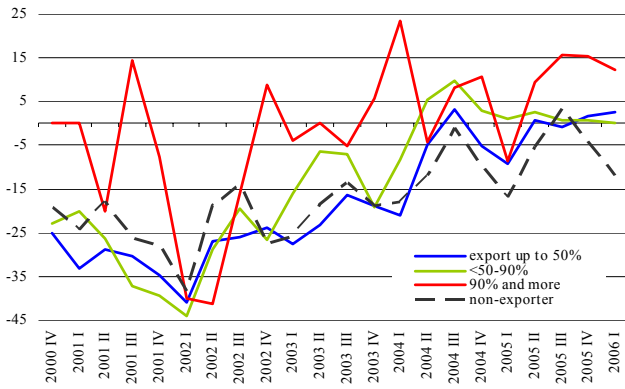
**Fig. 56 Forecast changes in the employment level vs. forecast changes in output — scale of business activity (percentage of responses in classes by output)**



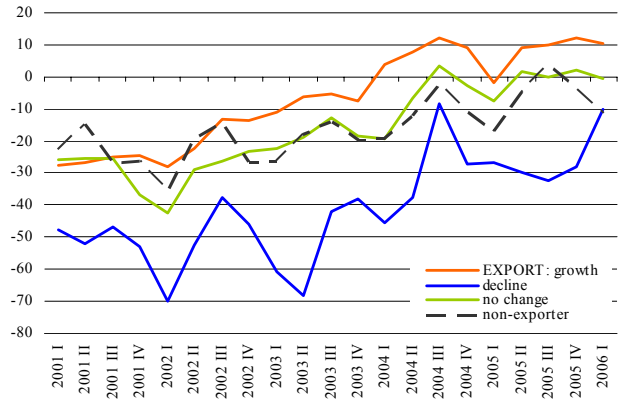
**Fig. 57 Forecast changes in the employment level vs. forecast changes in the number of orders (percentage of responses in classes by orders)**



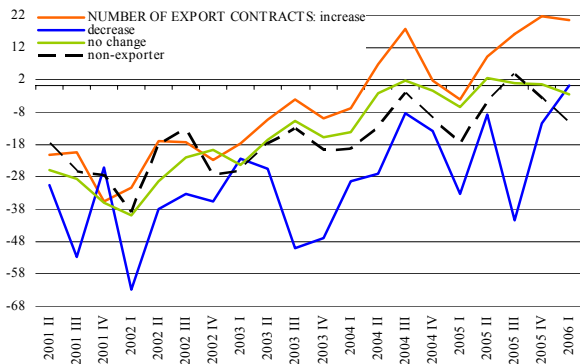
**Fig. 58 Forecast changes in the employment level vs. export profitability (percentage of responses in classes by export profitability, only refers to exporters)**



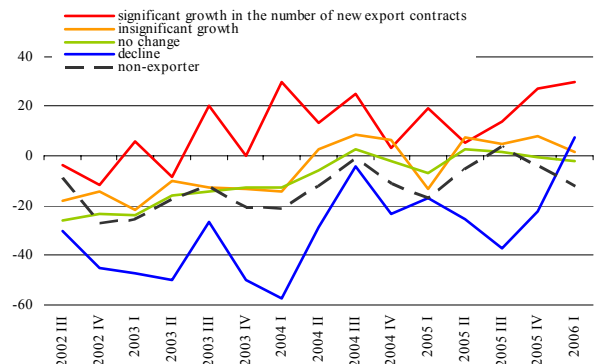
**Fig. 59 Forecast changes in the employment level vs. the share of revenue from exports in total revenue (percentages of responses in classes by export)**



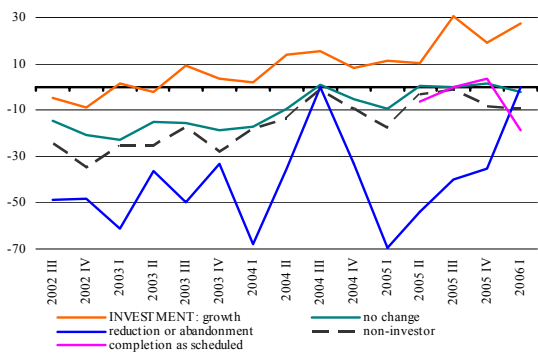
**Fig. 60 Forecast changes in the employment level vs. export forecasts (percentage of responses in classes by export)**



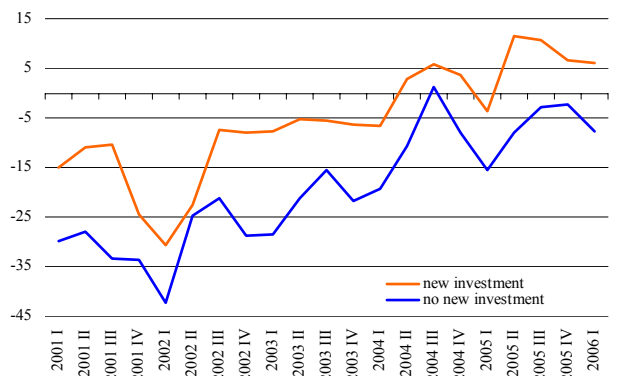
**Fig. 61 Forecast changes in the employment level vs. forecast changes in the number of export contracts in the last quarter (as compared with the previous quarter). Cases concerning the decline in the number of export contracts have a small share in the sample and, consequently, should be interpreted with caution.**



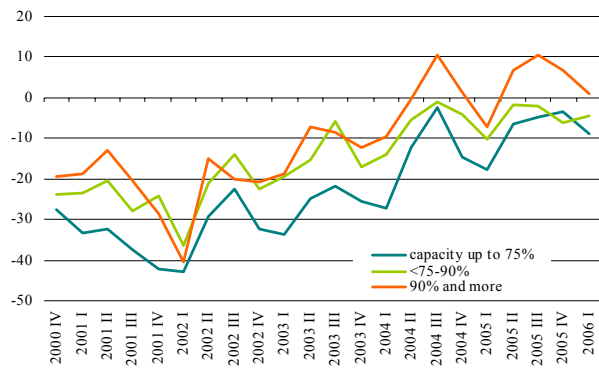
**Fig. 62 Forecast changes in the employment level vs. forecast changes in the number of new export contracts. Cases concerning the decline in the number of export contracts have a small share in the sample and, consequently, should be interpreted with caution.**



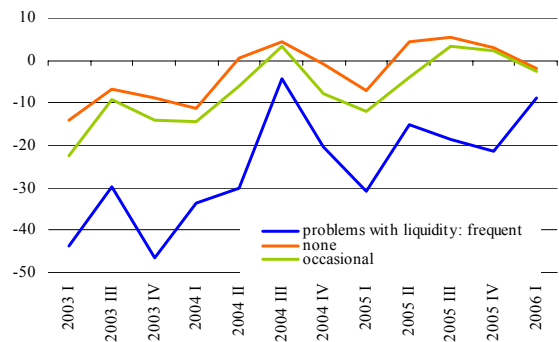
**Fig. 63 Employment forecasts vs. degree of capacity utilisation (percentage of responses by capacity)**



**Fig. 64 Forecast changes in the employment level vs. new investment forecasts (percentage of responses in classes by investment)**



**Fig. 65 Employment forecasts vs. degree of capacity utilisation (percentage of responses by capacity)**



**Fig. 66 Employment forecasts vs. problems with liquidity (percentage of responses in classes)**

## 1.4. Wages

- Wage rises of slightly lower scale and nominal growth rate than in 2005 Q1<sup>5</sup>.
- Plans of wage increase is most often declared by energy companies and companies with majority foreign capital.
- Plans of pay rises are more frequent in enterprises in better situation.

### FORECASTS OF WAGE INCREASES

**In 2006 Q1 23% of companies are planning to raise their wages.** Taking into account the size of enterprise measured with the number of employees, it can be estimated that **pay rises will apply to approx. 29% of employees.** This is less than in 2005 Q1, but this index should be interpreted with caution, as it has only been monitored for 5 quarters.

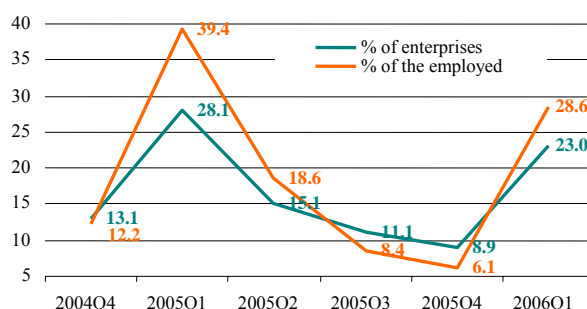


Fig. 67 Planned wage increases (% of the employed – responses weighted by the employment level)

### SELECTED FACTORS AFFECTING WAGE INCREASES

Increases are planned more often in companies in good and very good condition. More willing to raise their employees' wages are those enterprises which anticipate an increase in output, demand, orders (including export orders) and investment (both realised and planned for realisation). Companies increasing wages less often declare the emergence of serious problems hampering the company's growth, and in particular problems connected with low demand, liquidity maintenance or obtaining a loan. Thus, **the pay rise decisions of enterprises are primarily the derivative of the company's ability to finance this intention.** The rise in wages is usually coupled with plans to raise employment (cf. Fig. 71) – enterprises planning employment expansion will be increasing wages almost 3.5 times as often as those planning to cut their jobs (the proportion was only 2 times more often one year before).

<sup>5</sup> The wage survey carried out in October 2004 indicated that a half of surveyed enterprises planning to increase wages introduce such pay rises in the first quarter.



### FORECASTED WAGE INCREASES

The nominal growth rate of wage increases planned for 2006 Q1 is lower than one year ago. In real terms, however, this meant a certain increase. The wage increase among companies planning to raise wages is 4.5% on average, the median is 4.0% (weighed by the employment level – 3.6% and 3.0%, respectively). In relation to the whole sample, the average wage rise will amount to 1.0% – **its value declined by 0.5 percentage point as compared to 2005 Q1**. Only 2% of employees of the surveyed enterprises will receive a pay rise higher than 5%.

The largest pay increases in 2006 Q1 are planned in enterprises producing investment goods, in construction companies and in private domestic companies (these rises, however, are scarcer than in the other classes). The lowest rises are expected in public entities and companies with the largest workforce.

### WAGE PRESSURES

Wage pressures<sup>6</sup> observed by the surveyed enterprises in 2005 Q4 were slightly weaker than in the corresponding period of the preceding year (Fig. 75). Wage pressure was felt by 37% of companies (7% of which reported increased pressure), i.e. 4 percentage points less than 12 months before.

Pay increases are planned by 46% of the enterprises which recorded increased wage pressure (see Fig. 76). The impact of wage pressure is thus slightly weaker and less effective than that observed one year before.

Increased wage pressure was primarily felt by large enterprises (with 500 and more employees), *Mining and quarrying*, *Construction* and specialised exporters. The weakest pressures were observed in trade. As regards geographical distribution, the weakest wage pressure was recorded in Mazowieckie Voivodship (*województwo mazowieckie*).



Fig. 68 Average and median of the planned wage increases (for those enterprises which have such plans; data for 2004 Q4 refer to the effected wage increases and not to the planned ones)

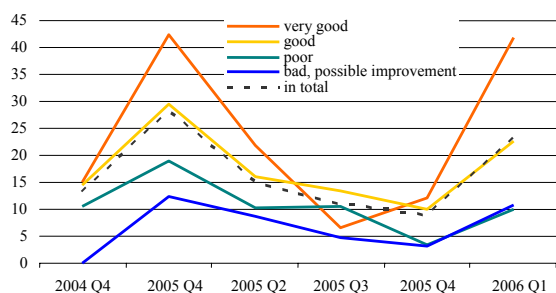


Fig. 69 Planned wage increases vs. enterprise's economic condition (% of responses in a relevant class)

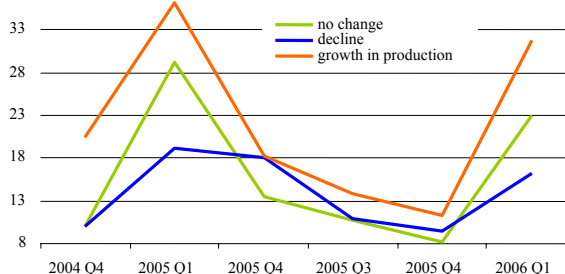


Fig. 70 Planned wage increases and the production forecasts (% of responses in a respective class)

<sup>6</sup> Entrepreneurs were asked whether there appeared wage pressure from their employees (cf. survey form – Annex 3).



Fig. 71 Planned wage increases and the employment forecasts (% of responses in a respective class)

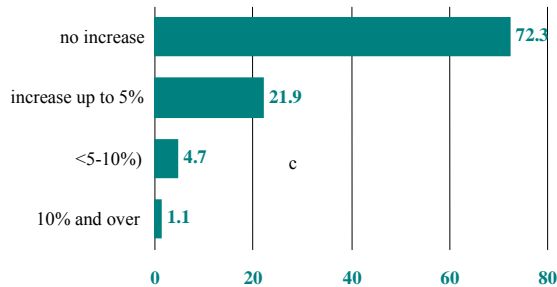


Fig. 72 Distribution of planned wage increases (data weighted by the employment level)

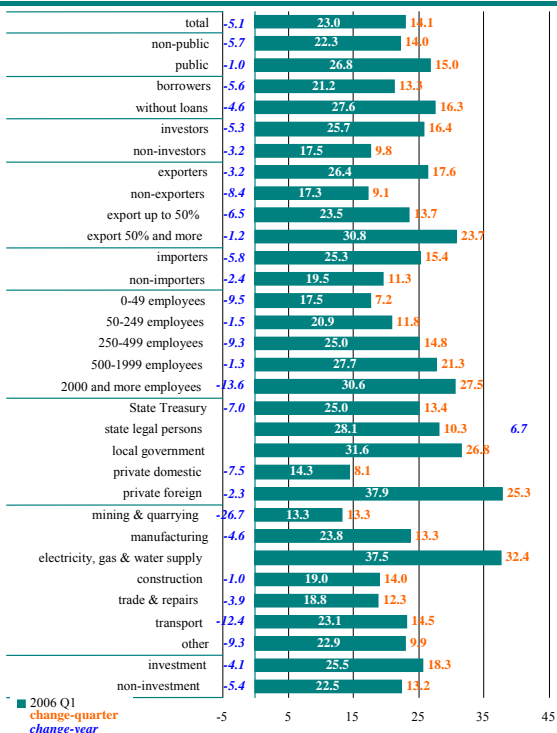


Fig. 73 Fig. 73 Planned wage increases (% of enterprises planning to carry out wage increases in classes) and the change as compared to the previous quarter and year

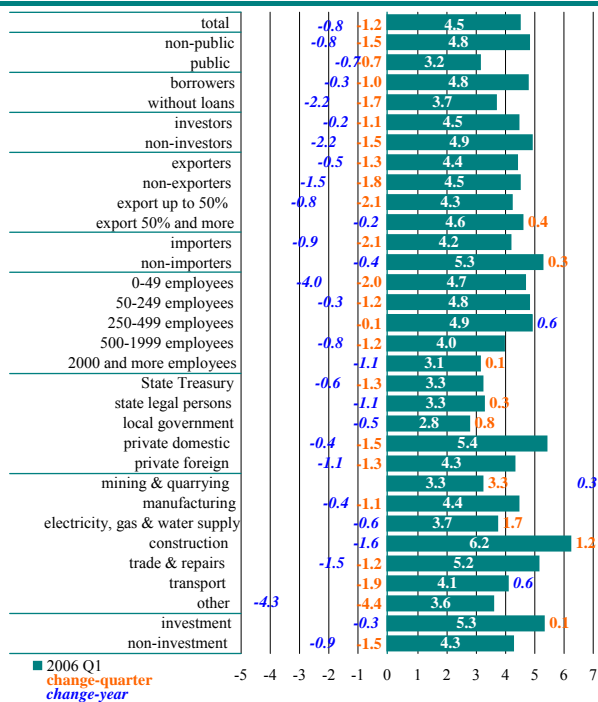


Fig. 74 Figures of planned wage increases (average in the class, for these enterprises which plan to increase wages) and change as compared to the previous quarter and year

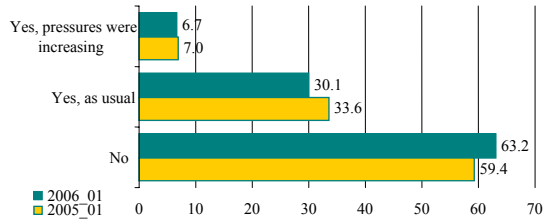


Fig. 75 Planned wage increases (% of enterprises planning to carry out wage increases in classes) and the change as compared to the previous quarter and year

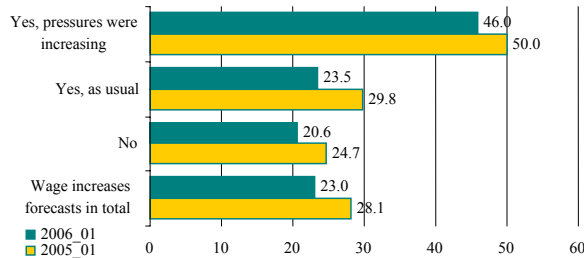


Fig. 76 Wage pressures and wage increases forecasts

## 1.5. Investment

forecast of economic activity	<ul style="list-style-type: none"> <li>• expected enlargement of corporate investment activity in 2006 Q1</li> <li>• enterprises more interested in new investments</li> </ul>
areas of increased investment activity	<ul style="list-style-type: none"> <li>• public sector</li> <li>• large enterprises (with 250-1999 employees)</li> <li>• construction, mining &amp; quarrying and transport</li> </ul>
continued investments	<ul style="list-style-type: none"> <li>• improved capacity to continue investments</li> <li>• the index of the capacity to continue commenced investments in the group of investors at its historical high</li> <li>• the percentage of enterprises anticipating resignation from investments in progress or limitation of the scale of investment lowest in the survey history</li> </ul>
investment barriers	<ul style="list-style-type: none"> <li>• financial barrier weaker than one year before (deficiency of financial assets was quoted by 13% of enterprises not intending to invest, i.e. 5 percentage points less than in the preceding year) and mostly applied to enterprises in weak economic condition); Thus, the lack of capacity to finance investments in the group does not indicate any real limitations in access to sources of finance, but rather results from a difficult economic situation of enterprises.</li> <li>• difficulties with receiving subsidies from EU funds</li> <li>• too low anticipated rate of return</li> <li>• in smaller enterprises the need of implementing investments is weaker</li> </ul>

### FORECAST OF ECONOMIC ACTIVITY

The investment activity index<sup>7</sup> suggests a certain growth in this activity in 2006 Q1 (cf. Fig. 77). Also, it should be emphasised that there has appeared a rising trend of investment activity.

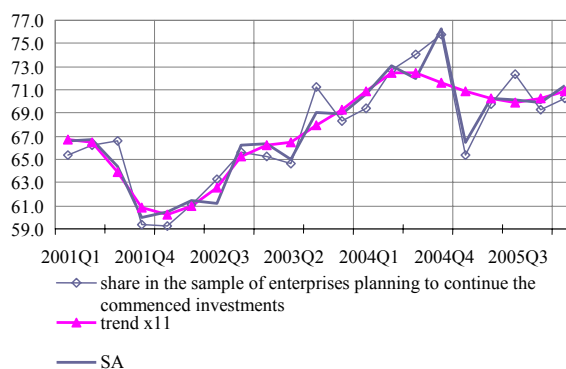


Fig. 77 Investment activity index – share in the sample of enterprises planning to continue the commenced investments (investors completing investments as scheduled were also included here). Full sample.

<sup>7</sup> The formula of the investment activity index has been changed in relation to the previous issue. The new index is based on the share of enterprises planning to continue investments in the sample and has good prognostic properties as regards the growth rate of investment outlays according to GUS F01 reporting.

In 2006 Q1 the continuation of commenced investments was declared by almost all the surveyed investors (nearly 98% of investors, i.e. 2 percentage points more than in the preceding quarter, Fig. 81). In 11% of cases even a high growth in the scale of implemented investments is possible, and over 8% of investors are planning to complete their investment projects in the coming quarter (a drop of 2.6 percentage points in the course of one quarter). Reductions, i.e. abandoning currently implemented projects, will be marginal in 2006 Q1 (just below 1% of the sample and approx. 1.3% of investors). **The percentage of enterprises anticipating a limitation of the scale of their investment is currently the lowest in the survey history.** In turn, the **index measuring the capacity to continue commenced investments in the group of investors reached its historical high point.**

#### INVESTMENT ACTIVITY – ANALYSIS OF MAIN CATEGORIES

In 2006 Q1 investment activity growth may be primarily expected in (Fig. 82):

- the public sector (Fig. 80),
- construction, mining & quarrying and transport,
- large, but not largest, enterprises (with 500-1999 employees).

In turn, a drop in investment activity is possible in sections:

- trade & repairs,
- other,
- electricity, gas and water supply.

#### NEW INVESTMENTS IN Q1

Improvement in the investment climate is suggested by **enterprises' increased interest in new investments.** One in three surveyed respondents anticipated embarking on new investments in the course of the quarter (which is 7 percentage points more than in the previous quarter, Fig. 78).

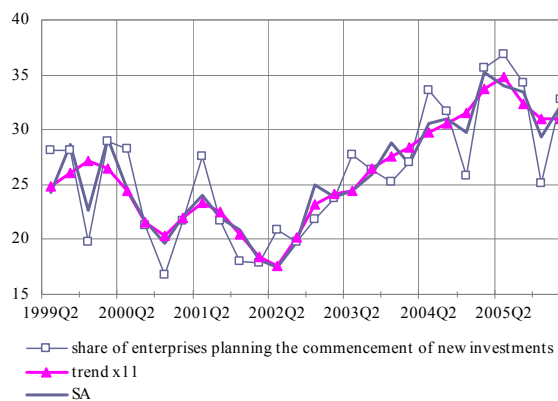


Fig. 78 New investments index - share of enterprises planning the commencement of new investments within a quarter

The index of new investments weighted by employment level reveals greater improvement than the unweighted index (Fig. 85), which means that the surge in interest in new investments occurred mainly among large enterprises. This index is currently at its historical high (comparable data available since 2003 Q1).

#### NEW INVESTMENTS – ANALYSIS OF MAIN CATEGORIES

The propensity to undertake new investments has increased in most categories studied, especially in:

- large and medium-sized enterprises (with over 250 employees),
- the public sector,
- and – in division into industries – in the section *Electricity, gas and water supply* (Fig. 85).

Moreover, a relatively higher percentage of companies planning new investments has been observed in these groups. It also should be added that **ever since the beginning of 2005 the public sector has recorded a larger share of enterprises planning to embark on new investments** than the private sector.

A drop in the percentage of enterprises planning new investments has been recorded in:

- transport,
- enterprises with the lowest employment level (Fig. 86).

#### NEW INVESTMENTS – PLANS FOR 2006

**The commencement of important investment projects in 2006 was planned by almost half of respondents (Fig. 94). The percentage of investors declaring to commence new investments is thus similar to that in the studies of investment forecasts for 2005.** The majority of investors planning new investments in 2006 (71%) intend to commence them **in the first half of the year (Fig. 93)**. A considerable and larger than last year group of investors (approx. 16% as compared with 10% in the previous year) did not have specific plans as to the time of commencing their planned investments.

#### FACTORS ENCOURAGING NEW INVESTMENT

One of the factors which should be listed as favouring investment activity in 2006 Q1 is a very good, according to their own declarations, economic situation of enterprises. This is because enterprises positively assessing their economic condition reported intentions to commence new investments relatively more often than companies in worse economic condition (new investments were planned by 37% of enterprises in very good or good economic condition and 19% of entities in worse situation – Fig. 90).

The need to expand production capacity may also be suggested by a high and rising level of production capacity utilisation.

#### INVESTMENT BARRIERS

**The need to commence in 2006 an investment project significant from the point of view of the enterprise was seen by almost 81% of surveyed respondents**, while in 33% of cases, the investments will not be started in 2006 in spite of the existence of this need (Fig. 94). These results are similar to responses recorded a year before.

In comparison to the findings of the previous study of investment barriers conducted in 2005, enterprises **more rarely pointed at their incapacity to finance investments** (a drop in the share of declarations of 5 percentage points down to 13%) or unfavourable legal environment (a decline of 3 percentage points to 3%). According to the respondents, lack of investment projects of an acceptable level of profitability is not a serious problem for investors at the moment, although the share of declarations of this barrier in the sample has increased dramatically (almost twofold – to the level of 8%).

Despite the weakening impact of financial barrier, observed at the sample level, there are still enterprises which will be unable to commence significant investment in 2006 due to the lack of financing. The incapacity to finance investment proved to be the most frequently named reason for the lack of investment (deficiency of financial assets as a reason for the lack of investment in 2006 was quoted by 13% of companies that will not commence new investments).

However, the problem of finding sources of financing almost exclusively applied to enterprises in weaker economic condition (financial barrier was indicated by 54% of enterprises which assessed themselves as bad, but only 6% of good and none of the best ones, Fig. 97). Thus, it may be assessed that the lack of capacity to finance investments observed in the group was a consequence of a difficult economic situation of enterprises, rather than a sign of any real limitations in access to the sources of finance.

Other important barriers to investment, apart from the financial barrier, were the **difficulties with receiving subsidies from EU funds** and the **too low anticipated rate or return** (declared, respectively, by 6% and 8% of enterprises that will not commence investments in 2006, Fig. 95).

In turn, weak demand and unfavourable environment (unstable legislation, bureaucracy) were reported as factors hampering investment activity. **A significant group of threats to investment was left out of the basic group of factors listed in the study.** Barriers not present on the suggested list were indicated by 36% of enterprises not intending to start investments in 2006, which corresponds to 19% of the whole sample. Enterprises positively assessing their condition reported this type of problems relatively more often (Fig. 97).

The survey results reveal that demand barrier may be a kind of incentive to commence investment (Fig. 98). This hypothesis is confirmed by comparing new investment plans for the next 3 months with the information on difficulties with the sales of products. **The index of new investments was growing faster in enterprises reporting difficulties in selling their products than in other enterprises, and for the first time it exceeded** the index level for companies without any problems with demand. Undoubtedly, this phenomenon will have to be watched closely, as it may be a sign of accelerating restructuring in this group of companies or an indication of deteriorating allocation of credit.

The analysis of investment plans in different employment level classes indicates that small companies tend to decide to commence significant investment in 2006 less often than large companies do (Fig. 99). The examination of one-quarter investment plans for which longer time series are available reveals that this is a permanent characteristics of this group of respondents. Moreover, the group of smaller entities had a larger share of enterprises in which significant investments will not be commenced in 2006 due to sufficient technological facilities or a freshly completed investment process.

### SOURCES OF FUNDING NEW INVESTMENT

The hierarchy of the sources of finance for new investment is relatively stable across the sample. Ever since the survey study was started, i.e. since 1999 Q2, the fundamental way of financing such investments has been from own funds of enterprises (in 2006 Q1, 47% of investors will fund their investment outlays from this source, which represents a rise of 3.6 percentage points in comparison to the previous quarter, Fig. 100). Bank loans remain the second largest source (32% of investors, rise of 2.8 percentage points), followed by non-bank external funds and other sources (15% and approx. 6% of investors, respectively).

In comparison to the results from the previous quarter there was a rise both in the share of investors funding new investment projects by themselves and also in the share of enterprises which will use loans to finance new investments. It has to be emphasised that **the contribution of investors using bank loans to finance new investments in the sample is slowly growing** (Fig. 101). This growth in enterprises' interest in bank loans as a way of funding new investments has been observed among the surveyed companies since 2003 Q3. In this period the contribution of investors declaring bank loans as the main source of funding new investments has risen from 25% to 33%.

### DIFFERENCES IN INVESTMENT FINANCING – ANALYSIS OF MAIN CATEGORIES

Some areas of weaker bank loan utilisation may be identified in the sample. Funding new investments with bank loans is relatively less often anticipated by state-owned and smallest enterprises, and by those with the largest employment (Fig. 102).

The interdependence between the economic condition and the source of funding new investments in the surveyed enterprises indicates that entities in good situation, which have better capacity of self-financing their activity, prefer to use own funds rather than alternative methods of finance (Fig. 103). In turn, weaker enterprises, which are not capable of generating sufficiently large equity capital, tend to recourse to non-bank external funds and other sources.

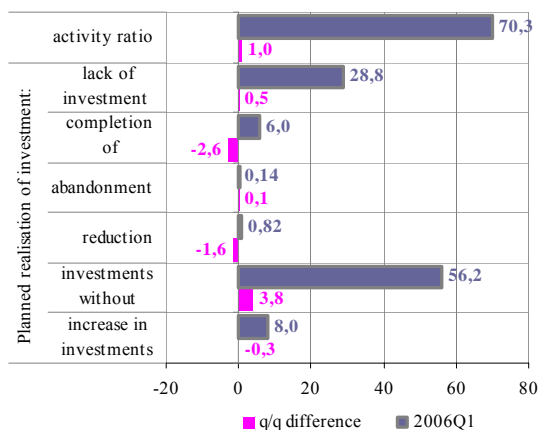


Fig. 79 Projected flow of commenced investments in 2006 Q1 - % of responses in a sample

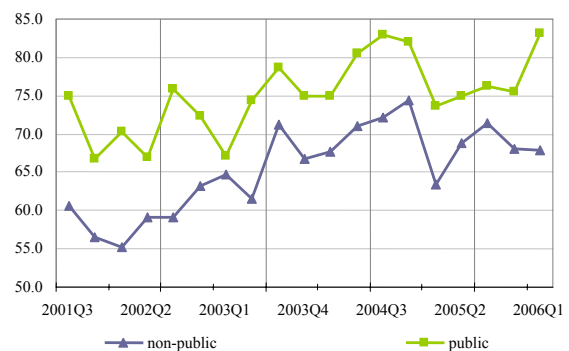
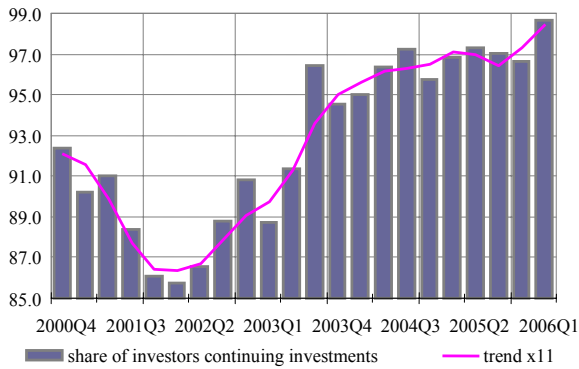
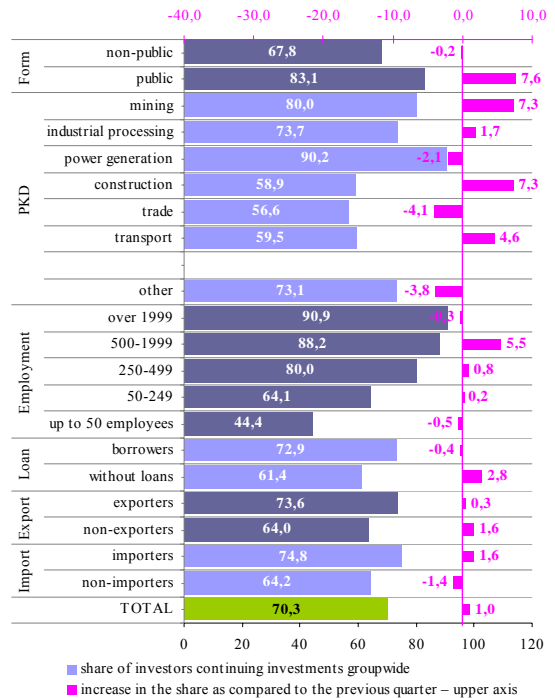


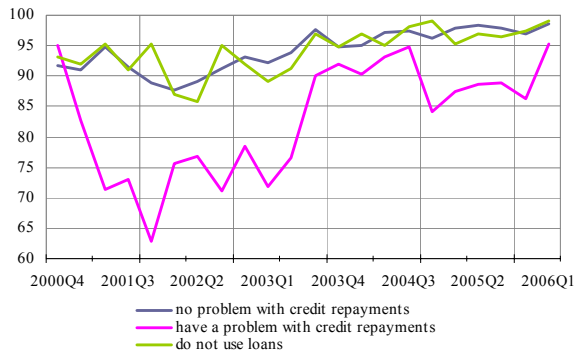
Fig. 80 Investment activity index (share in the sample of enterprises planning to continue the commenced investments) broken down by ownership sectors



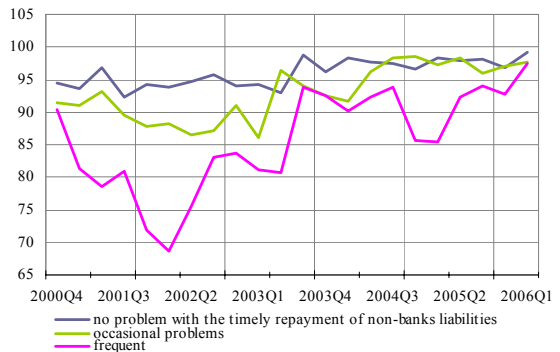
**Fig. 81 Investment continuation index in a group of investors – share of investors planning to continue the commenced investments (investors completing investments as scheduled are also included here). Sub-group of investors.**



**Fig. 82 Investment activity index (share in the sample of enterprises planning to continue commenced investments) in the main sections (blue bars) and the increase in this share as compared to the previous quarter (pink bars), 2006 Q1.**

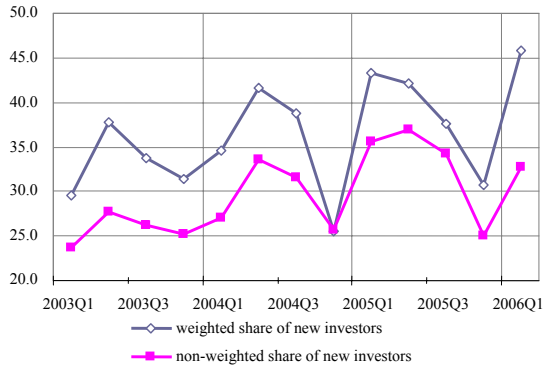


**Fig. 83 Investment continuation index – the share of investors continuing the commenced investments (including also investors completing investments as scheduled) vs. the efficiency of loans repayment**



**Fig. 84 Investment continuation index – the share of investors continuing commenced investments (including also investors completing investments as scheduled) vs. the efficiency of non-loan debt repayment**

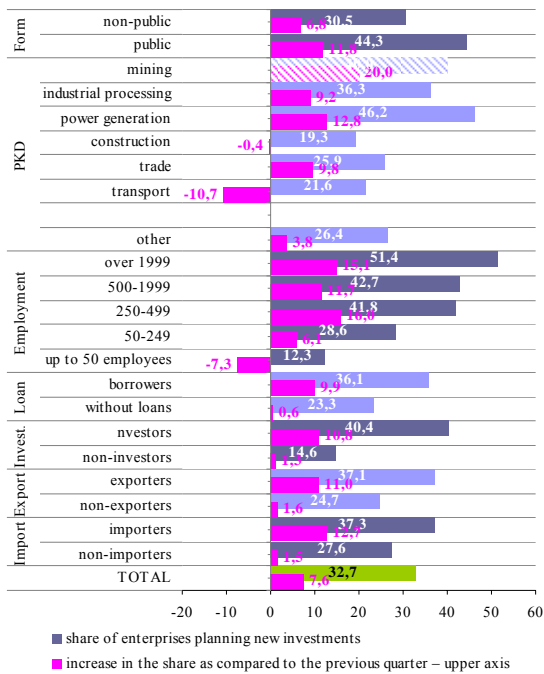




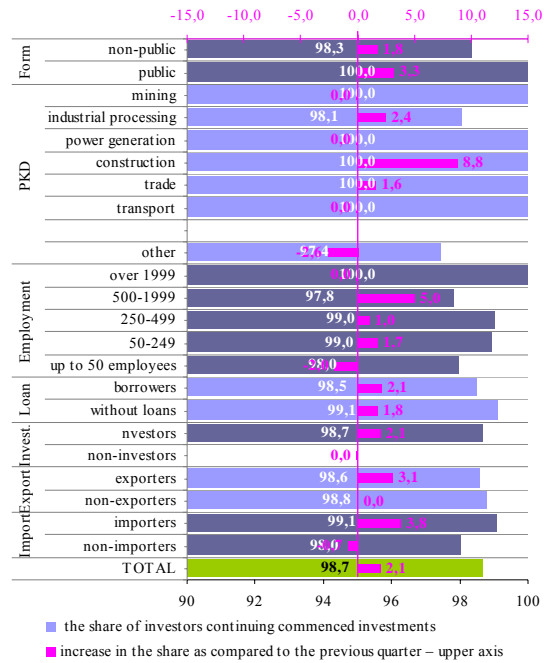
**Fig. 85** New investments index weighted with the employment level – the share of enterprises planning the commencement of new investments within a quarter



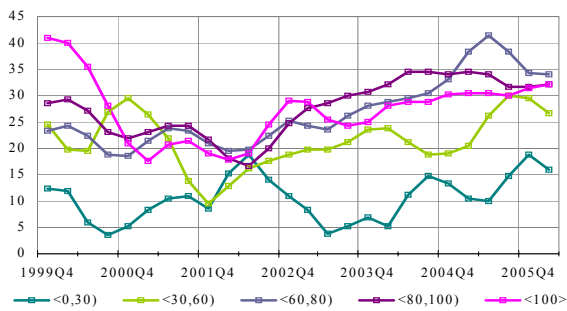
**Fig. 86** The share of enterprises planning new investments within a quarter in the classes of employment size



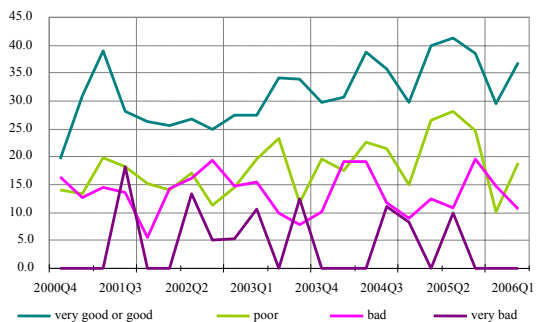
**Fig. 87** The share of enterprises planning new investments within a quarter in the main sections (blue bars) and increase in this share as compared to the previous quarter (pink bars) - 2006 Q1. Striped bars – groups with a low representation in the sample.



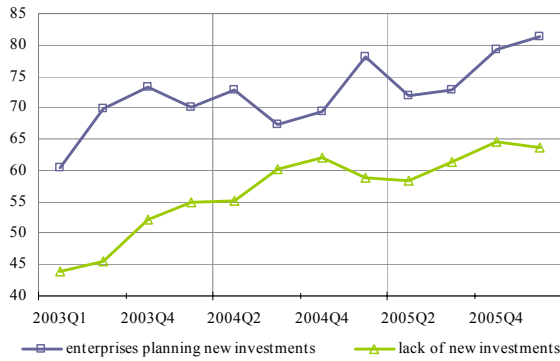
**Fig. 88** Investment continuation index in the main sections - 2006 Q1



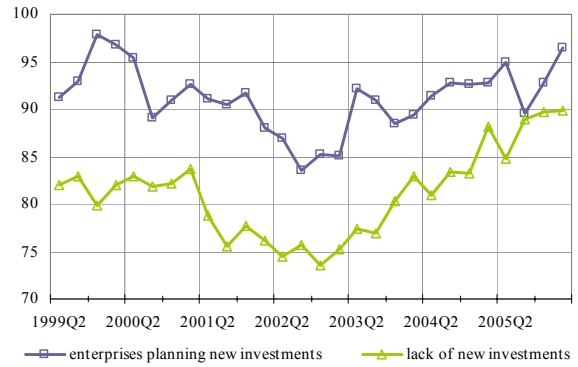
**Fig. 89** The share of enterprises planning new investments within a quarter in the classes of production capacity utilisation (trend x11)



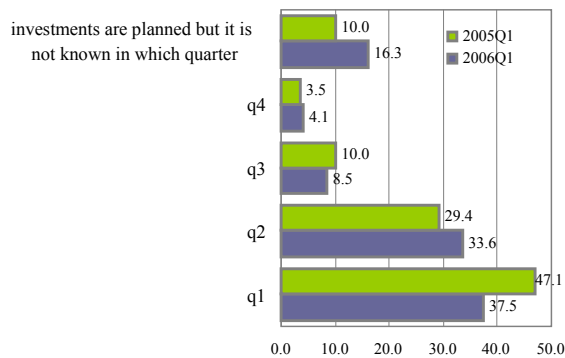
**Fig. 90** The share of enterprises planning new investments within a quarter in the classes of economic condition assessment



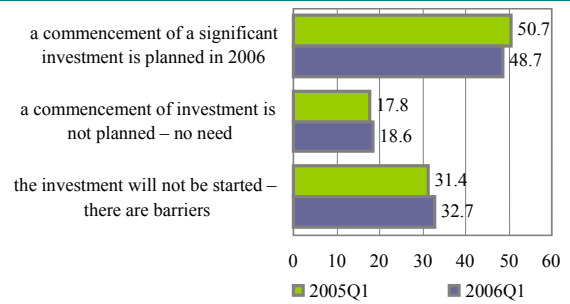
**Fig. 91** The share of enterprises which do not have any problems with liquidity in the group of entities planning the execution of new investments within a quarter and the group of businesses which do not plan the execution of new investments



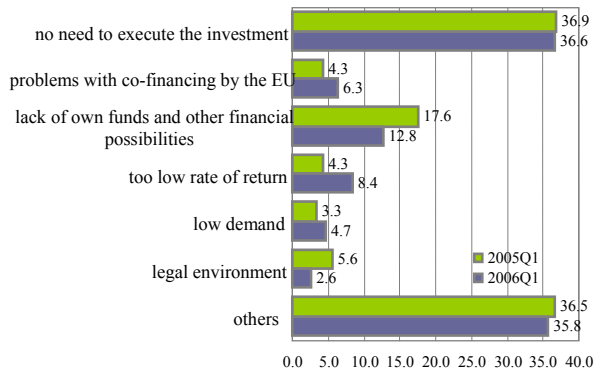
**Fig. 92** The share of enterprises efficiently repaying loans in the group of entities planning the execution of new investments within a quarter and in the group of businesses which do not plan the execution of new investments



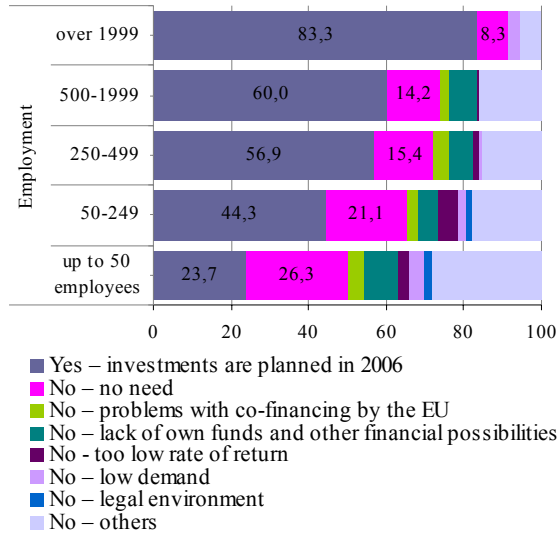
**Fig. 93** The date of commencing new investments planned in 2006 – percentage share of enterprises in the group of investors planning the execution of investments



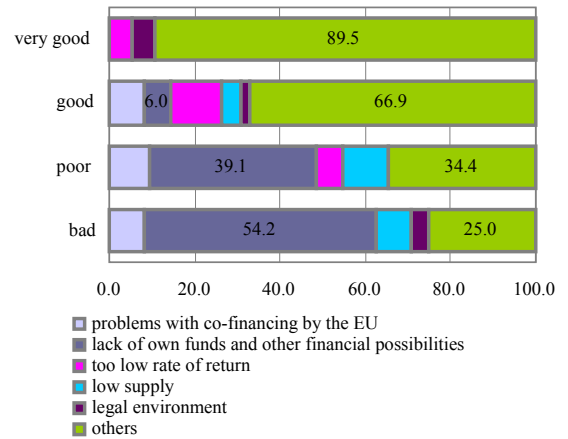
**Fig. 94** Investment plans for 2006 - % of responses in a group



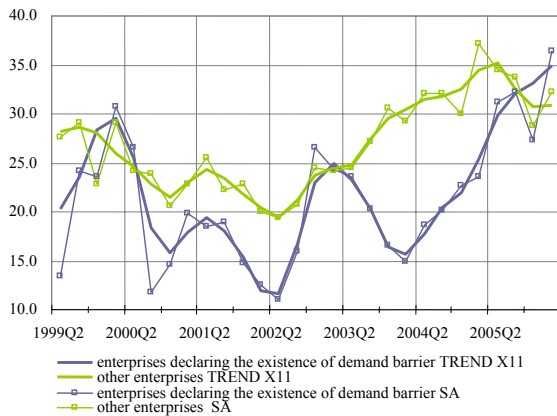
**Fig. 95** The reasons for which the enterprise does not plan the execution of investment in 2006 – the percentage share of enterprises in the group of businesses which do not plan investments (the enterprise could indicate two reasons, therefore the shares do not total up to 100%)



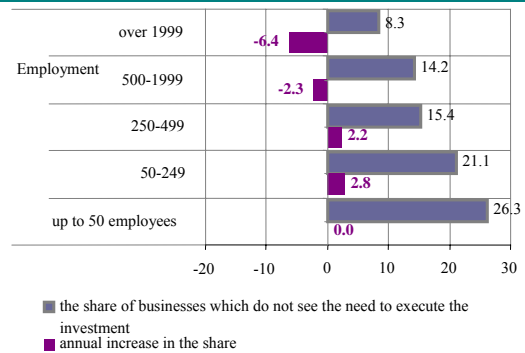
**Fig. 96 Plans of commencing significant investments in 2006, the main barrier hindering the undertaking of investment - % of responses in the class of employment size**



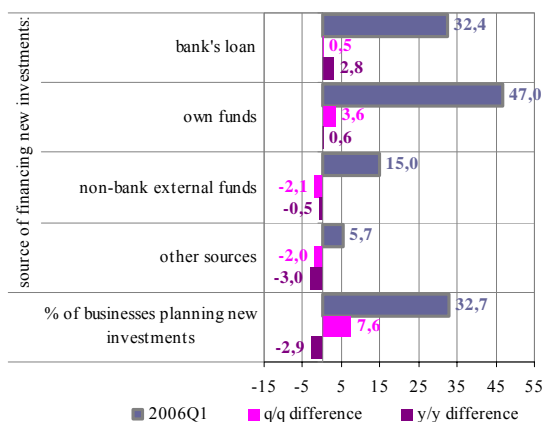
**Fig. 97 The main reason for the lack of investments in 2006 vs. assessment of economic condition, the sub-group of businesses which do not plan to invest, although there is such a need**



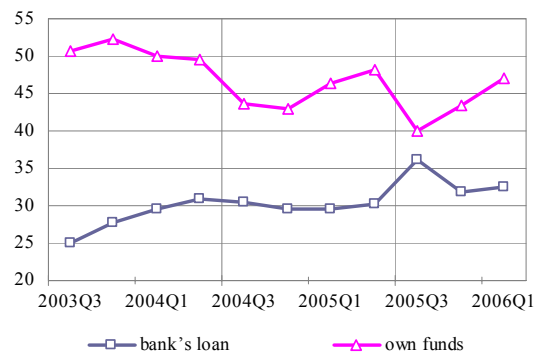
**Fig. 98 The share of enterprises planning new investments within a quarter among the enterprises informing on the existence of demand barrier and in the remaining group of examined entities (trend and seasonally adjusted row), Identification of demand barrier based on the results of open question**



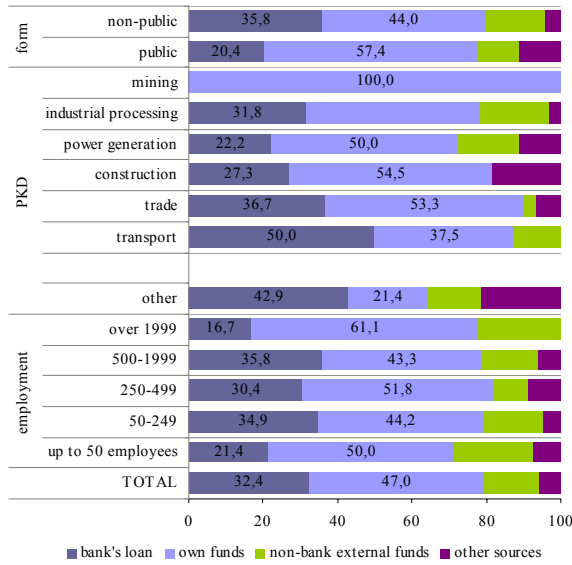
**Fig. 99 The share of enterprises which will not commence investments in 2006 in view of the lack of such a need - % of responses in the class of employment size and annual increase in this share**



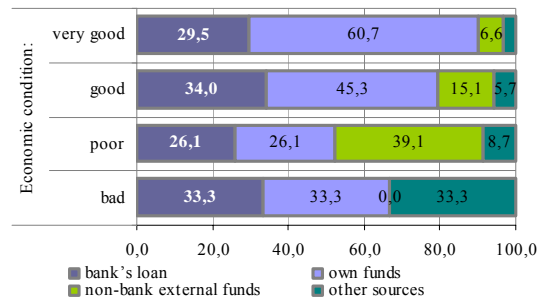
**Fig. 100 The main source of financing the newly planned investments, the share of investors in 2006 Q1**



**Fig. 101 The share of investors financing development from external sources - bank's loans, own funds. Sub-group of investors planning new ventures**



**Fig. 102 Structure of investors in terms of the main source of financing newly planned investments - % of responses in the class in 2006 Q1.**



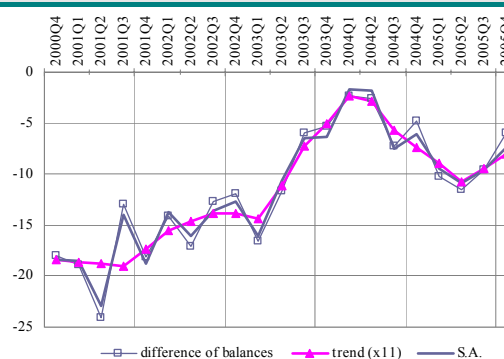
**Fig. 103 The main source of financing newly planned investments vs. assessment of economic condition in 2005 Q3**

## I.6. Stocks of finished goods in industry

stock level	<ul style="list-style-type: none"> <li>• some improvement in the matching of the level of stocks to the needs of the enterprise visible for the past two quarters</li> <li>• Balance of evaluations of the level of finished product inventories remains slightly negative, which means that the share of enterprises with excessive stocks is slightly larger than that of enterprises describing the level of their stocks as insufficient.</li> <li>• rise in the percentage of enterprises experiencing lack of sufficient stocks – for the first time in two years</li> </ul>
changes in main classification categories	<ul style="list-style-type: none"> <li>• improvement of assessment of the level of stock in majority of categories,</li> <li>• deterioration in evaluations of the stock level in the group of entities selling only in the domestic markets and in enterprises with the highest employment level.</li> </ul>

### EVALUATIONS OF STOCK LEVEL

In the surveyed group of industrial enterprises<sup>8</sup>, after the problem of excessive stocks had been growing since mid-2004, **some improvement in the matching of stock to the needs has been visible for two quarters now** (Fig. 104). The current level is similar to that from the end of 2004.



**Fig. 104 Ready products stock level ratio (difference of balances = too low – too high) in the industry (without power)**

In 2005 Q4 almost 80% of surveyed industrial enterprises described their stock of finished products as appropriate for their needs (Fig. 105), 13% of the surveyed companies assessed it as excessive (a decline of 2 percentage points as compared with the previous quarter), while 7% saw it as **insufficient – the percentage of such companies rose for the first time since 2003 Q4 (a rise of 1.6 percentage point in quarter-on-quarter terms)**.

### CHANGES IN STOCK LEVEL – ANALYSIS OF MAIN CATEGORIES

Over the past quarter, improvement in the evaluations of stock level has been observed in the majority of the analysed groups (Fig. 107). Problems with excessive stocks **most visibly intensified in enterprises selling in the domestic markets only** (the share of enterprises with excessive stocks rose by 4 percentage points up to 13%, while the percentage of companies with insufficient stocks fell by 7 percentage points to approx. 9%, Fig. 110). Stocks also increased in enterprises with the highest employment level.

Positive balance of stock evaluations (no problems with excessive stocks) was recorded in two classes, i.e. in mining & quarrying and in medium-sized enterprises (with 50 to 249 employees). The latter group recorded the strongest improvement in the degree of matching between stocks and needs.

<sup>8</sup> The analyses presented in this chapter only refer to manufacturing and mining enterprises.

## SELECTED FACTORS AFFECTING STOCK LEVEL

One of the sources of accumulating excessive stock of finished goods in enterprises is revealed by the comparison of stock evaluations with the impact of demand barrier (Fig. 109). The phenomenon of excessive stock was much more prominent in enterprises signalling problems with the sales of their products. The peak of this phenomenon occurred in mid-2005 and since then the degree of matching of stock has been growing in enterprises feeling demand barrier. It is worth pointing out that the balance of evaluations of stock level is currently slightly negative also in the group of enterprises not reporting difficulties with the sales of their products.

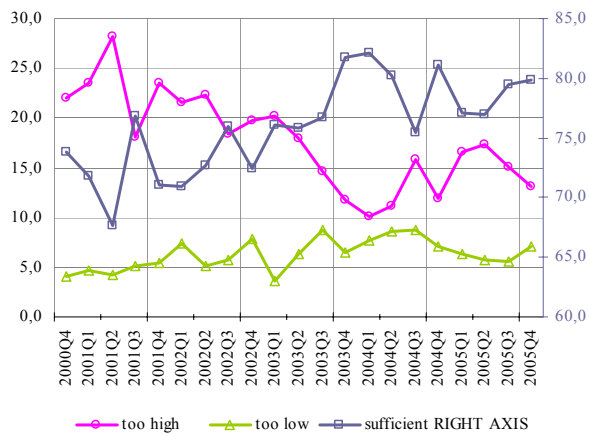


Fig. 105 Percentage of assessments of ready products stock level. Industrial enterprises (without power industry)

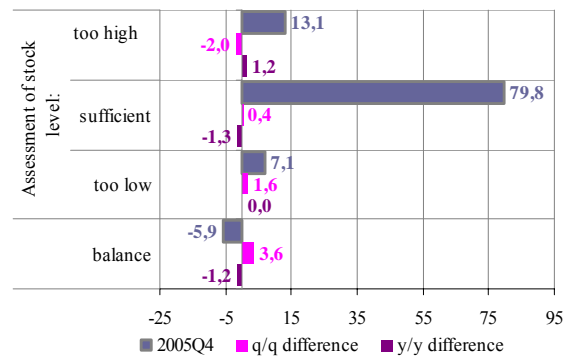


Fig. 106 Ready products stock level assessment. 2005 Q4 – % of responses in the group of industrial enterprises (without power industry)

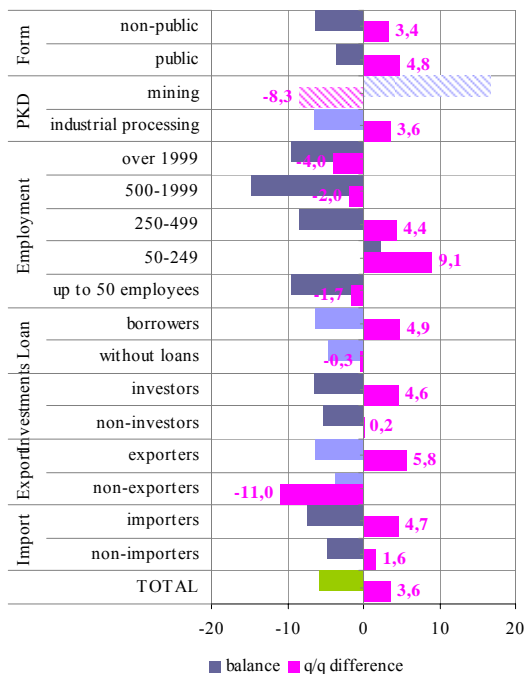


Fig. 107 Assessment of stock level – balance (blue bars) and increase in the balance as compared to the previous quarter (pink bars). 2006 Q1.

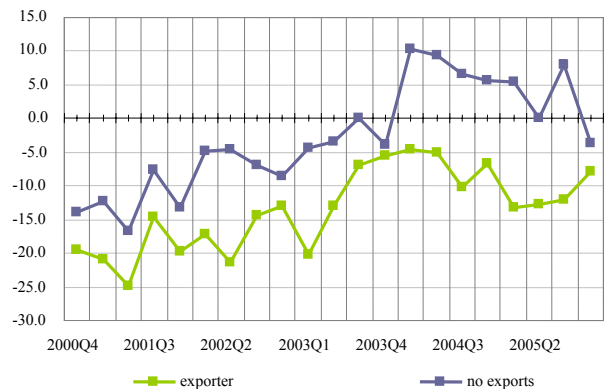
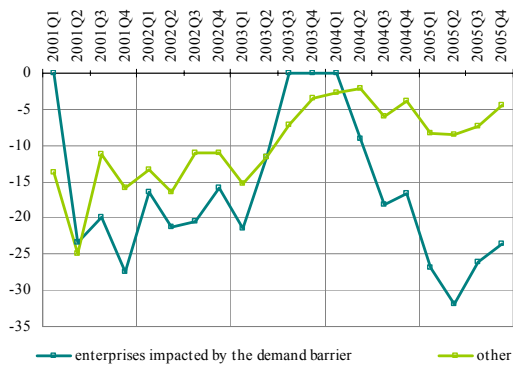
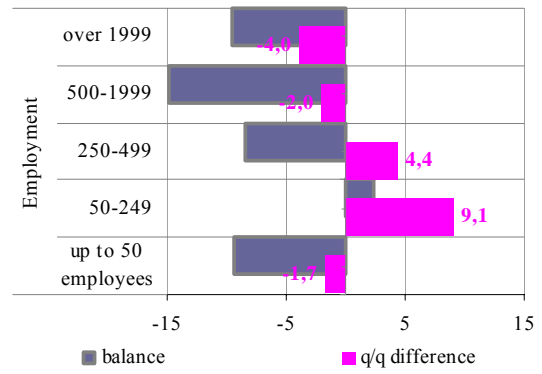


Fig. 108 Percentage of assessments of ready products stock level vs. export operations in 2005 Q4. Industrial enterprises (without power industry)



**Fig. 109** Percentage of stock level assessments in the group of enterprises impacted by the demand barrier and the remaining group of examined businesses. Industrial enterprises (without power industry)



**Fig. 110** Percentage of ready products stock level assessments vs. employment level in the enterprise in 2005 Q4. Industrial enterprises (without power industry)

## I.7. Production capacity utilisation

current developments	<ul style="list-style-type: none"> <li>• raw data – rise in the index to one of its highest values in the survey history</li> <li>• increase in the median of index distribution – to 85%</li> </ul>
areas of high production capacity utilisation (83% and more)	<ul style="list-style-type: none"> <li>• construction, mining &amp; quarrying</li> <li>• specialised exporters, exporters-importers, non-importing exporters</li> <li>• companies with foreign capital participation</li> <li>• companies with over 2000 employees</li> </ul>
increase in Q4	<ul style="list-style-type: none"> <li>• private and public sector</li> <li>• mining &amp; quarrying, manufacturing, construction</li> <li>• exporters-importers, non-importing exporters, non-specialised importers</li> <li>• companies with 50 to 249 employees and enterprises employing between 500 and 1999 people</li> </ul>

### LEVEL OF PRODUCTION CAPACITY UTILISATION

In December 2005 the distribution mean of the level of production capacity utilisation rose by 0.6 percentage point in relation to September reaching the level of 81.2% - one of its historical peaks – cf. Fig 111. There was also an increase in the median of distribution – up to 85%<sup>9</sup> – cf. Fig. 112. Over the last three months there was an increase in the number of companies with an 80-percent and higher level of capacity utilisation in the sample (the percentage of such companies increased by nearly 1 percentage point and represented 67% of the sample) coupled with a decrease in enterprises with the lowest level of capacity utilisation.

The average change in the level of capacity utilisation at the enterprise level was positive and amounted to 0.2 percentage point. Capacity utilisation increased in the case of 29% of enterprises, while its drop was recorded by almost 23% of surveyed companies.

### CHANGES IN PRODUCTION CAPACITY UTILISATION – ANALYSIS OF MAIN CATEGORIES

Changes in the level of production capacity utilisation varied across main categories, i.e.:  
A rise in the level of capacity utilisation was observed in the following classes:

- non-specialised exporters (up to 50% share of exports in revenue),
- PKD (NACE) sections: *Manufacturing* and *Construction*,
- the private sector,

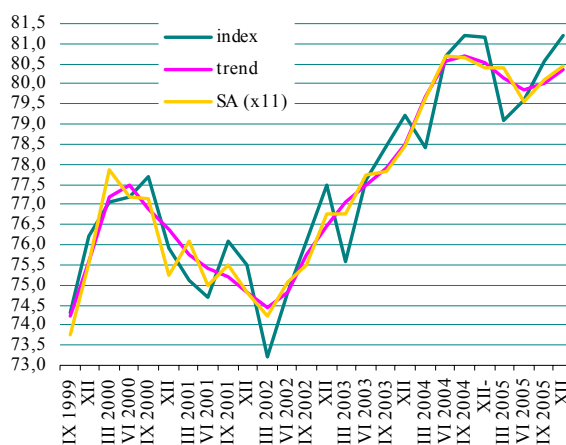


Fig. 111 Average production capacity utilisation level and the trend of this index

<sup>9</sup> Throughout the history of this survey, the median of this index has been very stable and persisted at the level of 80%; so far it has only deviated from this value on four occasions.



- large companies (with over 49 employees),
- the group of investors.

In turn, a falling tendency in the level of capacity utilisation was observed in the following classes:

- non-exporters, non-exporting importers,
- PKD (NACE) sections: *Electricity, gas and water supply, Trade & repair, Transport,*
- non-investors.

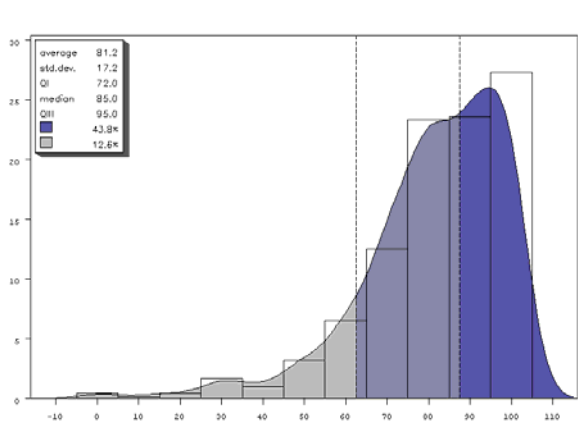


Fig. 112 Distribution of production capacity utilisation in December 2005

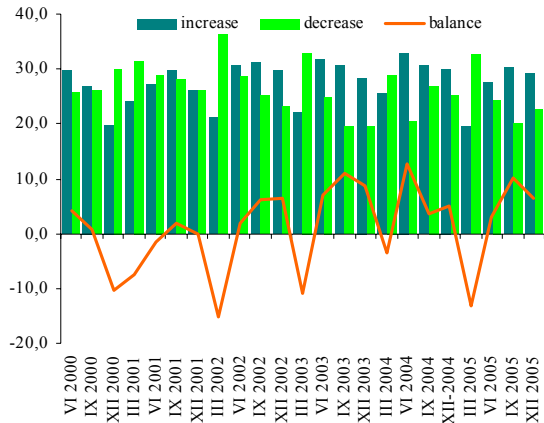


Fig. 113 Changes in the degree of production capacity utilisation at the unit level (dark green bars - increase as compared to the previous quarter, light green bars - decrease, pink line balance – increase minus decrease)

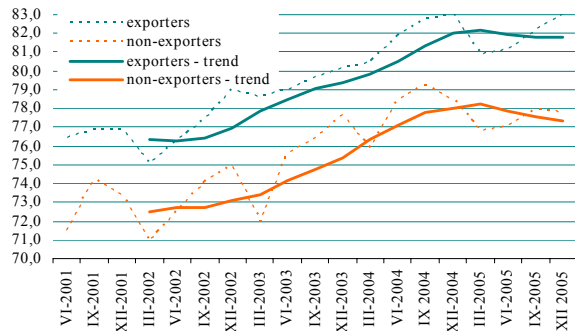
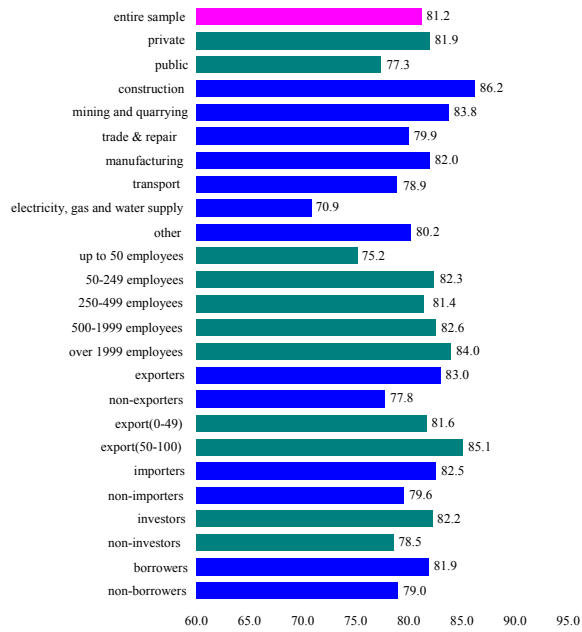


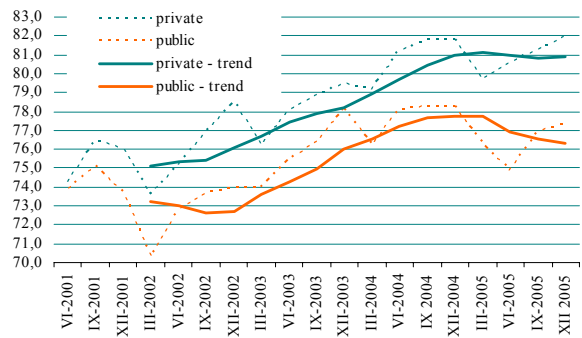
Fig. 114 Average production capacity utilisation level in the class of exporters and non-exporters



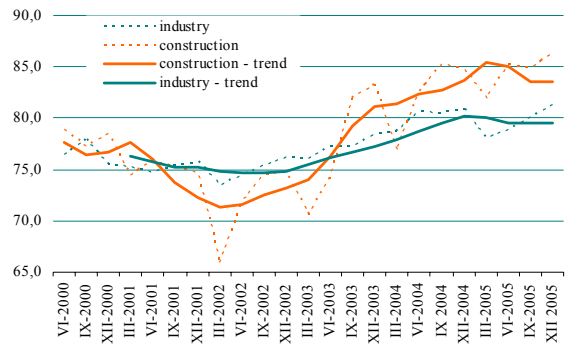
Fig. 115 Average production capacity utilisation level in the class of specialised exporters (with over 50% share of exports in revenue – export50) and non-specialised exporters (with less than 50% share of exports in revenue)



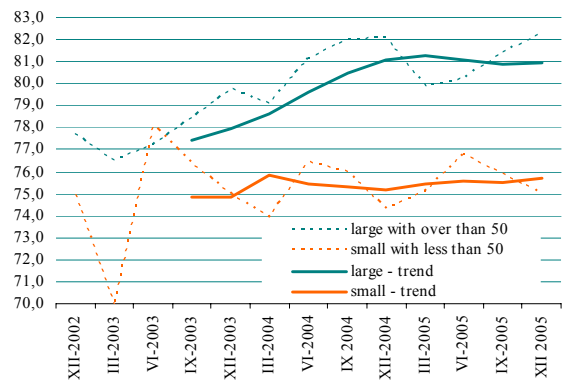
**Fig. 116 Average production capacity utilisation level in the main classifications - data for December 2005**



**Fig. 118 Average production capacity utilisation level in ownership sectors**



**Fig. 117 Average production capacity utilisation level in construction and industry**



**Fig. 119 Average production capacity utilisation level in the classes of enterprise sizes (size measured by the number of employed persons)**

## I.8. Bank loans

loan debt forecasts	<ul style="list-style-type: none"> <li>• According to forecasts from the last two quarters, the number of enterprises interested in increasing their loan debt is likely to fall again.</li> <li>• The plans of loan debt reduction prevailed, though the number of companies planning reduction was bigger than in the corresponding period of the previous year.</li> </ul>
debt forecasts in main classification categories	<ul style="list-style-type: none"> <li>• In 2006 Q1 the plans of loan debt increase predominated only among large enterprises (with over 2000 employees).</li> <li>• The largest reductions are announced by enterprises from the section <i>Other</i> and enterprises employing up to 50 people.</li> </ul>
loan availability	<ul style="list-style-type: none"> <li>• In 2005 Q4 the number of loan refusals decreased.</li> <li>• More problems with obtaining a loan in 2005 Q4 (as compared with the previous quarter) were only reported by enterprises from the section <i>Other</i>.</li> </ul>

### DEBT FORECASTS

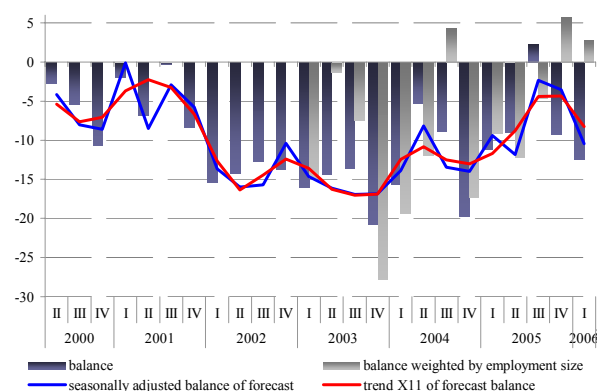
After two years of growing corporate interest in bank loans, the last two quarters saw an upward trend in the number of enterprises declaring their intentions to reduce bank loan debt (seasonally adjusted and raw indicators fell in quarter-on-quarter terms) – cf. Fig. 120. Analysis of debt forecasts by the size of enterprises suggests that the debt may increase in a group of the largest enterprises, though the increase may be weaker than in the previous quarter. Yet, it is difficult to assess the aggregate impact of those changes on the debt volume.

Despite the predominant forecasts of debt decrease in the last two quarters, at the end of 2005 Q4 the share of borrowers in the sample increased (from 73% to 74.5%) – cf. Fig. 122.

### DEBT FORECASTS – ANALYSIS OF MAIN CATEGORIES

The analysis of debt forecasts in main classification categories suggests that:

- debt reduction plans prevailed in majority of the analysed classes and categories – cf. Fig. 124,
- in classification by employment level, the plans to increase bank debt prevailed over debt reduction forecasts only among the largest enterprises (with over 2000 employees),
- sections *Trade & repair* and *Construction* reported a growing interest in increasing loan borrowing.



**Fig. 120 Loan debt forecast index (balance difference: debt increase - debt decrease, population of borrowers=100)**

## SELECTED FACTORS AFFECTING THE DEBT LEVEL

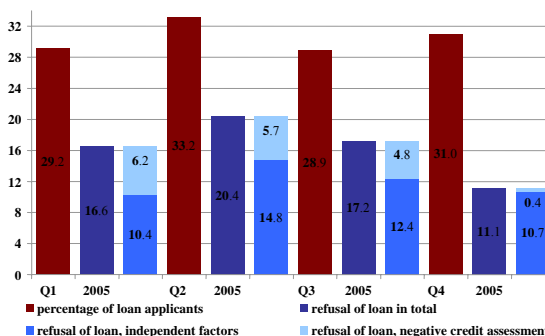
As in the previous quarter, plans to increase debt are announced mainly by the following enterprises:

- enterprises planning to commence new investment – cf. Fig. 125,
- enterprises planning to increase employment,
- enterprises expecting a permanent growth in demand for their products and services,
- enterprises anticipating a deterioration in their economic condition,
- companies expecting a fall in interest rates – cf. Fig. 126.

## LOAN AVAILABILITY

**2005 Q4 saw a marked increase in the number of positive loan decisions.** Better economic condition of enterprises applying for a loan was reflected in a smaller number of loan refusals. In 2005 Q4 only 0.4% of enterprises applying for a loan were refused it on the grounds of the lack of creditworthiness. The main reasons for loan refusals were factors beyond enterprises' control (not related to the company's economic condition) – cf. Fig. 121.

Analysis of loan availability in main categories shows that problems with obtaining a loan in 2005 Q4 increased as compared with the previous quarter only among enterprises from the section *Other* – cf. Fig. 128. In other classes opinions about easier access to bank funds prevailed. The high number of enterprises reporting problems with obtaining a loan continued in the group of non-investors, though some signs of improvement were visible. **Banks did not refuse to grant a loan to any enterprise assessing its economic condition as very good.** This proves that self-assessments by companies in a very good economic condition are consistent with external assessments. In 2005 Q4, the number of loan refusals did not exceed 15% in any of the employment classes. Loan applications were the most common among large enterprises (with over 500 employees) and the least common among the smallest enterprises.



**Fig. 121 The share of enterprises in the sample applying for a loan, percentage of enterprises which were refused a loan and reasons for refusal**

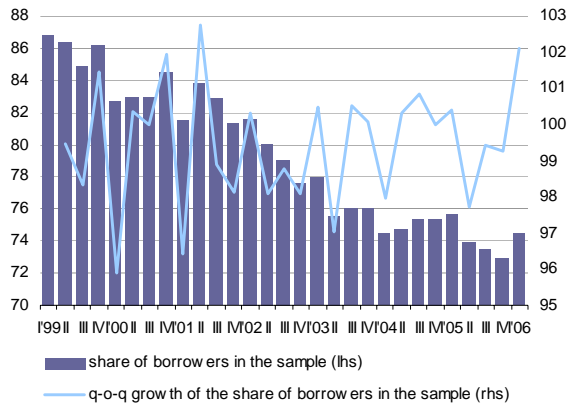


Fig. 122 The share of borrowers in the sample

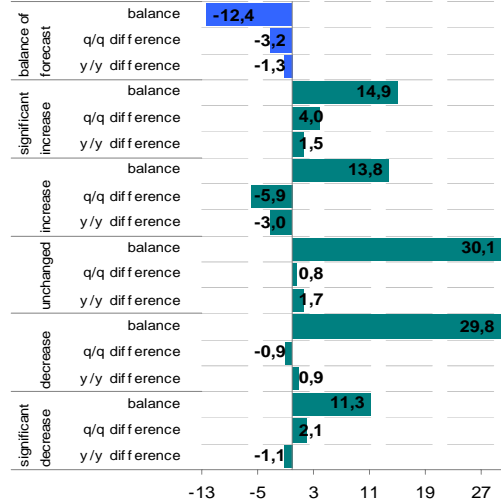


Fig. 123 Planned changes in the area of loan debt in the following quarter perspective (population of borrowers=100)

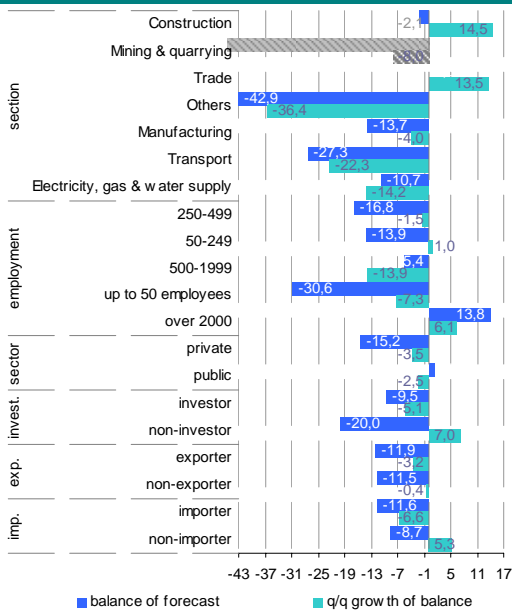


Fig. 124 Loan debt forecast for the forthcoming quarter by class. The balance of forecast (difference between forecast of debt increase and decrease). The classes underrepresented in the sample are marked in grey.

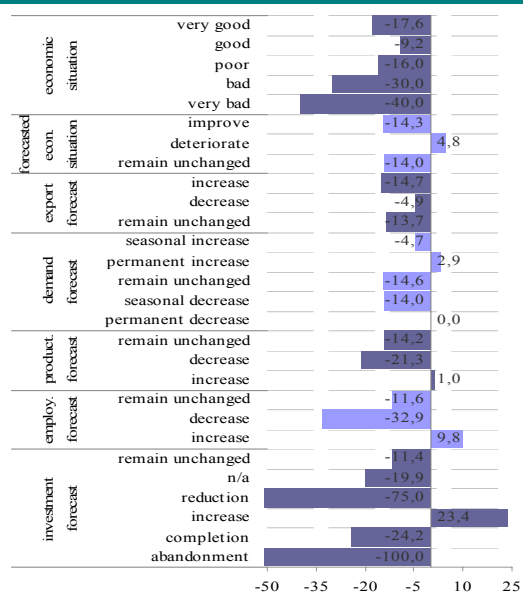


Fig. 125 Elements of enterprises' economic condition assessments and forecast vs. prognosis of loan debt in the forthcoming quarter. The balance is calculated as the percentage of forecasted increases and decreases in the classes of responses.

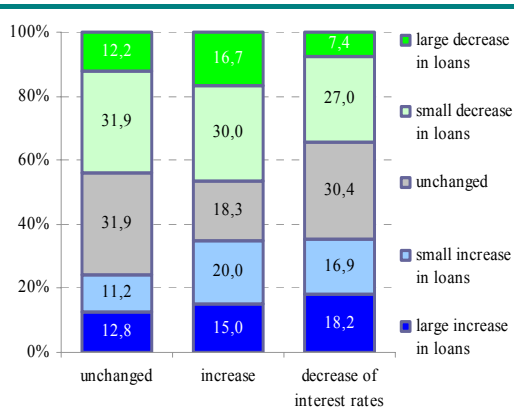


Fig. 126 Planned change in the level of debt in the light of expected changes of interest rates for the forthcoming quarter

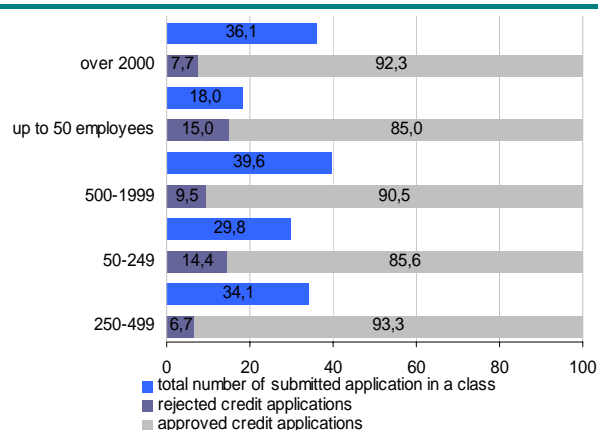


Fig. 127 Percentage of the enterprises (in classes of employment size) applying for a loan in the 2005 Q4 (% share in a class) and the share of approved and rejected loan applications in these classes (shares total up to 100)

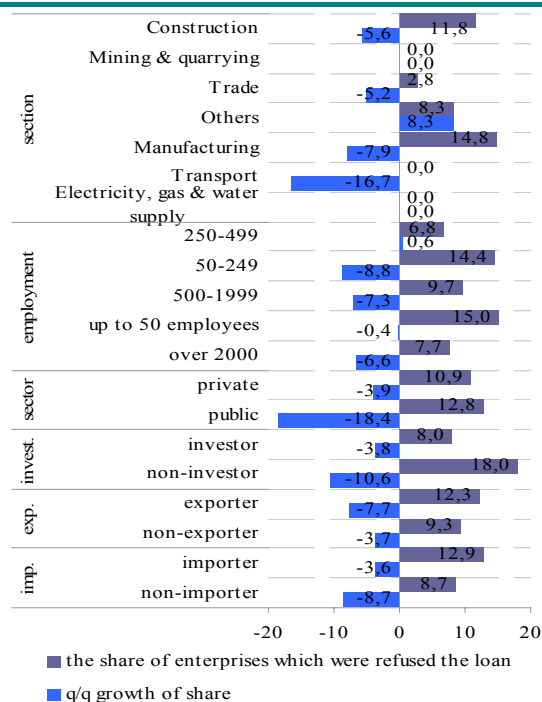


Fig. 128 The share of enterprises in the sample that were refused a loan in 2005 Q4, and q/q change of this category

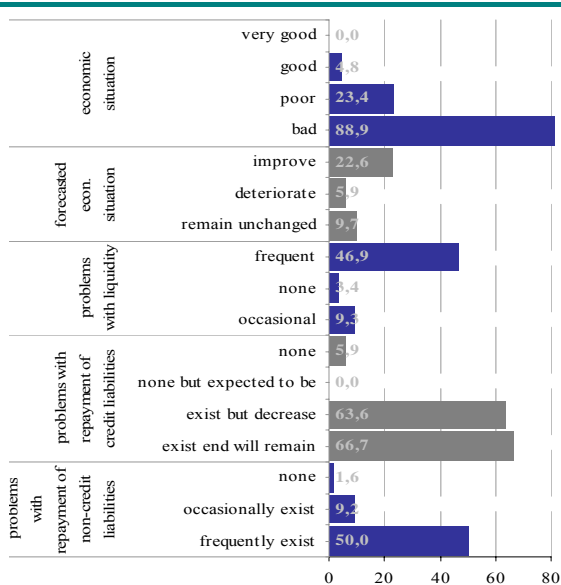


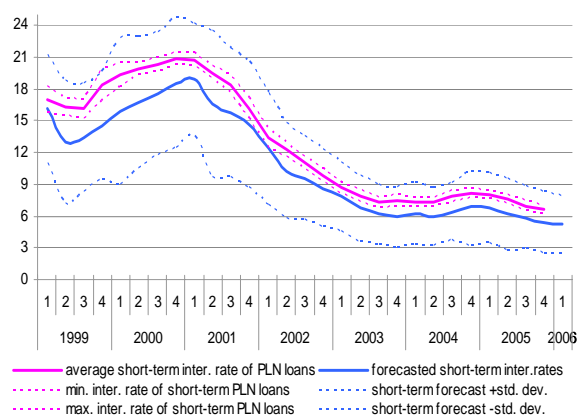
Fig. 129 The share of enterprises in the sample which were refused a loan in 2005 Q4 in the light of selected components of economic condition assessment. Population of borrowers.

## I.9. Loan interest rates

current situation	<ul style="list-style-type: none"> <li>• Interest rates on loans denominated in the zloty are falling.</li> <li>• Interest rates on foreign currency loans remain stable.</li> </ul>
changes in loan interest rates in main classification categories	<ul style="list-style-type: none"> <li>• The largest enterprises bear the lowest loan cost.</li> <li>• The better the economic situation, the cheaper the loan.</li> <li>• The average margin for a short-term loan is around 2%. Enterprises in a bad economic condition pay three times higher margin.</li> </ul>
interest rate forecasts	<ul style="list-style-type: none"> <li>• The number of enterprises predicting a continued fall in interest rates has decreased.</li> <li>• The opinion that bank loan interest rates will not change in the quarter horizon prevails in the sample (over 60% of borrowers).</li> </ul>

### INTEREST RATES ON LOANS DENOMINATED IN THE ZLOTY

The companies reported a fall in **loan interest rates in 2005 Q4. This was in line with expectations.** At the end of 2005, the average interest rate on short-term and long-term loans became equal at the level of 6.6% – cf. Fig. 130 and Fig. 132.



**Fig. 130 Interest on short-term PLN loans, the band of minimum and maximum interest rates as well as the forecast of interest rates within the fluctuation band (+/- standard deviation)**

### INTEREST RATES ON FOREIGN CURRENCY LOANS

Since mid-2003 interest rates on short-term foreign currency loans have remained stable – cf. Fig. 135 and Fig. 136. In 2005 Q4 the average interest rate in this loan category was 3.7%.

In 2005 Q4 interest rates on long-term foreign currency loans showed a steady growth as compared to the previous quarter. Yet, they remained at a very low level (the lowest interest rates on long-term foreign currency loans were recorded in 2005 Q3).

### CHANGES IN LOAN INTEREST RATES – ANALYSIS OF MAIN CATEGORIES

In 2005 Q4, the largest enterprises (with over 2000 employees) obtained long-term loans denominated in the zloty at the lowest price – cf. Fig. 137.

**Relatively the most expensive loans were obtained by small enterprises and companies from the sections *Wholesale and retail trade; repair and Construction* (cf. Tab 3).** In all classes of enterprises, long-term loans became cheaper in comparison to the corresponding period of the previous year.

The situation was similar in the case of interest rates on short-term loans. **Large enterprises (with over 2000 employees) and companies from the section *Electricity, gas and water supply* obtained the cheapest short-term loans.** (cf. Fig. 138), while small companies and companies from the section *Construction* had to pay the most. However, long-term loans in the section *Wholesale and retail trade; repair* were charged with the highest interest rates, while the interest rates on short-term loans were at the average level of the sample.

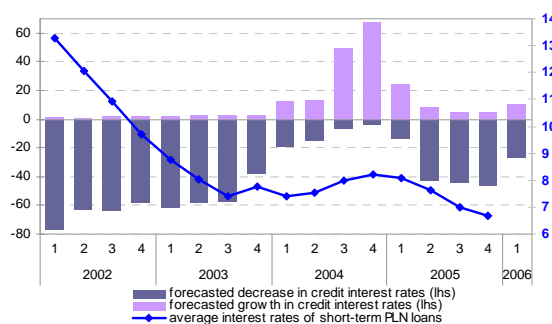
The level of interest rates on short-term loans denominated in the zloty was correlated with the assessment of economic condition of enterprises. 2005 Q4 saw **an increase in interest rates on loans to entities assessing their economic condition as bad.** Enterprises in a very bad economic condition faced a 3.5-percentage-point increase in loan interest rates as compared with the previous quarter. Interest rates on short-term loans to enterprises in a very good economic condition fell and were 50% lower than the interest rates on loans to enterprises in a very bad economic condition.

#### CHANGES IN INTEREST RATES ON LOANS AND THE NBP REFERENCE RATE AND INTERBANK INTEREST RATES

The spread between average interest rates on long- and short-term loans and the NBP average reference rate shows, among others, that the lending policies pursued by commercial banks are adjusted to the changes in the NBP's monetary policy. 2005 Q4 saw no change in the level of the NBP reference rate, while commercial banks reduced slightly the price of money offered to enterprises (cf. Fig. 139). The average interest rate on loans to enterprises stood around 2 percentage points above 1M and 3M WIBOR rates<sup>10</sup>.

#### INTEREST RATE FORECASTS

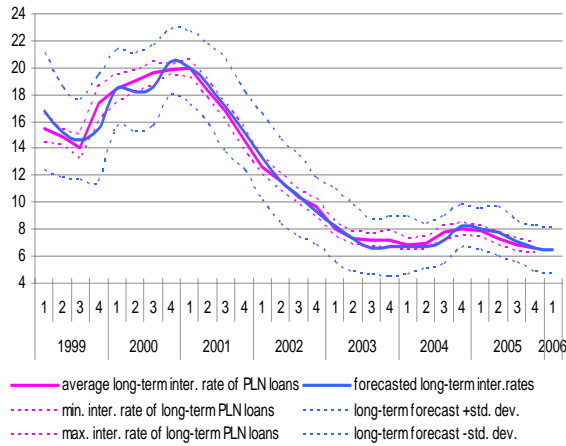
The forecasts of a decrease in the cost of credit prevail over loan price growth forecasts in the sample; but this predominance has shrunk as compared with the previous quarter – cf. Fig. 131.



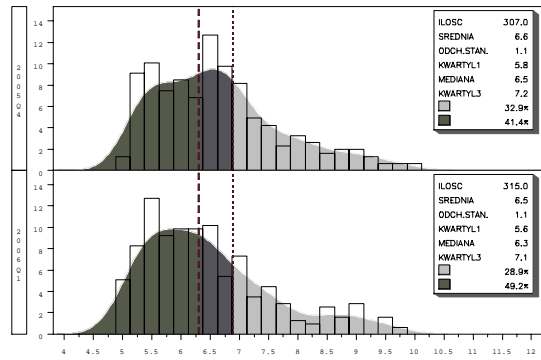
**Fig. 131 Forecasted changes in loan interest rates and average interest rates of short-term PLN loans**

<sup>10</sup> In commercial banks 3M WIBOR is generally the basis for determining interest rates on long-term loans (where maturity period is longer than 5 years).

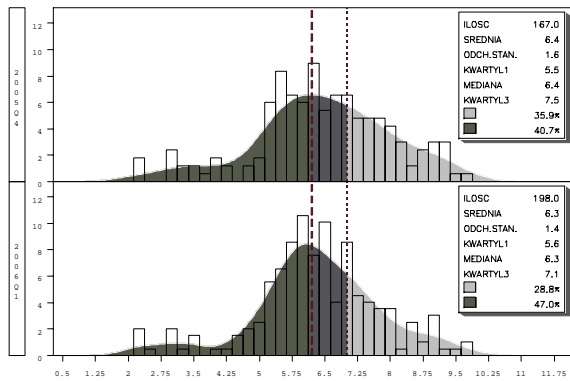




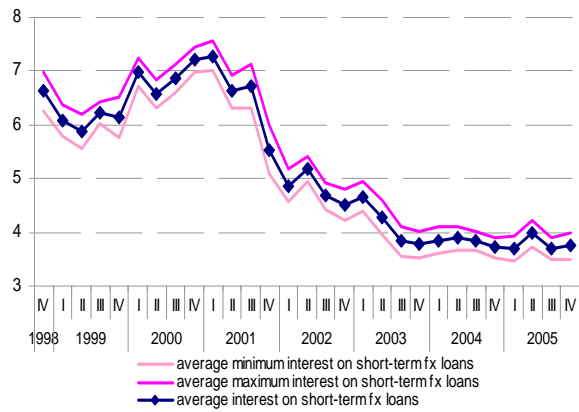
**Fig. 132 Interest on long-term PLN loans, the band of minimum and maximum interest rates as well as the forecast of interest rates within the fluctuation band (+/- standard deviation)**



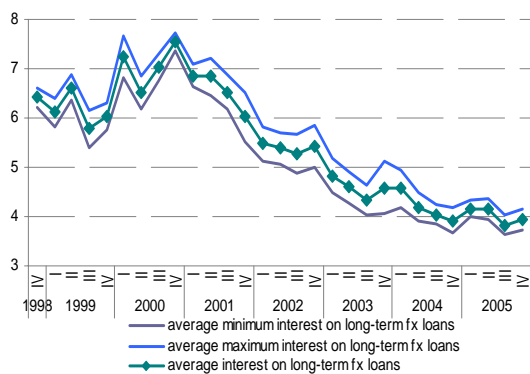
**Fig. 133 Distribution of average interest rates of short-term PLN loans in 2005 Q3 and 2005 Q4. Red lines indicate average minimum and maximum interest rates for Q4.<sup>11</sup>**



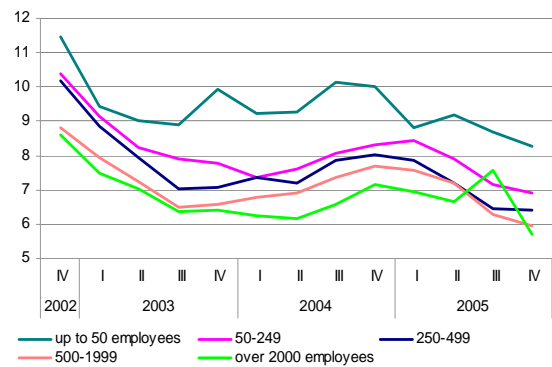
**Fig. 134 Distribution of average interest rates of long-term PLN loans in 2005 Q3 and 2005 Q4. Red lines indicate average minimum and maximum interest rates for Q4.<sup>12</sup>**



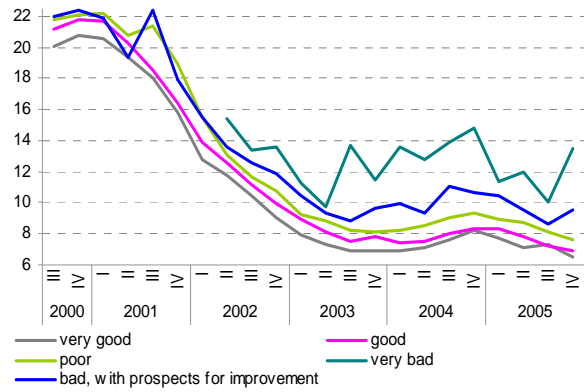
**Fig. 135 Interest on short-term foreign currency loans within the band of minimum and maximum average interest rate of the loan**



**Fig. 136 Interest on long-term foreign currency loans within the band of minimum and maximum average interest rate of the loan**



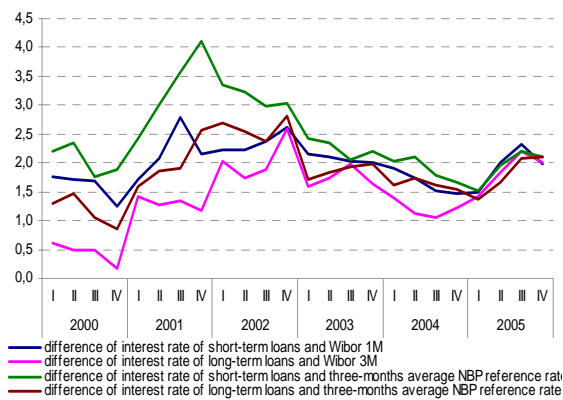
**Fig. 137 Interest rates on short-term PLN loans vs. employment size**



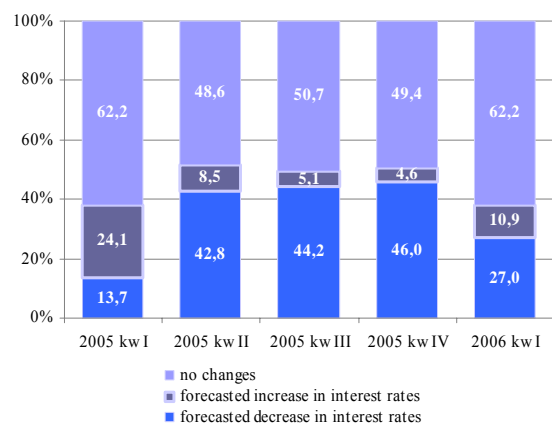
**Fig. 138 Average interest rates of short-term loans vs. assessment of enterprise's economic situation.**

**Tab. 3 Average interest on PLN loans in the main classes of enterprises in 2005 Q4 - change in interest as compared to the corresponding quarter of the previous year**

	interest on long-term loans	y/y change in interest on long-term loans	interest of short-term loans	y/y change in interest on short-term loans
250-499	6,22	84,50	6,42	79,84
50-249	6,96	83,70	6,91	82,87
500-1999	5,93	83,23	5,94	77,19
up to 50 employees	9,76	92,18	8,25	82,45
over 2000	5,13	68,68	5,69	79,71
private	6,71	81,82	6,60	80,67
public	6,16	83,41	6,59	82,42
Construction	7,42	78,21	7,74	87,24
Mining & quarrying	5,71	72,40	6,79	80,61
Trade	7,70	83,50	6,61	74,48
Others	6,70	78,04	7,03	93,26
Manufacturing	6,44	85,31	6,48	80,75
Transport	5,94	69,63	6,93	85,26
Electricity, gas & water supply	5,27	74,10	5,53	76,58
importer	6,60	84,36	6,26	79,41
non-importer	6,63	81,83	7,22	84,95
investor	6,37	84,68	6,42	82,48
non-investor	7,11	82,44	7,21	81,17
exporter	6,55	87,40	6,31	79,45
non-exporter	6,56	75,81	7,05	83,63



**Fig. 139 Differences of average interest rates on long-term and short-term PLN loans, NBP reference rate, 1M WIBOR and 3M WIBOR**



**Fig. 140 Expected changes of interest on loans within the forthcoming quarter**

## I.10. Financial liquidity of enterprises

financial liquidity	<ul style="list-style-type: none"> <li>Financial liquidity of enterprises is improving, hitting its highest level in the survey history.</li> <li>The number of enterprises servicing their loans and non-bank liabilities on a timely basis is increasing.</li> </ul>
changes in liquidity in main classification categories	<ul style="list-style-type: none"> <li>clear positive correlation between size of the enterprise and timely repayment of its liabilities</li> <li>Enterprises from the section <i>Electricity, gas and water supply</i> and large enterprises (with over 2000 employees) displayed the highest level of financial liquidity.</li> <li>Non-investors, non-exporters and non-importers as well as enterprises from the section <i>Construction</i> face a relatively largest number of problems with servicing their loan liabilities on a timely basis.</li> </ul>

### LIQUIDITY ASSESSMENTS

Since 2003 the number of enterprises reporting no problems with maintaining liquidity has been increasing. At the end of 2005 Q4 the ratio of entities reporting a satisfactory level of financial liquidity reached 70% thus hitting the highest level in the survey history – cf. Fig. 141.

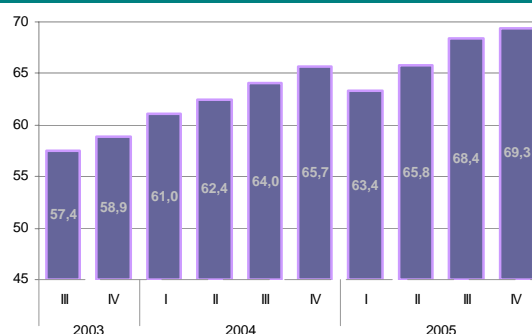


Fig. 141 Percentage share of enterprises reporting no liquidity problems

### LIQUIDITY ASSESSMENT – ANALYSIS OF MAIN CATEGORIES

Problems with maintaining liquidity were least frequently reported by the largest enterprises (with over 2000 employees) – cf. Fig. 144 and entities from the section *Electricity, gas and water supply*. Those problems were reported most frequently by enterprises in the section *Construction*. Non-investors experienced the largest improvement in liquidity. On the other hand, the section *Electricity, gas and water supply* saw the highest growth in the number of enterprises reporting problems in this respect.

There is a negative correlation between the existence of liquidity problems and enterprise size. **The smaller the company is, the greater the likelihood of its facing liquidity problems** (cf. Fig.145). In the last 2.5 years the group of the largest companies (with over 2000 employees) and the smallest companies (with up to 50 employees) recorded the largest improvement in liquidity. The group of the smallest enterprises (with up to 50 employees) continue to be facing the biggest problems with maintaining financial liquidity– cf. Fig. 146.

### LOAN DEBT SERVICING

**The number of enterprises paying off their loan liabilities strictly in accordance with the terms of the loan contract is increasing** – cf. Fig. 147.

2005 Q4 was another consecutive period of improvement in loan debt servicing reported by the surveyed enterprises. But the fall in the number of enterprises experiencing problems with settling their liabilities is not the only positive development: the number of companies expecting to face such problems is also decreasing.

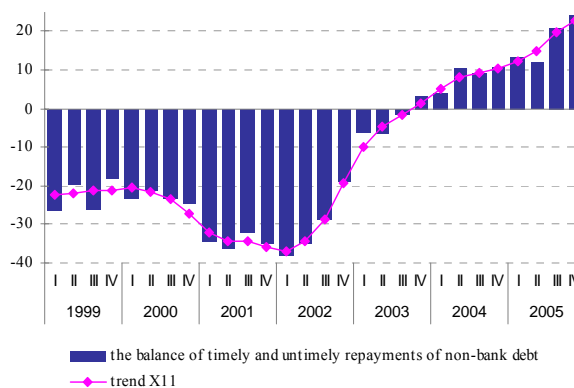
## LOAN DEBT SERVICING – ANALYSIS OF MAIN CATEGORIES

The majority of analysed classes show improvement in the enterprises' capacity to settle their loan liabilities. A slight deterioration was recorded only in the following groups (cf. Fig.149):

- enterprises from the section *Electricity, gas and water supply*,
- the largest and the smallest enterprises,
- the public sector.

## NON-BANK DEBT SERVICING

**The capacity to service non-bank liabilities showed an improvement once again.** The index of the capacity to pay off liabilities increased by 4 percentage points as compared to the previous quarter and by as much as 14 percentage points as compared to the corresponding period of the last year – cf. Fig. 142.



**Fig. 142 The balance of timely and untimely repayment of non-bank liabilities in the sample**

## NON-BANK DEBT SERVICING - ANALYSIS OF MAIN CATEGORIES

Analysis of the capacity to service non-bank liabilities in main categories has revealed that (cf. Fig. 152):

- The timeliness of settlement of non-bank liabilities has been improving in all classes of enterprises from year to year.
- In 2005 Q4 the biggest number of enterprises reporting problems with timely settlement of liabilities was recorded in the section *Construction* and among non-investors and non-importers.
- The fewest problems with servicing liabilities were reported by the largest enterprises, while the majority of problems concerned small and medium-sized enterprises – cf. Fig.153.

## FINANCIAL LIQUIDITY AND DEBT SERVICING

According to the survey results, enterprises attached markedly greater importance to the timely settlement of bank loan debt than non-bank debt – cf. Fig.154.

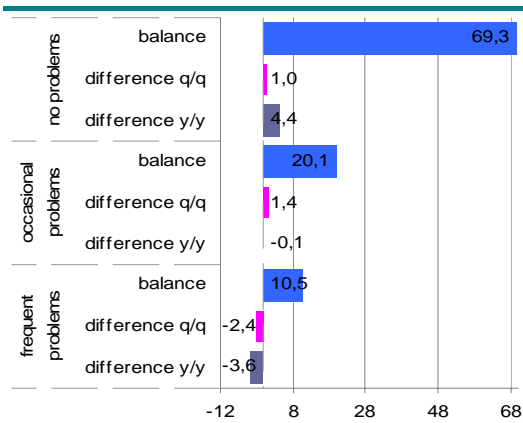


Fig. 143 Problems with liquidity in 2005 Q4 and change of this category as compared to the previous quarter and corresponding quarter of the previous year

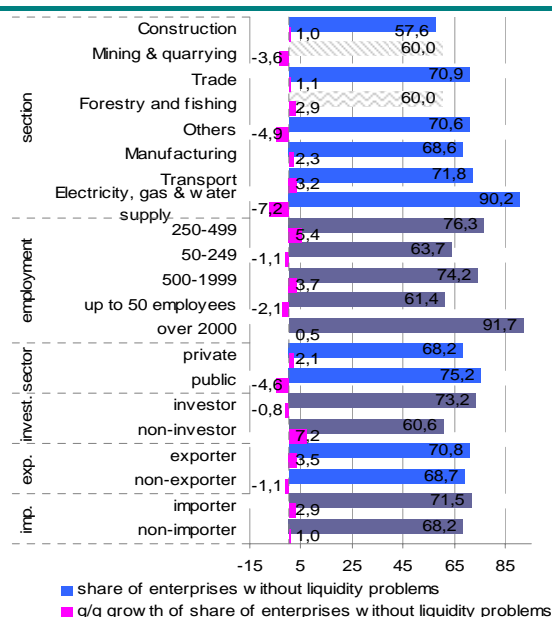


Fig. 144 Problems with liquidity in the enterprises in the selected sections and an increase in the share of enterprises without problems with liquidity as compared to the previous quarter (classes of enterprises underrepresented in the sample marked in grey)

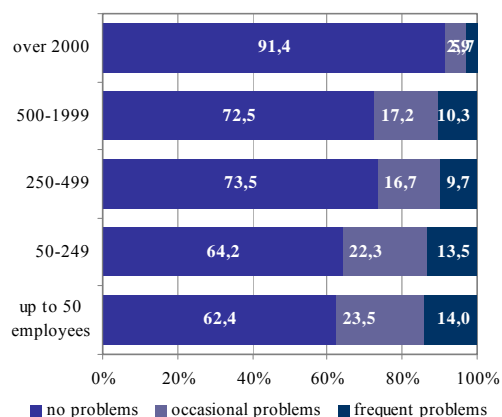


Fig. 145 Frequency of problems with liquidity in the light of size of enterprises in the previous quarter

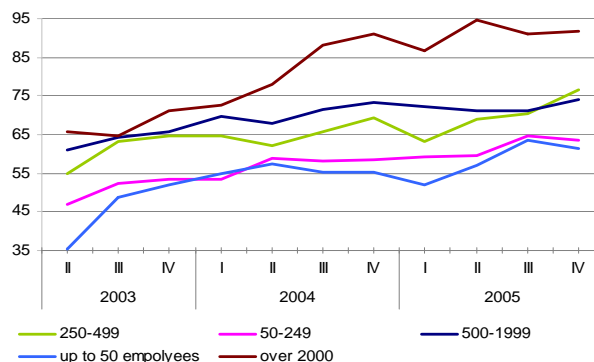


Fig. 146 Percentage share of enterprises without liquidity problems vs. size of employment

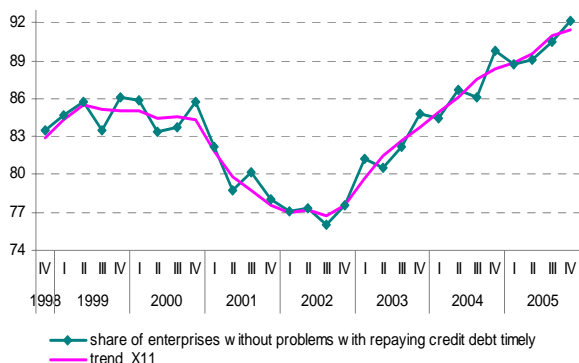


Fig. 147 Share of enterprises repaying loan debt in due time

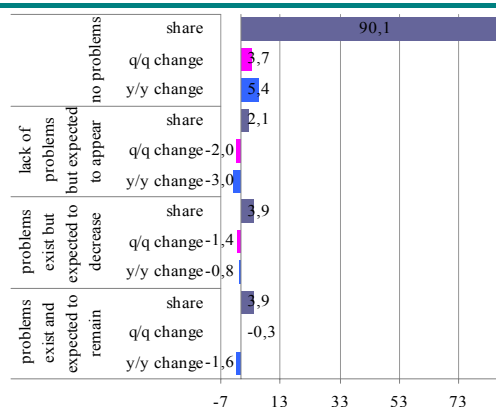
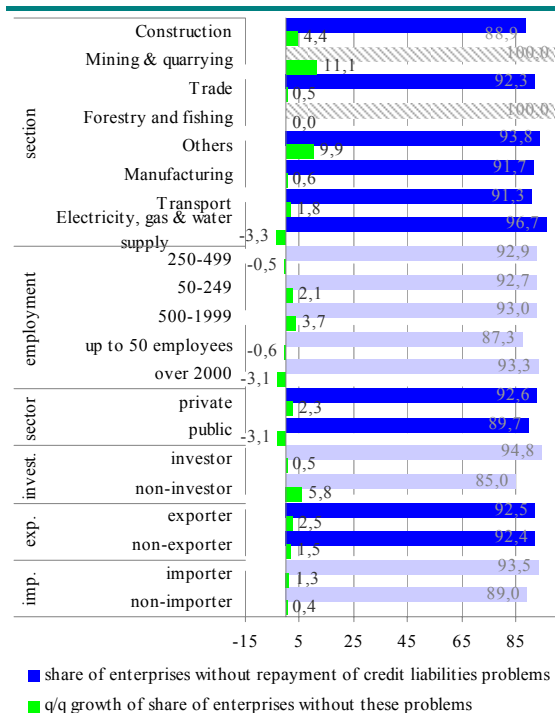
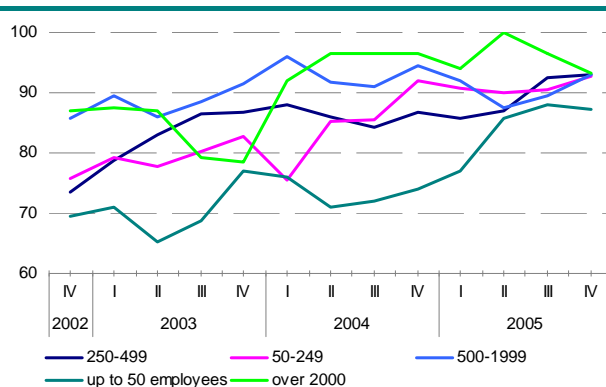


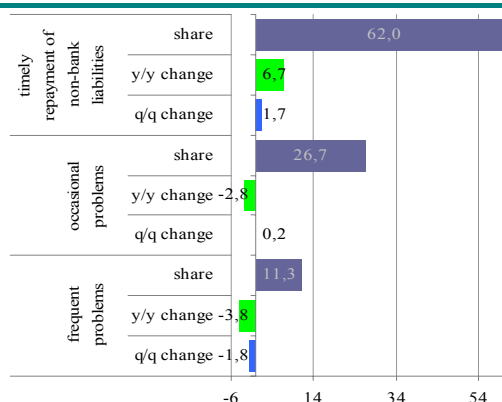
Fig. 148 The degree of timelessness of loan debt repayments and the change as compared to the previous quarter and corresponding quarter of the previous year



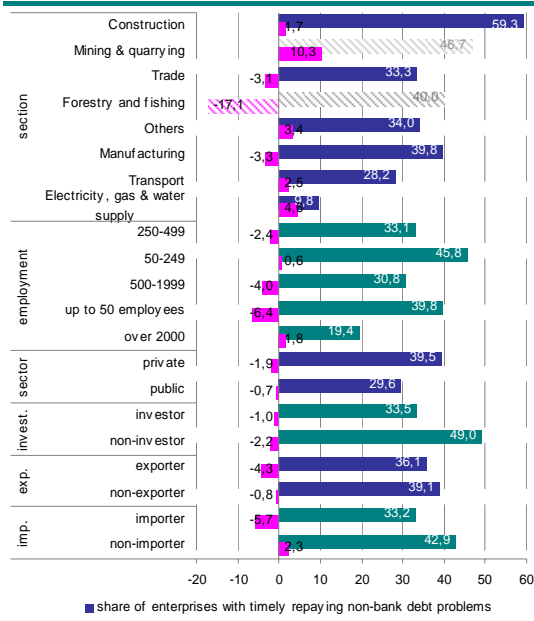
**Fig. 149 Share of enterprises timely repaying credit liabilities in 2005 Q4 in the selected sections and increase in the share as compared to the previous quarter. The classes under-represented in the sample are marked in grey.**



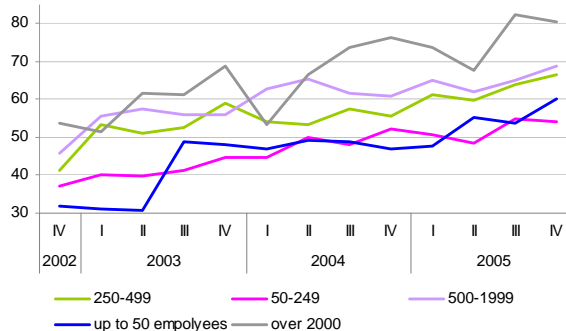
**Fig. 150 Percentage share of enterprises timely repaying loan debt vs. size of enterprises.**



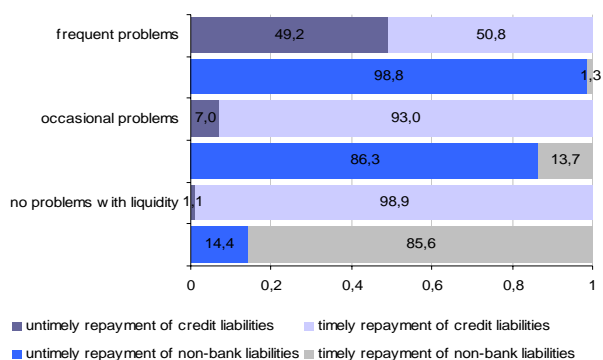
**Fig. 151 Degree of timely non-loan debt repayment, change as compared to the previous quarter and to the corresponding quarter of the previous year**



**Fig. 152 Share of enterprises with problems with repaying non-bank liabilities in 2005 Q4 and change in the category as compared to the previous quarter. The under-represented sections are marked in grey.**



**Fig. 153 Share of enterprises without problems with the repayment of non-bank liabilities vs. size of employment**



**Fig. 154 Problems with liquidity w 2005 Q4 vs. frequency of problems with the timelessness of repayment of loan and non-bank liabilities as well as lack of such problems**

## I.11 Prices, Costs

CPI and PPI forecasts	<ul style="list-style-type: none"> <li>• slight growth in inflation expectations within a quarter with the concurrent decrease in the expected price growth rate within a year</li> </ul>
forecasts of own prices	<ul style="list-style-type: none"> <li>• increased rate of growth in prices (typical of this time of the year)</li> </ul>
forecasts of the prices of commodities and materials used for production	<ul style="list-style-type: none"> <li>• Expectations of an increased growth rate of the prices of products significantly decreased as compared to the corresponding period of the previous year.</li> <li>• stabilisation of inflation expectations, but at the level exceeding 2% in December 2006</li> <li>• Enterprises expect an acceleration in the price growth rate of raw materials and commodities in quarter-on-quarter terms and at the same time are planning higher increases in the prices of finished goods as compared with the previous quarter.</li> </ul>
inflation – as one of growth barriers	<ul style="list-style-type: none"> <li>• Problem of the growing costs of operations (prices of raw materials and commodities, fuels, inflation) persists at the fourth place among the barriers to enterprises' growth.</li> </ul>
response of businesses to the increase in fuel prices	<ul style="list-style-type: none"> <li>• The enterprises' most common response to the growth in the prices of fuels in 2005 was the resignation from a part of margin or limitation of other costs so that the prices of products remained unchanged.</li> <li>• Currently the enterprises' response to the growth in the prices of fuels would be much stronger – twice as many enterprises would decide to pass, either fully or partially, the increase in fuel prices onto the customers.</li> </ul>

### CPI FORECASTS

After a significant growth in inflation expectations in 2004 and their decrease in the first three quarters of 2005, they have stabilised in the second half of the year. In 2006 Q1, the average of the quarterly estimated increase in the prices of consumer goods and services was 1.4%, whereas the median was 1% (cf. Fig. 157).

Forecasts of annual increase in the prices of consumer goods and services (within the upcoming 12 months) suggest a **decrease in inflation expectations** (cf. Fig. 155), down to the level of 2.6% and 2.3% (for the average and median, respectively).

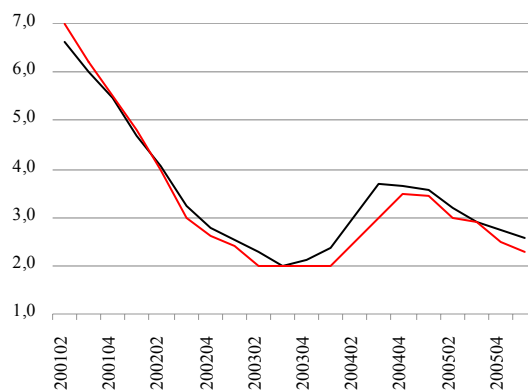


Fig. 155 Average expected growth in the prices of consumer goods and services in the upcoming 12 months (black line) and median of these expectations (red line).

### PPI FORECASTS

A slight increase in inflation expectations has been recorded as compared to the previous quarter. **However, in a one year's horizon a clear decrease can be seen in the growth rate of production prices in industry.** In 2006 Q1, the average of the expectations of the quarterly increase in producer prices in industry stands at the level of 1.2%, whereas the median amounts to 1%. The average of forecast evaluations within a year is 2.5%, whereas the median is 2% (cf. Fig. 161).



### FORECASTED PRICES OF OWN PRODUCTS

Over the last four quarters the forecast growth of prices charged for own products has been fairly stable and also lower than in 2004 (cf. Fig. 156).

In 2006 Q1, **the increase in the prices of products offered by the surveyed enterprises will be slightly higher than in the previous quarter and will average 1%**. The increase in the growth of prices is seasonal. It is related, among others, to the expected increases in the prices of raw materials and commodities (typical of this time of the year).

Price rises are planned by 43.5% of respondents, i.e. 3.3% more than in the previous quarter (cf. Fig. 164)<sup>13</sup>.

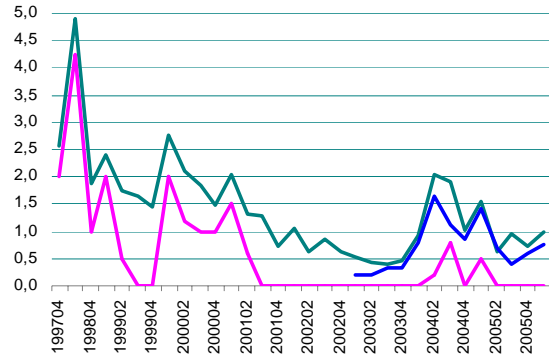


Fig. 156 Average expectations of the quarterly increase in the prices of the goods and services sold by the enterprise (green line), the average weighted by the size of enterprise (blue line) and median of these expectations (pink line)

### FORECASTED PRICES – ANALYSIS OF MAIN CATEGORIES

Analysis of forecast changes in the prices of own goods and services in different categories reveals that:

- the enterprises from sections *Mining & quarrying* and *Electricity, gas and water supply* plan to increase their prices the most frequently
- the transport companies and enterprises from the section *Manufacturing* plan to raise their prices the least frequently
- the average of markups of goods in the section *Trade & repair* in the entire studied period was higher than for the remaining part of analysed population (cf. Fig. 165).
- the percentage of enterprises planning to increase their prices is the highest in the largest companies (where the number of employees exceeds 2000 persons), and the lowest in the smallest enterprises (employing less than 50 people). However, the price increase average is the opposite: in the largest enterprises it is the lowest and amounts to 0.5%, whereas it stands at 1.2% in small companies. Finally, in 2006 Q1, the average of forecast prices weighted by the level of employment is 0.2% lower than the average for the entire sample examined.
- non-exporters will increase prices markedly more frequently than exporters (non-exporters also plan higher increases than exporters at 1.5% against 0.8%),
- and non-importers than importers (increase in prices will amount to 1% and 0.8%, respectively).

### SELECTED FACTORS AFFECTING THE CHANGE IN PRICES

Among the examined factors impacting the pricing policy were: increase in wages, unplanned increase in stocks and increase in the prices of commodities and raw materials used for production.

The prices of goods and services are most strongly impacted by the changes in the prices of commodities and raw materials used for production. The overwhelming majority of enterprises which do not expect an increase in the prices of commodities do not plan to increase their prices, either (Tab. 6). In the case of expected increase in the prices of commodities, nearly 60% of enterprises will fully or partially pass the weight of this increase to the prices of their products, while every third enterprise will not decide to increase the prices of its products in this situation.

The unplanned increase in stock has a smaller impact on pricing. Every fourth company which deals with the problem of excessive stock tries to solve it, among others, by reducing prices. It is also visible that the tendency to increase prices (measured by the index of planned markups) in this group is much smaller than in the remaining classes – cf. Tab. 5.

The data suggest that currently the increase in wages does not constitute any significant reason product price increases (cf. Tab. 4). The index of planned price increases is comparable in the group of companies planning to increase wages and in the companies which do not plan any changes in wages.

### FORECASTED PRICES OF COMMODITIES AND MATERIALS

**A small, typical of this period, increase in the growth of the prices of raw materials and commodities can be expected.** Half of the enterprises expect that the changes in prices will not exceed 1%, while the evaluations average is 1.8%. Thus, the rate of increase in these prices remains lower than in the period from 2004 Q2 to 2005 Q1, but still higher than in 2002-2003 (cf. Fig. 166).

In the survey enterprises were asked to name the main barriers, which can negatively influence the company's economic condition in the upcoming 6 months.

**For the past two quarters the problem of growing cost of operations** (prices of commodities, raw materials, fuels or inflation) **has ranked fourth among the barriers** which can negatively influence the growth of the enterprise (in June 2006, growing costs were listed as the ninth strongest barrier). It is worth reminding that special focus was put by the respondents on the problem of high prices in the mid of 2004, but then significantly weakened in the first half of 2005 to intensify again in September 2006.

### ENTERPRISES' RESPONSE TO THE INCREASE IN FUEL PRICES

In 2005, the prices of fuels increased by 11% in year-on-year terms. The enterprises were asked about their prevailing response to the increase in these prices. In 90% of cases, in spite of higher costs of fuels, the prices of products offered by the surveyed enterprises were not increased. This lack of markups was related, first of all, to the relatively low share of the costs of fuels in the companies' operational costs (over half of the surveyed enterprises indicated fuel costs as relatively low as compared to other costs).

The prices in other enterprises did not increase, because they decided to reduce their margin (25.8% of the surveyed population) or reduce other costs (9.3%). In turn, 7.5% of respondents decided to partially pass the increase in the prices of fuels onto the customers, and only in 2% of cases the increase in the costs of fuels was fully compensated by price increases.

At the moment, the response of enterprises to a potential increase in fuel prices **would be much stronger**. In case the prices of fuels began to increase again, only 80% of enterprises declared maintaining stable prices, while 3.5% of businesses would pass the increase in fuel prices onto the customers and over 15% would introduce slight increases, thus compensating the growing cost of fuels at least partially – cf. Fig. 167. The group of companies which decided to increase their own prices includes, first of all, transport and construction companies.

In the *Transport* section nearly 60% of businesses would not decide to pass the increase in fuel prices to the prices of their services in 2005, and half of the respondents belonging to this sector would not do it in the near future, either, if the prices of fuels began rising again. 35% of transport companies, in the case of further fuel price increases, would at least partially compensate them with the increase in their own prices and another 15% of the surveyed businesses would fully pass the increase in the prices of fuels to the prices of their services (cf. Fig.168).

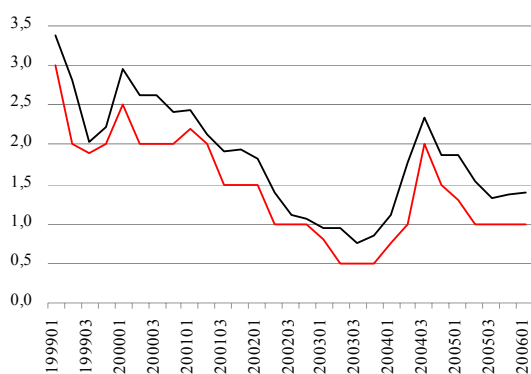


Fig. 157 Average expectations of the quarterly increase in the prices of consumer goods and services (black line) and median of these expectations (red line).

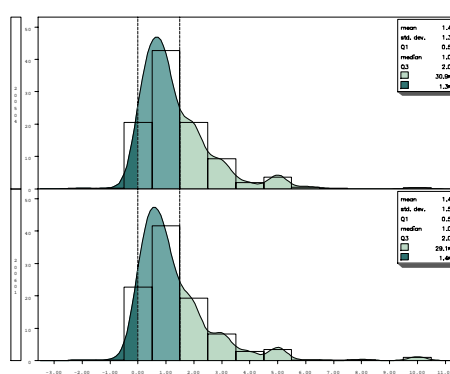


Fig. 158 Distribution of the quarterly growth rate of the consumer prices of goods and services forecasted by the businesses (percentage values for 2006 Q1 - lower figure, and for 2005 Q4 – upper figure).

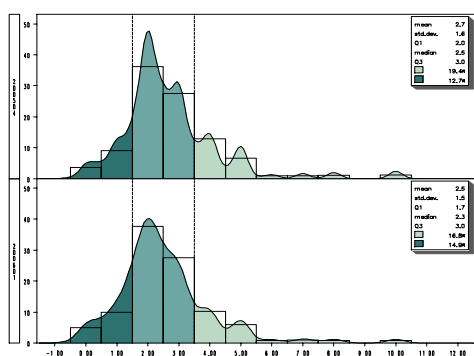


Fig. 159 Distribution of the growth rate of the consumer prices of goods and services in the upcoming 12 months forecasted by businesses (percentage values for 2006 Q1 – lower figure and for 2005 Q4 – upper figure)

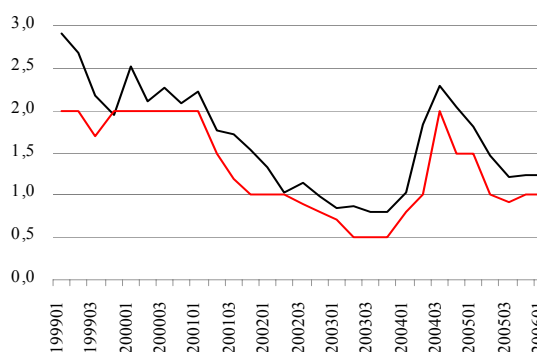
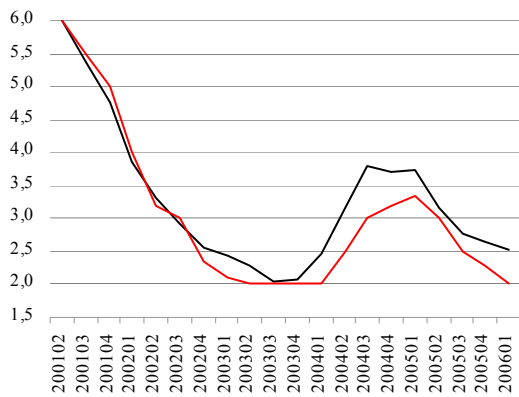
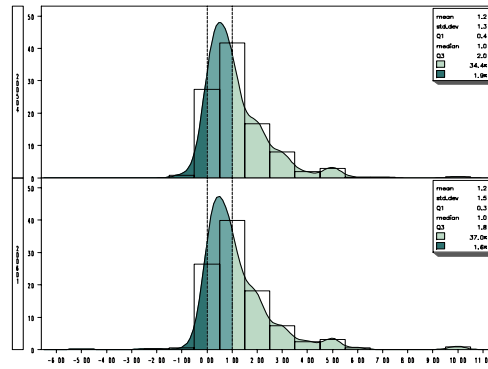


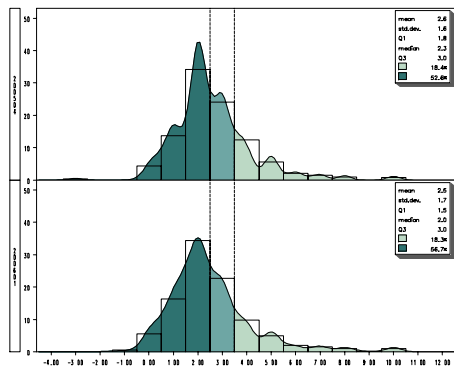
Fig. 160 Average expectations of the quarterly increase in the producer prices in industry (black line) and median of these expectations (red line)



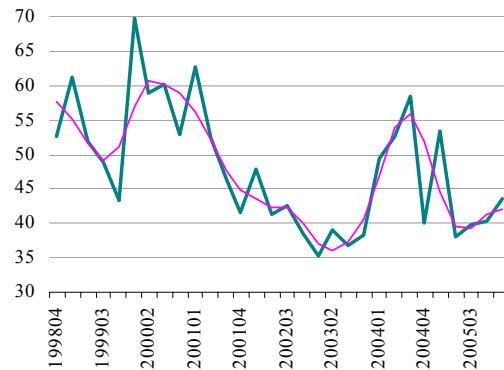
**Fig. 161** Average expectations of the increase in the producer prices in industry in the upcoming 12 months (black line) and median of these expectations (red line)



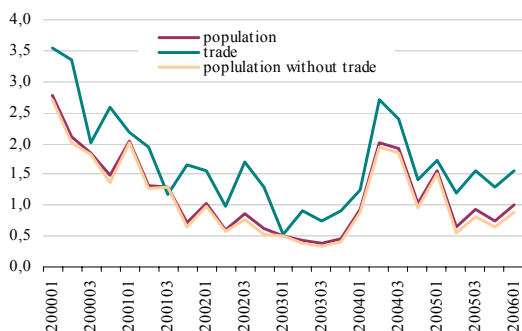
**Fig. 162** Distribution of the quarterly growth rate of the producer prices in industry (percentage values for 2006 Q1 – lower figure and for 2005 Q4 – upper figure)



**Fig. 163** Distribution of the growth rate of producer prices in industry in the upcoming 12 months (percentage values for 2006 Q1 – lower figure and for 2005 Q4 – upper figure)



**Fig. 164** Percentage of enterprises planning to increase prices of the offered goods and services – green line and trend (obtained by x11method) – pink line



**Fig. 165** Average expectations of the quarterly increase in the prices of goods and services sold by enterprises in the entire population in the section *Trade & repair* and in the population after excluding the section *Trade & repair*.

**Tab. 4** Projections of changes in the prices of sold goods and services in 2006 Q1 broken down according to the wages in enterprises (data in percentage)

projected wage increases	changes of prices		
	decrease	no change	increase
no	8.9	48.3	42.8
yes	12.1	42.4	45.5

**Tab. 5** Forecasts of changes in the prices of sold goods and services in 2006 Q1 broken down according to the stock of ready products in enterprises (data in percentage)

stock of ready products	changes of prices		
	decrease	no change	increase
too high	25.0	36.7	38.3
sufficient	8.9	48.1	43.0
too low	12.5	34.4	53.1



Fig. 166 Average expectations of the quarterly increase in the prices of raw materials and materials used by enterprises (green line) and median of these expectations (pink line)

Tab. 6 Projections of changes in the prices of raw materials and materials in 2006 Q1 broken down according to projections of changes in the prices of sold goods and services

changes in prices of materials	changes in prices of goods		
	decrease	no change	increase
decrease	50.0	34.2	15.8
no change	7.7	79.8	12.6
increase	7.1	34.2	58.7

Tab. 7 Forecasts of changes in the prices of sold goods and services in 2006 Q1 in different sections (data in percentage)

section	changes of prices		
	decrease	no change	increase
<b>construction</b>			
construction	5.4	50.0	44.6
<b>mining &amp; quarrying</b>			
mining & quarrying	0.0	23.1	76.9
<b>wholesale and retail trade</b>			
wholesale and retail trade	8.7	38.5	52.9
<b>post and telecommunication</b>			
post and telecommunication	0.0	100.0	0.0
<b>manufacturing</b>			
manufacturing	11.6	50.1	38.3
<b>transport</b>			
transport	18.9	37.8	43.2
<b>electricity, gas and water supply</b>			
electricity, gas and water supply	0.0	50.0	50.0
<b>others</b>			
others	4.5	45.5	50.0
<b>employment</b>			
up to 50 employees	10.8	48.0	41.2
from 50 to 249	7.9	47.5	44.6
from 250 to 499	11.5	46.7	41.8
over 2000	12.2	43.9	43.9
up to 50 employees	5.9	47.1	47.1
<b>import</b>			
importers	12.1	48.7	39.2
non-importers	5.7	45.8	48.6
<b>export</b>			
exporters	11.4	49.4	39.2
non-exporters	6.5	41.6	51.9

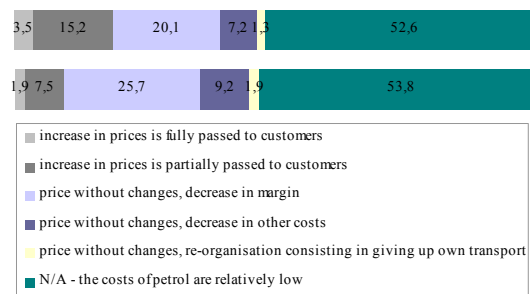


Fig. 167 Enterprise's response to the increase in the prices of petrol in 2005 (lower bar) and expected response to the increase in the prices of petrol in the upcoming period (upper bar)

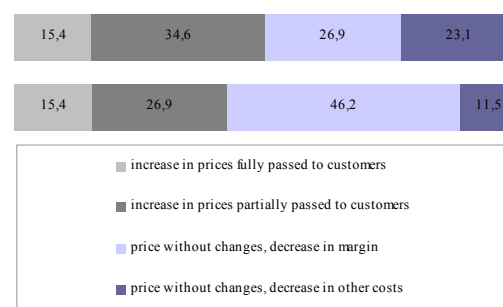


Fig. 168 Enterprise's response to the increase in the prices of petrol in 2005 (lower bar) and expected response to the increase in the prices of petrol in the upcoming period (upper bar) in the section Transport.

## FIXED COSTS

current developments	<ul style="list-style-type: none"> <li>seasonally adjusted data – stabilisation of the relation of fixed costs to total costs</li> <li>raw data – slight decrease in the share of fixed costs in total costs</li> </ul>
changes in the main classification categories – decline areas	<ul style="list-style-type: none"> <li>manufacturing</li> <li>companies not using bank loans</li> </ul>

Over the past six quarters, the share of fixed costs in total costs was fairly stable.

**In December 2005, the share of fixed costs in total costs decreased as compared to September** by 0.2 percentage point, reaching 36.4% of total costs (0.2 percentage point more than in December 2004).

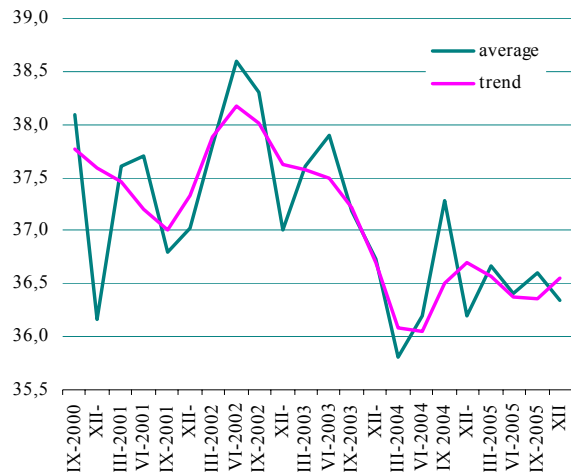
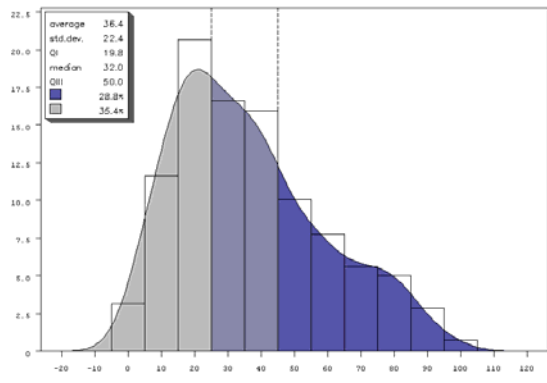


Fig. 169 Average share of permanent costs in total costs and the trend of this ratio

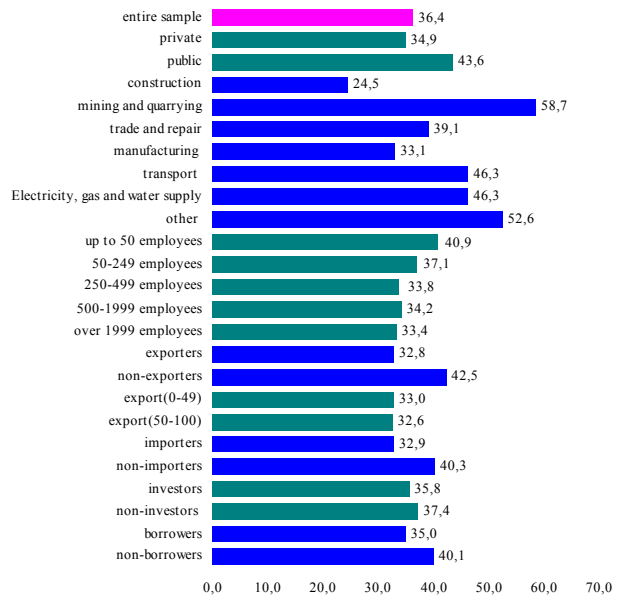
### CHANGES IN FIXED COSTS – ANALYSIS OF MAIN CATEGORIES

Analysis of changes in the relation of fixed costs to total costs in a few main classifications suggests:

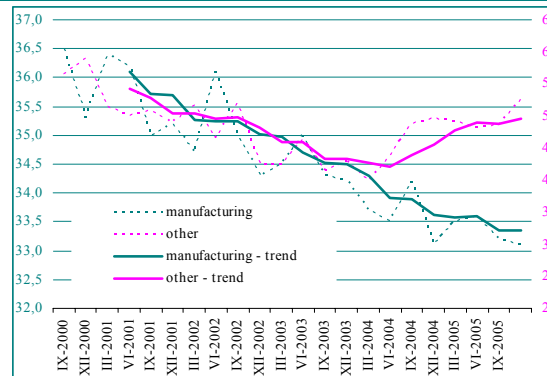
- stabilisation in the level of fixed costs in the group of exporters against a gradual increase of these costs in the group of non-exporters,
- reduction in fixed costs in the section *Manufacturing*, increase of these costs in the group of service companies from the section *Other*, stabilisation in other NACE (PKD) sections,
- clear growth trend of the fixed costs in the group of borrowers against the decreasing share of these costs in the group of companies which do not use bank loans.



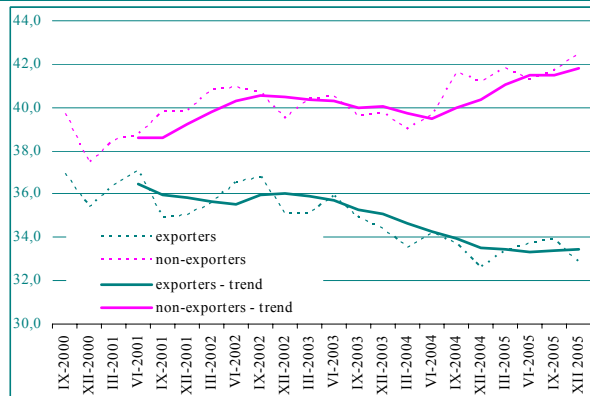
**Fig. 170** Distribution of the share of permanent costs in total costs in December 2005



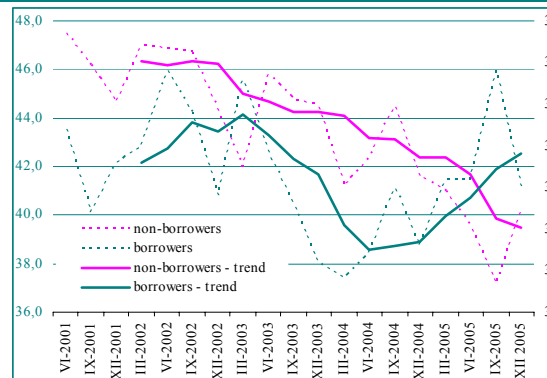
**Fig. 171** Average share of permanent costs in total costs in the main classifications – data for December 2005



**Fig. 172** Average share of permanent costs in total costs in the sections *Manufacturing* and *Construction*.



**Fig. 173** Average share of permanent costs in total costs in the class of exporters and non-exporters



**Fig. 174** Average share of permanent costs in total costs in the group of borrowers and businesses without a loan

## I.12 Exchange rate

- The euro and dollar exchange rates are above the break-even point for exports.
- The percentage of enterprises declaring that the exchange rate declined below their break-even point decreased (under the minimum value in terms of exports profitability).
- The real exchange rate is at the break-even point at which imported products can squeeze out domestic production.
- The current quarter is another period when the problem of exchange rate ranks first among the barriers which can unfavourably impact the company's economic condition over the next 6 months – it is reported by over 1/5 of respondents.

### THE RATE OF EXPORTS PROFITABILITY AND DOMESTIC PRODUCTION

The **real euro exchange rate**, in spite of the appreciation of the zloty against this currency, is all the time **above the threshold exchange rate of profitable exports as declared by the respondents**. It means that the current level of exchange rate allows export sales (on average) to be profitable. However, the fact that the real exchange rate remains within the area delineated by one standard deviation poses a significant threat to the profitability of exports for a certain group of companies.

In December 2005, the value of the zloty against the dollar weakened as compared to September 2005, through which the real exchange rate (PLN/USD) moved away from the threshold exchange rate of profitable exports and settled in the upper limit of the band set for this rate by one standard deviation. This signals a weakening threat to the profitability of exports of enterprises.

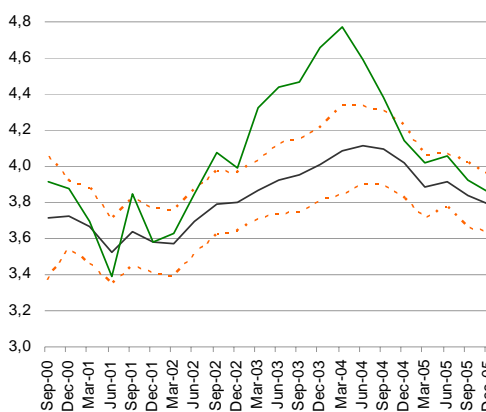


Fig. 175 Euro exchange rate at which exports become unprofitable (black line) along with the range of confidentiality indicated by one standard deviation (dashed red lines). Additionally the real euro exchange rate was indicated (green line)<sup>14</sup>.

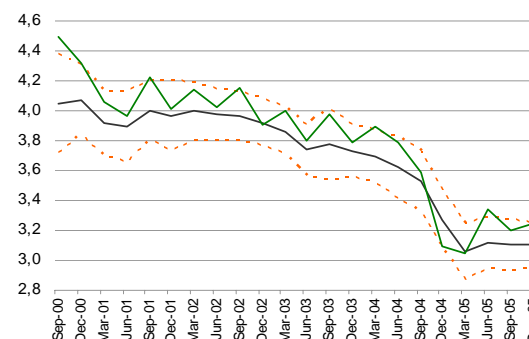


Fig. 176 Dollar exchange rate at which exports become unprofitable (black line) along with the range of confidentiality indicated by one standard deviation (dashed red line). Additionally the real dollar exchange rate was indicated (green line)<sup>15</sup>.



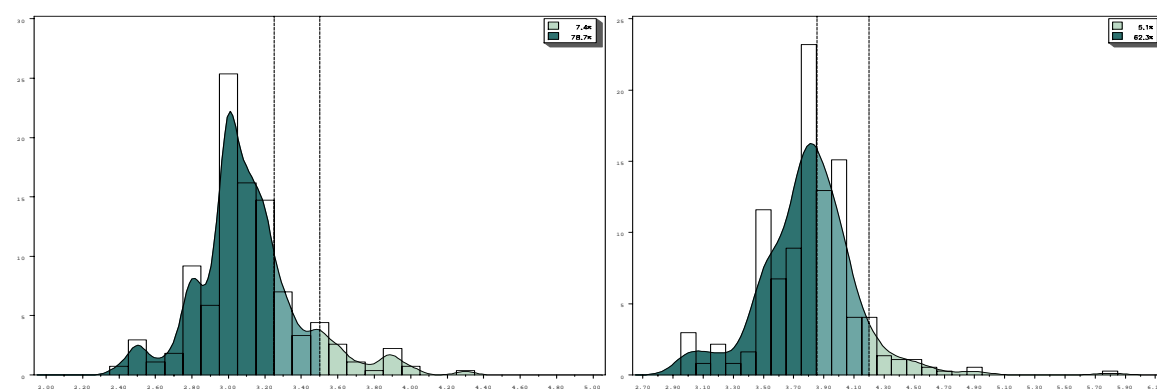
In spite of the invariably strong position of the zloty against the euro and dollar, the surveyed enterprises reported a decrease in the share of unprofitable exports in revenue from foreign sales. **There was also a decrease in the percentage of exporters for whom the threshold exchange rate of profitable exports exceeded the real exchange rate of these currencies**<sup>16</sup>. In December 2005, this percentage accounted for 37.7% in the case of euro exchange rate (as compared to 38.3% in the previous quarter), whereas it was 21.3% for the dollar (against 34% in the previous survey) – cf. Fig. 181.

The analysis (cf. Fig. 178) shows that the real exchange rate (PLN/USD) is maintained at the threshold level at which imported products can supersede domestic production in view of their more attractive price, and the real euro exchange rate has fallen below this level (cf. Fig. 179). Thus, imported products can constitute competition for some domestic manufacturers.

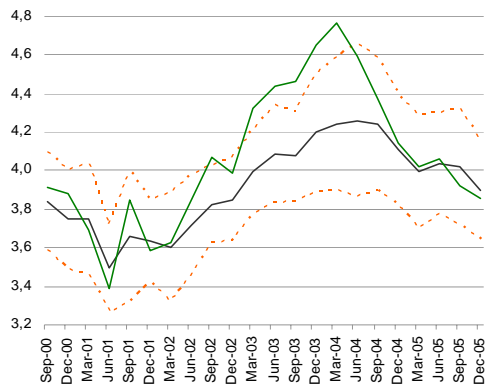
### FLUCTUATIONS OF THE EXCHANGE RATE AS A BARRIER TO DEVELOPMENT

In the survey enterprises were requested to indicate the main barriers which can unfavourably impact the company's economic condition over the next 6 months. **In December 2005, once again (for the sixth time in a row), the exchange rate was the most important (most frequently mentioned) problem reported** by the respondents – such declarations were submitted by 21.4% of the surveyed enterprises.

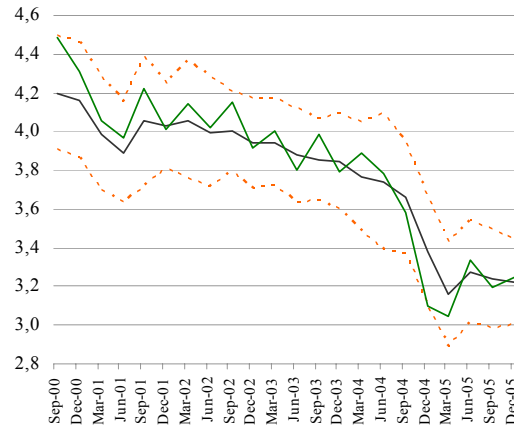
In December 2005 the exchange rate problem was reported, first of all, by both exporters and importers (nearly 33% of the group) and companies which are only exporters (23%). It is evident that in the classes of exporters high percentage of respondents declare that the situation on the currency market poses a threat to their development, while among the companies offering their products only in the domestic market and importers this percentage is very low (cf. Tab 8).



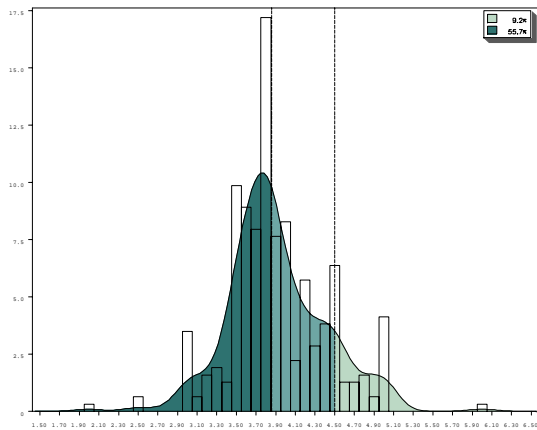
**Fig. 177 Specification, in the form of distributions, of the responses of surveyed enterprises related to the exchange rate level, at which exports become unprofitable. The left figure informs on the dollar exchange rate and the right one refers to the euro exchange rate. The dashed line in the figure (the first one in the left) is indicated at the level of average monthly exchange rates (of dollar and euro, respectively) as at the end of December 2005.**



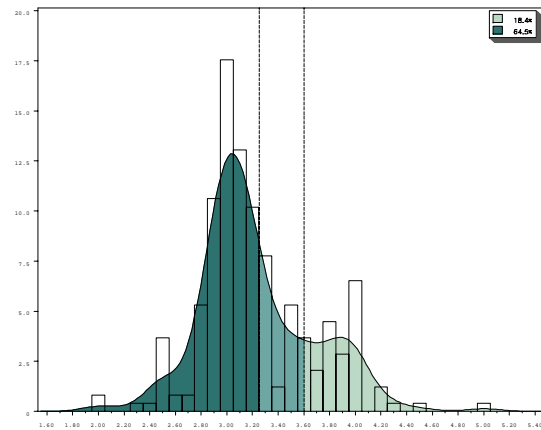
**Fig. 178** The euro exchange rate is unprofitable because of the higher competitiveness of goods (black line) along with the range of confidentiality indicated by one standard deviation (dashed red line). Additionally the real dollar exchange rate was indicated (green line).



**Fig. 179** The dollar exchange rate is unprofitable because of higher competitiveness of imported goods (black line) along with the range of confidentiality (dashed red line). Additionally the real dollar exchange rate was indicated (green line).



**Fig. 180** The distribution of the exchange rate at which, according to the businesses, there can appear problems with the disposal of own goods, caused by higher attractiveness (lower prices) of imported goods. The euro exchange rate. The dashed line in the figure (the first one on the left) is indicated at the level of average monthly euro exchange rates as at the end of December 2005.



**Fig. 182** The distribution of the exchange rate at which the problems can appear with the disposal of own goods caused by higher attractiveness (lower prices) of imported goods. The dollar exchange rate. The dashed line in the figure (the first one on the left) is indicated at the level of average monthly dollar exchange rates as at the end of December 2005.



**Fig. 181** The share of businesses for which the border exchange rate of profitable exports increased above the real dollar exchange rate (green line) and euro exchange rate (pink line)

**Tab. 8** The foreign exchange rate as a development barrier in the classes of enterprises classified as exporters, importers or operating only in the domestic market (percentages)

Enterprises	Moment of filling in the survey form	Is the exchange rate a barrier to development?	
		no	yes
exporters and importers	March 2005	56.8	43.2
	June 2005	70.8	29.2
	September 2005	68.2	31.8
	December 2005	67.4	32.6
only exporters	March 2005	72.5	27.5
	June 2005	76.7	23.3
	September 2005	71.6	28.4
	December 2005	76.8	23.2
only importers	March 2005	86.4	13.6
	June 2005	88.3	11.7
	September 2005	92.6	7.4
	December 2005	98.1	1.9
domestic market	March 2005	92.5	7.5
	June 2005	93.1	6.9

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	September 2005	96.8	3.2
	December 2005	95.8	4.2

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### I.13. Exports, imports

export activity – current developments	<ul style="list-style-type: none"><li>• The percentage of exporting companies increased slightly – reached the record level in the survey history</li><li>• Nevertheless, the share of exports in total revenue decreased and the trend of this phenomenon suggests the stabilisation of the share of exports in the total revenue.</li></ul>
export forecasts	<ul style="list-style-type: none"><li>• The trend of this phenomenon suggests the stabilisation of exports growth rate.</li><li>• The forecasted number of concluded exports agreements stabilised, as well.</li><li>• Raw data – in Q1 a decrease, typical of his period, in exports as compared to the previous period can be expected.</li></ul>
profitability of exports	<ul style="list-style-type: none"><li>• There was a decrease in the share of unprofitable exports in the revenue from exports (down to 6.7%) and also in the percentage of respondents reporting this fact.</li></ul>
imports	<ul style="list-style-type: none"><li>• The share of imports in costs increased to a record high.</li><li>• The percentage of businesses using the supply imports increased.</li></ul>

#### EXPORT ACTIVITY

**2005 Q4 saw slight increase in the export activity of the surveyed enterprises:** as compared to the previous quarter, the percentage of exporting companies increased slightly (up to 64.2% – a record level in the survey history). However, the average share of exports in the revenue of surveyed enterprises (exporters) slightly decreased – down to 39.7% (cf. Fig. 187). The line of this trend suggests that since 2003 **this share has fluctuated around a constant value of 40%.**

The study also showed that more enterprises (25.3%) decreased their share of exports in revenue than increased this relation (23%). Concurrently, the percentage of businesses in which revenue from exports exceed 80% of the total revenue slightly increased (cf. Fig. 186).

#### AREAS OF INCREASED EXPORT ACTIVITY

Exporters constitute an overwhelming majority of enterprises in the *Manufacturing* section. In addition, more exporters can be found among private enterprises, investing or using a bank loan. There is a positive correlation between the percentage of exporters and the size of the enterprise (cf. Fig. 188).

#### PROFITABILITY OF EXPORTS

After a significant increase in the share of unprofitable exports in total exports, which was observed in 2005 Q1, certain improvement was reported in the following months.

**In 2005 Q4, a slight decrease in the share of unprofitable exports<sup>17</sup> in the revenue from exports was reported** as compared to the previous quarter – cf. Fig. 183. **The average value of this share accounted for 6.7%** – i.e. 0.5 percentage point less than in the previous quarter and 1 percentage point less in comparison to the corresponding period of the previous year.

The decrease in the share of unprofitable exports in revenue was observed along with a decrease in the percentage of businesses reporting non-profitability of sales – from 22.8% to 21.8% (cf. Fig. 189).

The data show that the share of unprofitable exports decreased in the group of specialised exporters (over an 80% share of exports in the revenue) and in the group of companies whose share of exports in revenue ranges from 20% to 40%.

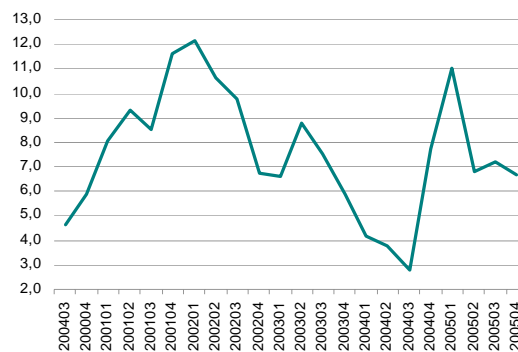


Fig. 183 The share of unprofitable exports in the revenue from enterprises' export sales (the average of distribution; data in %)

Intensification of non-profitable export (the largest among the examined groups) was recorded by the companies which generate up to 20% of their revenue from exports (cf. Fig. 190).

### PROFITABILITY OF EXPORTS – ANALYSIS OF MAIN CATEGORIES

The analysis of unprofitable exports in the total revenue from export sales (cf. Fig. 191) reveals, among others, that:

- the enterprises from sections *Electricity, gas and water supply* and *Transport* have fully profitable exports.
- **in the Mining & quarrying section, in the public sector and in enterprises employing over 1999 employees the share of unprofitable export significantly exceeds the average share for the whole sample of exporters,**
- the share of unprofitable exports in large enterprises is twice as high as in small ones, that may indicate that small companies more flexibly adjust to the changes in the economic situation or take more prudent decisions on their sales abroad (this can be confirmed by the fact that the average share of revenue from exports in total revenue is lower in smaller companies).

### EXPORT FORECASTS

According to the opinion of the surveyed enterprises in **Q1 export may increase slower than in 2005 Q4**. The export forecasts index after a seasonal adjustment assumed a positive value although significantly lower than in 2005 Q4, returning to the level recorded in 2005 Q2 and Q3 (cf. Fig. 184). The trend of the forecasted export remains stable.

The drop in export forecasts' optimism may be connected with the exchange rate barrier stressed by enterprises.

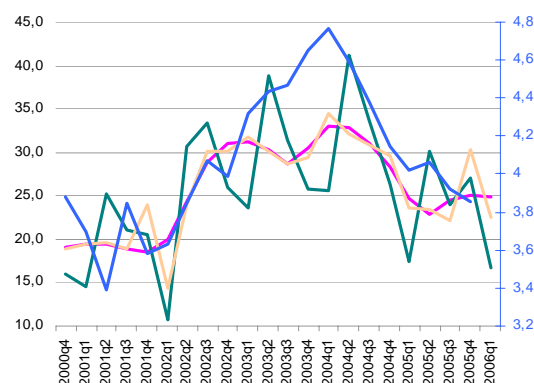


Fig. 184 Balance of export forecast (green line), seasonally adjusted ratio (yellow line) and trend (obtained by x11 method – pink line). The real euro exchange rate was also indicated in the figure (blue line)

Forecasts for 2006 Q1 relating to the new exports agreements remained fairly stable in the last four quarters, with the possibility of slight adjustment downwards as compared to the previous quarter. The percentage of enterprises expecting the number of new export agreements to decrease went up, though only slightly, while the percentage of companies which plan to sign such agreements decreased.

The optimism of export forecasts (as compared to the previous quarter) worsened in all the examined categories (except for the section *Other*) – cf. Fig. 193.

## IMPORT

Since 2001 the share of imports in costs has been gradually increasing.

In December 2005, the supply imports extended to 62.3% of respondents, i.e. 3.4 percentage points more than in the previous quarter. **The average share of supply imports in the costs of enterprises' operations also increased and reached the level of 20.4% - the highest level in the entire survey history (cf. Fig. 185).**

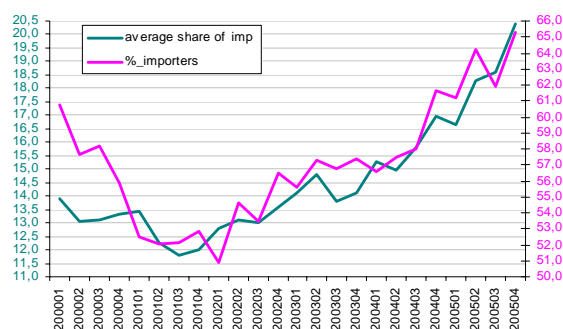


Fig. 185 The average share of supply imports in costs (left axis - green line) and percentage of respondents using imports (right axis - pink line)

## CHANGES IN THE IMPORT TO OUTPUT RATIO — ANALYSIS OF MAIN CATEGORIES

The analysis of changes in the share of supply imports in costs (calculated as a difference between the size of their share in December 2005 and in September 2005) suggests that an increase of the index calculated in this way was reported in all the groups, apart from enterprises with between 250 and 499 employees (cf. Fig. 194).

The analysis of time sequences reveals that in recent years a significant growth in imports was reported by:

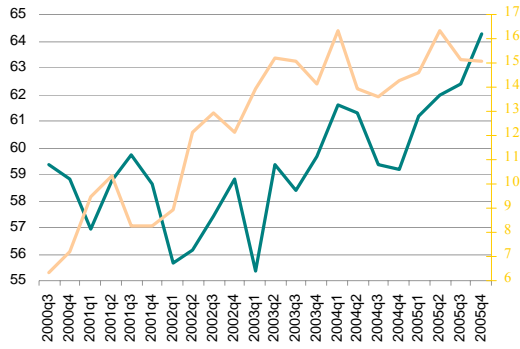
- exporters, especially the specialised ones,
- SME sector, including the smallest enterprises (with less than 50 employees),
- trade, *Manufacturing* and *Construction* (although in the case of the latter the share of imports is still very high),
- the private sector.

In addition, it was observed that in the group of non-exporters the changes in the import to output ratio were minimal, which was also true for the public sector and in the *Transport* section – these groups, however, are characterised by a low share of imports in costs.

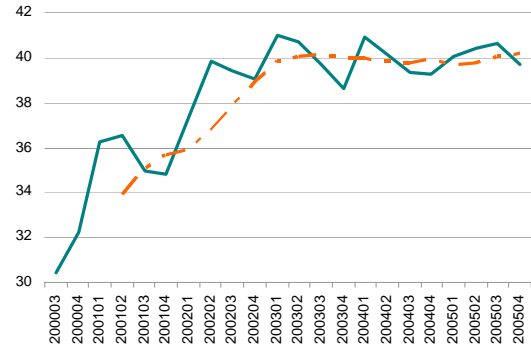
#### FEATURES OF THE POPULATIONS OF EXPORTERS AND IMPORTERS

**The populations of importers and exporters mostly overlap – over 87% of importers are also exporters. Thus, the features of these two groups are very similar.** In general, exporters and importers are characterised by:

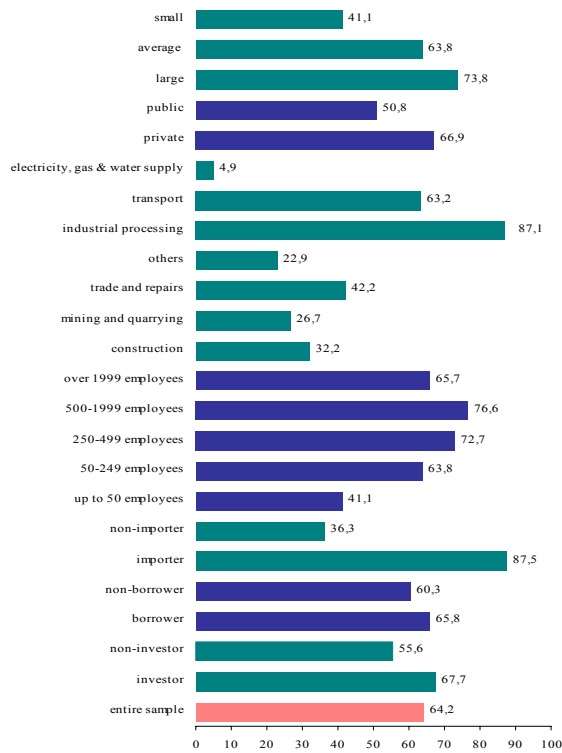
- production capacity utilisation larger than in other enterprises,
- smaller share of fixed costs in total costs,
- larger share of companies planning to increase employment,
- larger investment activity,
- better economic condition and more optimistic forecasts of this situation.
- The feature clearly distinguishing the group of exporters from the remaining part of the sample is a high and continuously increasing share of supply imports in costs (cf. Fig. 198).



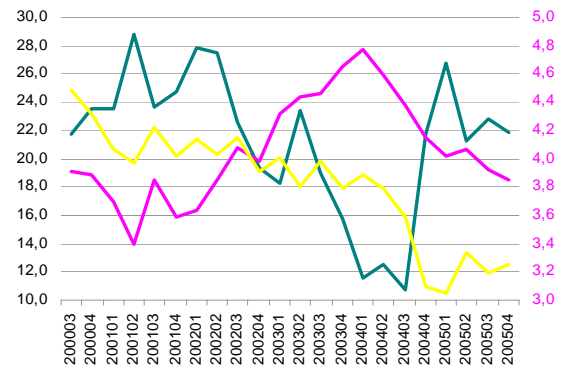
**Fig. 186** Percentage of exporters in the sample (green line), trend obtained by x11 method (pink line) and percentage of businesses whose export volume exceeds 80% of its total revenue (yellow line - right axis)



**Fig. 187** The share of export in total revenue in the group of exporters – green line and trend (obtained by the 4 period moving average) red line (data in %)

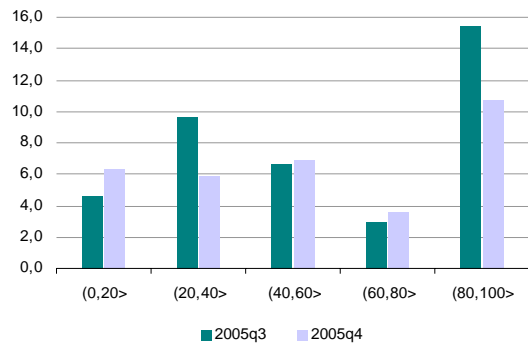


**Fig. 188** The percentage of exporters in 2005 Q4 in main classifications



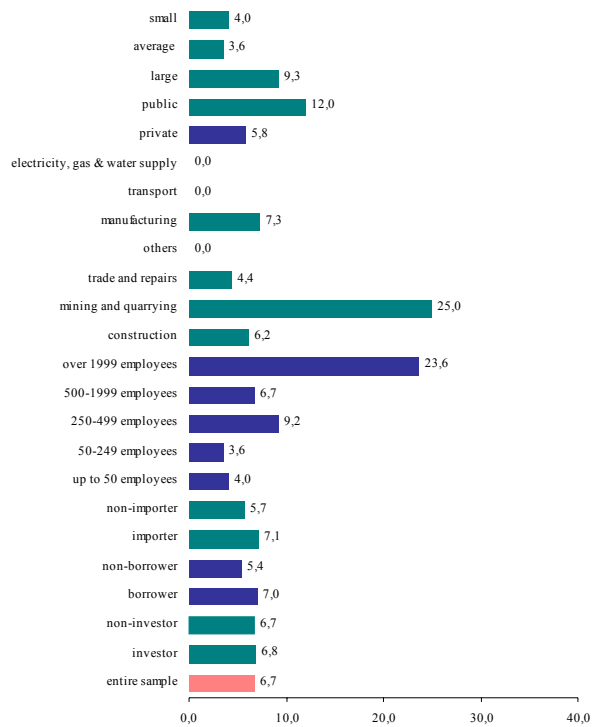
**Fig. 189** Percentage of businesses reporting unprofitable export (green line) and real euro exchange rate - pink line (right axis) and dollar exchange rate (yellow line, right axis).



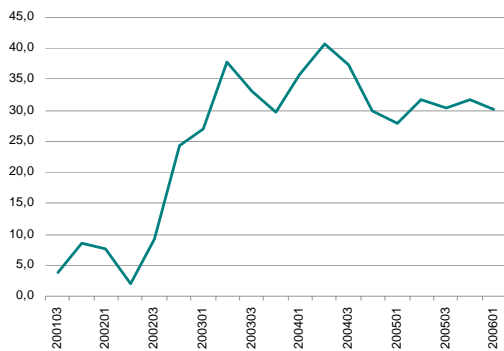


moment of filling in the survey form	the class of exporters' size				
	(0,20>	(20,40>	(40,60>	(60,80>	(80,100>
September 2005	39.1	14.9	16.5	14.4	15.1
December 2005	40.2	14.9	16.5	13.4	15.1

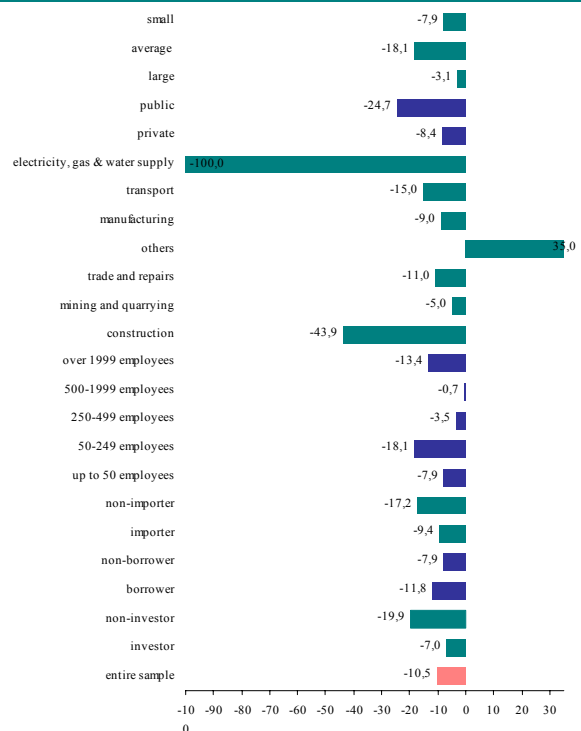
**Fig. 190** The share of unprofitable exports in the groups of enterprises based on the share of revenue from export in total revenue (on the vertical line the share of unprofitable exports in revenue from exports) – upper figure; the table includes the percentage of enterprises in each of the examined classes in 2005 Q3 and 2005 Q4.



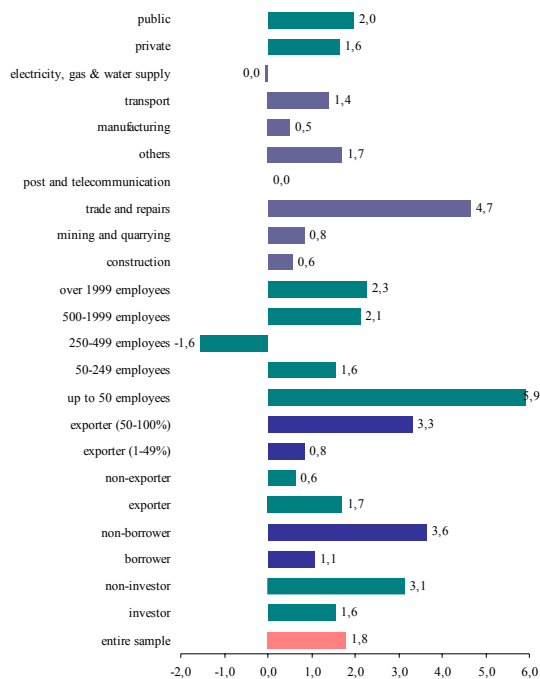
**Fig. 191** The share of unprofitable exports in the revenue from exports in main classifications in 2005 Q4



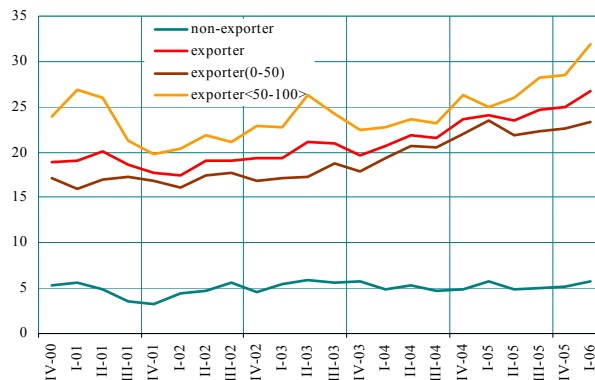
**Fig. 192** Index (balance of responses) of the projections of new export agreements



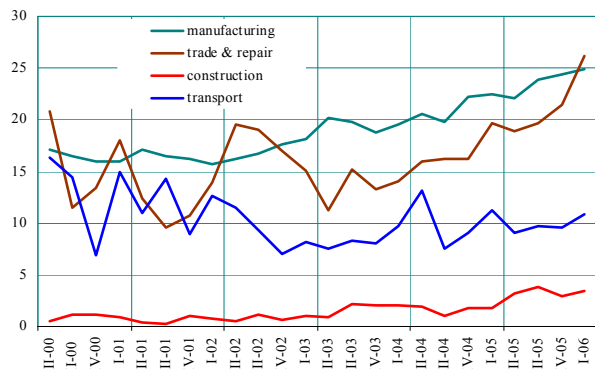
**Fig. 193** Difference between the ratio of the balance of export forecasts in 2006 Q1 and 2005 Q4 in main classifications



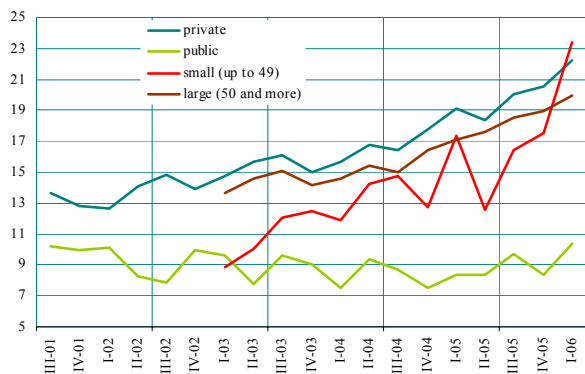
**Fig. 194 The change in the share of supply imports in the costs in main classifications (difference between the share of supply imports in the costs in 2005 Q4 and 2005 Q3)**



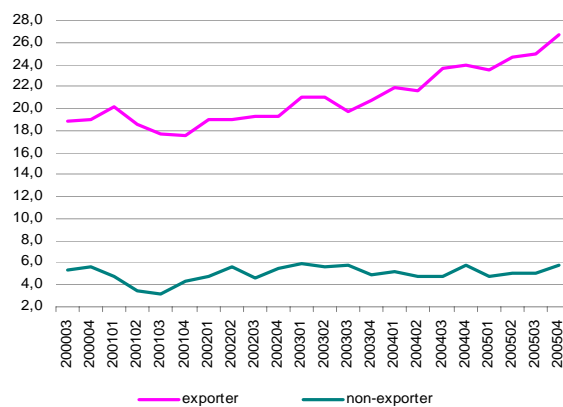
**Fig. 195 The share of imports in the costs in classes of export activity**



**Fig. 196 The share of imports in the costs in the PKD (NACE) sections**



**Fig. 197 The share of imports in the costs in ownership sectors and classes of enterprises' size measured by the level of employment**



**Fig. 198 The share of supply imports in the costs of exporters and non-exporters**

### I.14. Growth barriers – selected problems

Tab. 9 Barriers to development (table includes the moments at which the ratios assume maximum values in the surveyed period)<sup>18</sup>

Frequency of problems reported in:	fx rates, including fluctuations	high competition	low demand	increase in prices, inflation	changes in taxes, changes in regulations	collection of receivables, payment hold-ups	lack of liquidity	competitive imports, market protection	difficulties in obtaining a loan	high price of bank's loan	economic slowdown, unemployment
maximum values	26.8	21.2	28.2	13.4	17.2	20.0	15.1	9.7	9.2	18.6	21.6
2004 Q1.	14.4	8.4	12.8	5.8	11.2	13.3	5.3	2.9	6.3	3.7	6.6
2004 Q2.	13.8	8.1	11.4	8.3	<b>17.2</b>	9.8	4.8	3.6	5.2	3.3	6.3
2004 Q3	9.8	7.1	9.1	11.6	9.9	9.6	4.2	2.0	4.6	3.6	4.0
2004 Q4	14.6	9.3	11.8	<b>13.4</b>	5.1	11.4	4.8	1.6	4.4	6.4	3.9
2005 Q1.	24.2	9.6	10.8	13.1	7.5	8.5	5.4	<b>3.3</b>	3.8	4.8	3.2
2005 Q2	<b>26.8</b>	11.4	10.4	7.4	4.5	7.2	6.7	4.3	3.5	3.9	2.3
2005 Q3	19.8	13.6	12.6	3.6	5.4	7.3	7.6	4.9	3.0	3.4	4.0
2005 Q4	20.1	11.3	11.2	11.1	7.7	7.0	4.8	4.4	2.9	2.6	4.4
2006 Q1	21.4	10.6	10.0	9.0	6.8	5.3	5.3	4.3	2.9	2.6	2.2

### 1.15 Economic climate indices – supplementary data

The indices presented in this chapter are based, among others, on the “hard” data of public statistics released by the GUS<sup>19</sup>. The NBP’s *integrated economic climate index* has fallen and points to a neutral economic condition. The NBP’s *scaled economic climate index* shows a growing tendency, however, the level of this indicator is fluctuating around 50 percentage points, which also indicates a neutral economic climate. However, the *forecast realisation index* clearly increased above the 0 level, which suggests a good economic condition.

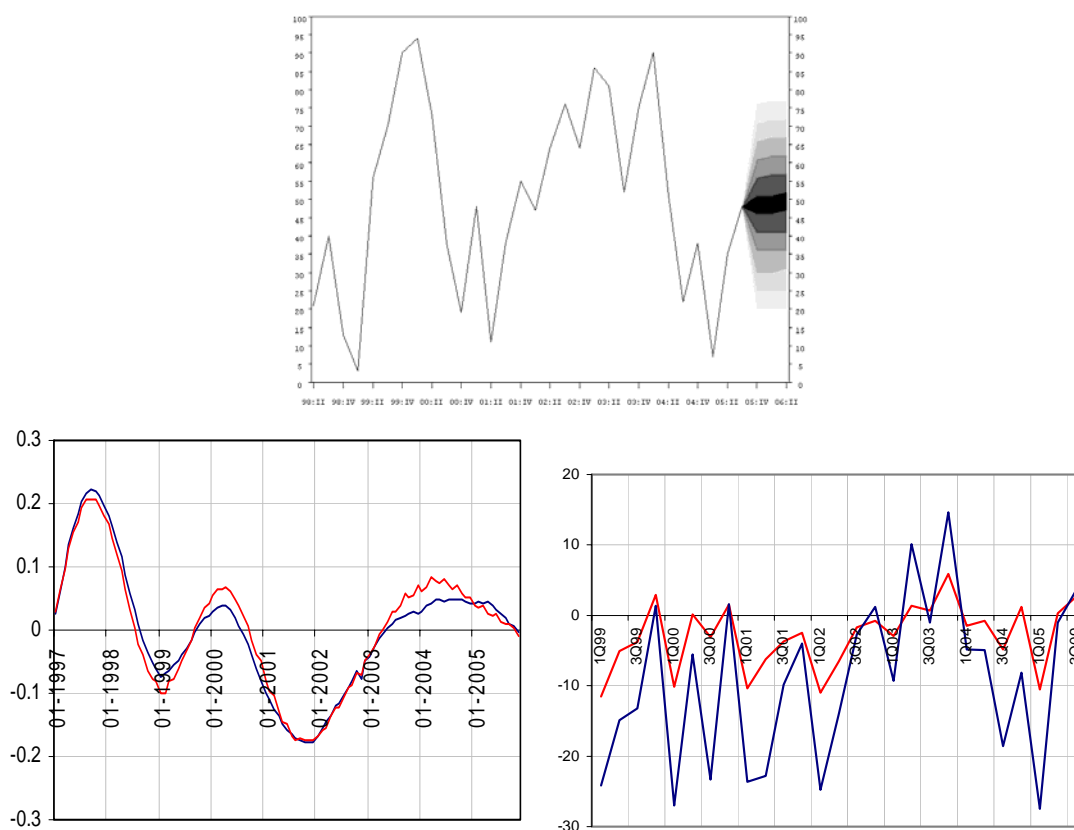


Fig. 199 Concurrent NBP indicator of the economic climate (upper figure), unified NBP indicator of economic condition (left lower figure), forecast realisation index (right lower figure)

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## II. ANNEX 1 - METHODOLOGICAL NOTES

1. Starting with 2006 the format of report has been modified.
2. Moreover, there has been a change in the way of assessing data of a clearly seasonal nature – the emphasis has been put on the behaviour of trends and changes in seasonally adjusted indices and not, as it was the case previously, on raw data changes. It has to be underlined that for some variables there are already eight-year time series available, which was the main argument behind the decision to modify the way of presenting these data.
3. The document has been prepared mainly on the basis of forecasts concerning the economic climate and qualitative indicators of the condition of enterprises. It presents anticipations of the enterprises surveyed by the NBP and also econometric forecasts of certain time series for January-March 2006.
4. In December 2005, the NBP survey was administered to 767 of entities selected from the whole territory of Poland. Forecast-related questions prevailed; they concerned demand, output, economic condition of the company, exports, employment level, investment, interest rates, value of foreign currency loans, price movements and dollar and euro exchange rates. Furthermore, the respondents were asked about their current economic position, timeliness of debt servicing, problems with maintaining liquidity and profitability of exports.
5. The paper makes use of the following classification categories:
  - into types of activity according to the Polish Classification of Activities (PKD – Polish equivalent of the NACE) (the classification has been somewhat modified: section *Transport, storage and communications* has been broken down into two groups: the first contains the division *Post and telecommunications*, while the second – under the heading of *Transport* – encompasses all the other divisions of the section),
  - into ownership sectors: public sector, private sector and five forms of ownership,
  - into employment level classes: from 1 to 49 employees, from 50 to 249 employees, from 250 to 499 employees, from 500 to 1,999 employees and over 2,000 employees,
  - into employment level classes (2): small and medium-sized enterprises (with up to 250 employees) and large enterprises (with 250 and more employees),
  - according to the purpose of products offered by enterprises: enterprises producing investment goods (PKD divisions: 29, 30, 33, 34, 35 and 45 – construction) and other enterprises.
6. The text also includes indices of economic climate. Many of the economic climate indices have been calculated as the difference between the percentage of favourable and unfavourable responses as regards the condition of the enterprises. The indices assume values between +100 and –100. Negative values should be interpreted as a deterioration of the economic climate and positive values as its improvement,
7. Wherever no information is provided below a table or a figure indicating the source of data, the source is the NBP monitoring.

#### Economic climate index

In constructing the economic climate index we took account of three main considerations:

- it should be available monthly,
- it should be transparent (easily interpretable),
- it should consume all available information on a widely understood economic climate, and thus it should also account for quarterly variables (some of them being of fundamental importance such as GDP).

The model that was employed in constructing the economic climate index (as meeting the three conditions) can be formulated in the following way:

$$X_t = \Lambda F_t + \varepsilon_t$$

where  $X_t$  is a vector of variables of dimension  $N \times 1$  which we qualified as potential indicators of economic situation observed in time 't':  $(X_{1t}, X_{2t}, \dots, X_{Nt})'$ ,  $\Lambda$  is a matrix of unknown parameters of dimension  $N \times r$ , in which  $i^{\text{th}}$  verse  $\equiv (\lambda_{i1}, \lambda_{i2}, \dots, \lambda_{ir}) \equiv \lambda_i'$ , i.e. matrix  $\Lambda$  may be formulated as:  $(\lambda_1 \lambda_2 \dots \lambda_N)' \equiv \Lambda$ .  $F_t$  is a vector  $r \times 1$  constituting  $r$  common factors:  $(F_{1t}, F_{2t}, \dots, F_{rt})' \equiv F_t$ , and  $\varepsilon_t$  is a random component ( $N \times 1$ ).

It can be easily observed that such a construction summarises the most important characteristics of  $N$  variables using  $r$  of common factors, i.e.: it reduces the behaviour of  $N$  variables to only  $r$  of main characteristics ( $r$  of common factors), where  $N > r$ . Obviously, different variables may be related to the main tendencies (common factors) to a smaller or greater extent. The degree of correlation of particular variables and main characteristics observed in the data set is measured by constituent coefficients of matrix  $\Lambda$ .

If the matrix of random component covariance –  $E(\varepsilon_t \varepsilon_t')$  – were diagonal, then we would talk about a typical factor model. Such an assumption, however, excludes the possibility of correlation of economic variables (apart from those enclosed in common factors). Still, it turns out that if we limit ourselves to certain class of dependences (relationships) among the components of vector  $\varepsilon_t$ , then the factor analysis is correct even when the matrix of covariance is not diagonal. In such a case, we are dealing with the so-called approximate factor analysis. This makes possible the autocorrelation of particular components of  $\varepsilon_t$ , i.e.:  $E(\varepsilon_{it} \varepsilon_{it-k}) \neq 0$  and also codependence among economic variables  $X_t$ :  $E(\varepsilon_{it} \varepsilon_{st}) \neq 0$  may be accepted. The key assumption here is the lack of relationship between common factor ( $F_t$ ) and random component ( $\varepsilon_t$ ). It has to be observed that the lack of detailed parameterisation of processes  $F_t$  and  $\varepsilon_t$ , while operating on large data sets, is in fact an advantage.

An important benefit of the used methodology is the possibility of accounting for various irregularities present in available time series. This means that in calculating the economic climate index we used both frequently released data (monthly and quarterly) and series unavailable for the whole period of the panel. For example, despite the fact that the index has been calculated since the beginning of 1997 with quarterly frequency, in its reconstruction we used the survey data of NBP monitoring available quarterly, among others the level of production capacity utilisation (available only since the end of 1999). What is important is that the proposed modelling structure can, coherently and formally, process virtually all available information on the overall economic climate, and on this basis diagnose the state of the economy. The above-described

methodology (factor analysis) is in fact a wide generalisation of the apparatus of arithmetic (or weighed) average used for the set of all variables. It provides both a varied selection of weights reflecting the actual contribution of particular variables to the non-observable economic climate, and makes it possible to use, at the same time, series of different observation frequency.

In contrast to standard econometric models, the number of variables is not an impediment for estimation. On the contrary: the greater the set of available data, the more reliable the course of the economic climate index. At the present, experimental stage the index was based on 55 time series (see list in Supplement).

Construction process proceeded in a number of stages:

Stage 1:

- Selection of potentially usable variables (see list in Supplement)
- Seasonal adjustment of (the majority of) variables with the use of spectral analysis methods allowing to filter out time series from cycles of desired frequency. In this context, it has to be mentioned that according to the opinion prevailing in literature the duration of a business cycle ranges between 2 and 8 years. Accordingly, by using a spectral filter we rid the variables of cycle shorter than 2 years (thus ridding time series of regular seasonality of yearly cycles).
- Examination of time series against stationarity. All variables were rid of possible trends (both deterministic and stochastic) and standardised (by trimming the mean and division by standard deviation)

Stage 2:

- Estimation of the economic climate index. In the initial stage estimation was based on complete series only (1997:01 – 2003:11). As a result we achieved several common factors. Then, assuming a linear relationship between these factors and incomplete series (those quarterly or with some observations lacking), we reconstructed the weights (matrix  $\Lambda$ ) and, in consequence, we arrived at certain approximation of missing observations. In this way we obtained a full panel of observations. Thanks to the second estimation of factors and then weights (matrix  $\Lambda$ ), we arrived at the next approximation of missing observations and, most importantly, of common factors. The process was iterated.

It has to be emphasised that in reconstructing missing observations, the stock/flow character of particular quarterly variables was taken into account, which is by no means trivial especially while operating on (log) differences.

As a result of model estimation, we arrive at trajectory  $r$  of common tendencies, which provide the best possible explanation of the performance of all variables. Ideally, an assumption could be made of the existence of one common tendency which would explain in a significant way the dynamics of all time series, naturally interpreted as the level of economic prosperity. However, even though the utilised economic variables constitute a fairly homogeneous data set (from the point of view of usefulness in informing about real economic processes), we should not limit our assumptions to just one tendency present in the set for a number of reasons. One is that some of the variables may be leading in nature, some non-cyclical, and the remaining part may be coincident economic indicators. In this situation it can be expected that each out of, say, three common factors will have a different interpretation resulting from the characteristics of particular three groups of variables. Moreover, it has to be mentioned that a substantial share of the data set is represented by survey data, which due to being largely subjective (or potentially leading in relation to macroeconomic variables) may differ in nature from macroeconomic variables.

As a consequence, we adopted the following strategy. We assumed the existence of several common tendencies in the available set of variables. In the course of experiment we chose one factor, which is best correlated with variables commonly accepted as “good indicators” of economic climate. In particular, the index (our chosen factor) remains in close relationship with the following variables:

QUANTITATIVE DATA:

- Short-term investments
- Investments in enterprises
- Industrial output
- Exports (in PLN and USD)
- Imports (in PLN and USD)
- Inventories in enterprises
- Revenue of enterprises
- Building permits
- Employment in enterprises

QUALITATIVE DATA:

- New orders (domestic and external demand stream) – GUS
- Output (diagnosis) – GUS
- Forecast of economic situation of enterprises – GUS
- Forecast of new orders – GUS
- Forecast output of the enterprise – GUS
- Forecast economic activity in the construction and assembly activity – GUS
- Inventories in trade and services – GUS
- Forecast economic situation of trade and service companies – GUS
- Forecasted number of products sold by trade and service companies – GUS
- Output index – NBP monitoring

SUPPLEMENT:

**List of variables utilised for the calculation of the economic climate index**

**I. Real economy:**

- 1) retail sales of goods
- 2) wholesale sales in trading enterprises
- 3) GDP
- 4) individual consumption
- 5) investments in enterprises
- 6) short-term investments
- 7) industrial output
- 8) exports in PLN
- 9) exports in USD
- 10) imports in PLN
- 11) imports in USD
- 12) inventories in enterprises
- 13) electricity supplies
- 14) revenue of enterprises



- 15) net earnings
- 16) zloty loans to individuals
- 17) building permits

## **II. Qualitative data on customer and producer economic climate:**

### GUS CONSUMER ECONOMIC CLIMATE:

- 18) changes in economic situation of households in the last 12 months
- 19) changes in economic situation of households in the next 12 months
- 20) current big purchases

### GUS BUSINESS TENDENCY SURVEYS: INDUSTRY

- 21) overall economic situation of the enterprise
- 22) new orders (domestic and external demand stream)
- 23) changes in the output of enterprises
- 24) stock level
- 25) forecast of economic situation of the enterprise
- 26) forecast of new orders
- 27) forecast of the output of the enterprise
- 28) employment forecast

### GUS BUSINESS TENDENCY SURVEYS: CONSTRUCTION

- 29) economic activity in construction and assembly sector
- 30) forecast economic activity in construction and assembly sector

### GUS BUSINESS TENDENCY SURVEYS: TRADE

- 31) overall economic situation of the enterprise (in relation to the previous month)
- 32) number of sold goods (in relation to the previous month.)
- 33) stock level
- 34) forecast of overall economic situation of the enterprise
- 35) forecast quantity of sold goods

### NBP MONITORING:

- 36) new investments
- 37) investments in progress
- 38) output
- 39) total demand
- 40) production capacity utilisation

## **III. Macroeconomic conditions:**

- 41) state budget performance
- 42) M0 money supply
- 43) M1 money supply
- 44) M2 money supply

- 45) interest rate (3-month WIBOR)
- 46) CPI
- 47) PPI
- 48) terms of trade in the period
- 49) current account of the balance of payments: revenue from exports
- 50) current account of the balance of payments: spending for imports
- 51) exchange rate of the euro
- 52) exchange rate of the US dollar

#### IV. Labour market:

- 53) unemployment rate
- 54) average employment in the enterprise sector
- 55) average wage in the enterprise sector

#### Forecast realisation index

Construction proceeded in two stages. In the first stage, with access to F-01 data on each enterprise's revenue, we fitted an equation to every enterprise separately. Because of a considerable number of series, we chose an automatically fitted model structure (autoregressive model with four lags plus deterministic trend), which seems to be universal in our case. Obviously, by doing that we deprived ourselves of direct supervision over the estimated equations. This, however, would be difficult anyway, in the face of a large number of estimations. Estimations were carried out with a step-wise method, and the number of observations was always 16 (four years). Thus, trying to draw conclusions on economic condition of enterprises (revenue) in Q2 we used only the observations for period till the end of Q1, the survey of Q4 economic climate was based on the sample reaching to Q3, and so on. Then we used the criterion of the models' fit with the real process to eliminate those enterprises for which a satisfactory level of compatibility could not be found ( $R^2$  over 0.75). By limiting the scope of analysis only to enterprises with predictable historical development we are allowed to assume that large discrepancies between real and forecasted data can be interpreted in terms of increased uncertainty on the part of the enterprise.

The second stage was forecasting for the one-quarter period. These forecasts were then confronted with real values by calculating a relative forecast error defined as the difference between the real and forecasted values of revenue, in relation to the real value. In consequence, positive errors point to the improvement in economic climate – forecast revenue turns out to be lower than the actual ones. The first variant of the synthetic measure of uncertainty was formed as the average of relative forecast errors weighed with revenue:

$$\mu \equiv \sum e_i \times \frac{revenue_i}{\sum revenue_i}$$

where  $e_i$  stands for relative forecast errors, and  $revenue_i$  is revenue of the considered enterprises and the modified index:

$$\eta \equiv \sum I(|e_i| \geq mape) \cdot e_i \times \frac{revenue_i}{\sum revenue_i}$$

where *mape* stands for mean absolute percentage error of forecast:

$$mape = \frac{100}{N} \sum_{t=1}^N \left| \left( y_t - \hat{y}_t \right) / y_t \right|$$

and  $I(\cdot)$  is a function assuming the value 1 if the expression in brackets is true, and the value 0 in the opposite case. In other words, in cases when forecast errors calculated for particular quarters were smaller than the average error in the period assigned for estimation (i.e. until the quarter immediately preceding the analysed quarter), we assume this occurrence to be normal for a given enterprise. Thus, errors are assigned the weight 0 and, consequently, are not taken into account in our modified index. The foregoing modification aims at monitoring very large deviations from expected revenue in particular enterprises.

**NBP MONITORING**

**FORECASTS FOR 2006 Q1**

NACE:	<input type="text"/>	Form of ownership (three characters):	<input type="text"/>
Is the company an exporter (does it sell its products abroad)? [yes/no]		<input type="text"/>	
<b>1. Indicate the number of employees in the company as at 1 December 2005:</b>			
<b>2. The company forecasts that in 2006 Q1 the demand for its products as compared to 2005 Q4:</b>			
a. will increase substantially – mainly as result of the typical for the period (seasonal) increase in demand for the company's products			
b. will increase substantially – mainly as a result of a steady growth in demand for the company's products			
c. will show no change or will undergo slight changes			
d. will decrease substantially – being only a seasonal phenomenon, always observed in the period			
e. will decrease substantially – as a result of a permanent decline in demand for the company's products			
<b>3. In 2006 Q1 the company anticipates:</b>			
a. an increased number of orders			
b. a decreased number of orders			
c. the same number of orders			
d. not applicable			
<b>4. Does the company anticipate any significant changes in the period from January to March 2006, regarding:</b>			
a. the level of output (increase / decrease / no change)			
b. the level of employment (increase / no change / decrease)			
c. investment programmes launched before the date of filling in this questionnaire and currently underway (withdrawal / reduction / no change {investment will be continued} / increase / not applicable {lack of investment})			
<b>5. In 2006 Q1 does the company plan:</b>			
a. to launch major investments financed mainly with bank loans			
b. to launch major investments financed mainly with company own funds			
c. to launch major investments financed mainly with external non-bank assets			
d. to launch major investments financed with other funds			
e. the company does not plan such investments			
<b>6. Does the company plan to launch any major investments in 2006?</b>			
a. yes, the beginning is due in the [ ] quarter of 2006			you can indicate no more than 2
b. no, the company currently does not need to invest (the company has completed the implementation of an investment programme or is equipped with sufficient technological facilities)			
c. no, the company has not received any EU appropriations (the company applied for			

such) and own funds are insufficient	reasons and put them in the order of importance
d. no, the company neither has own funds nor is able to raise them	
e. no, the anticipated rate of return on investment would be too low	
f. no, the demand for the company's products is too low	
g. no, the volatility of legal regulations, bureaucracy etc. discourage investment	
h. no, investment is not anticipated for reasons other than mentioned above	
<b>7. What is the degree of capacity utilisation in the company (%?)?</b>	
<b>8. What is the level of stock of finished products in the company?</b>	
a. too high	
b. sufficient	
c. too low	
d. not applicable	
<b>9. The company anticipates that:</b>	
a. the prices charged in 2006 Q1 (as compared to the level as at 31 December 2005) will increase (decrease) by ...%	
b. the input prices of purchased raw materials and supplies in 2006 Q1 (as compared to: see above) will increase (decrease) by ...%	
c. the increase in prices of consumer goods and services (CPI) in 2006 Q1 will be ... %	
d. the increase in producer prices in industry (PPI) in 2006 Q1 will be ...%	
e. the increase in the CPI in the next twelve months will be ...%	
f. the increase in the PPI in the next twelve months will be ...%	
g. the US dollar exchange rate as at 31 March 2006 will be ... zloty (in PLN for one dollar)	
h. the euro exchange rate as at 31 March 2006 will be ... zloty (in PLN for one euro)	
<b>10. What is the share of fixed costs in total costs (%?)?:</b>	
<b>11. With regard to loan debt servicing:</b>	
a. the company faces no problems with debt servicing and does not anticipate such problems in the next quarter	
b. the company faces no such problems but anticipates that they may appear in the next quarter	
c. the company has been facing such problems but anticipates their decrease in the next quarter	
d. the company has been facing such problems and does not anticipate any improvement of this situation	
e. the company does not use any loans	
<b>12. Did the company face any problems with timely payment of non-bank liabilities in the 2005 Q4?:</b>	
a. no, never	
b. yes, occasionally	
c. yes, frequently	
<b>13. Did the company face any problems in maintaining its financial liquidity in 2005 Q4? [frequently / occasionally / never]?:</b>	
<b>14. In accordance with the company plans for the period till the end of March 2006, the amount of bank loans outstanding as compared to 31 December 2005:</b>	

a. will increase substantially
b. will increase slightly
c. will show no change
d. will decrease slightly
e. will decrease substantially
f. not applicable (the company does not use any bank loans)
<b>15. If the company was refused a loan in 2005 Q4, what was the main reason for that:</b>
a. lack of (deterioration in) creditworthiness
b. reasons connected with factors beyond the company's control
c. not applicable – the company applied for a loan in Q4 but was not refused it
d. not applicable – the company did not apply for a loan in Q4
<b>16. State the minimum and maximum interest rate for bank loans calculated on the company's outstanding amount in 2005 Q4:</b>
a. for a short-term loan in the zloty (up to one year) – minimum
b. for a short-term loan in the zloty (up to one year) – maximum
c. for a long-term loan in the zloty (over one year) – minimum
d. for a long-term loan in the zloty (over one year) – maximum
e. for a short-term foreign currency loan (up to one year) – minimum
f. for a short-term foreign currency loan (up to one year) – maximum
g. for a long-term foreign currency loan (over one year) – minimum
h. for a long-term foreign currency loan (over one year) – maximum
<b>17. As compared to the present bank loan price, the company anticipates that by the end of March 2006:</b>
a. there will be a decrease in interest rates (i.e. the price at which the company can obtain a loan)
b. there will be an increase in interest rates
c. the interest rates will show no change
d. the company does not use bank loans
<b>18. State the anticipated interest rate at which the company will be able to draw a bank loan (in the zloty) at the end of 2006 Q1:</b>
a. for a short-term loan (up to one year)
b. for a long-term loan (over one year)
<b>19. State the share of export sales revenue in total revenue (%):</b>
<b>20. If export sales are not fully profitable, please state what percentage of revenue from exports constitutes unprofitable exports (unprofitable meant as price*rate that does not cover input costs and other costs related to the export of goods)? If the total export sales are profitable, please enter 0:</b>
<b>21. Did the number of export contracts in 2005 Q4 as compared to 2005 Q3:</b>
a. increase substantially
b. decrease substantially
c. not change substantially
<b>22. The company expects that the exports volume in 2006 Q1 as compared to the previous</b>

<b>quarter:</b>
a. will increase
b. will decrease
c. will remain at a comparable level
<b>23. Does the company expect in 2006 Q1:</b>
a. a substantial increase in the number of export contracts
b. a slight increase in the number of export contracts
c. the number of concluded contracts to be similar as other years in the same period
d. a slight decrease in the number of new export contracts
e. a substantial decrease in the number of new export contracts
<b>24. What is the threshold level of the foreign exchange rate at which exports will become (is) unprofitable (in the zloty):</b>
a. of USD
b. of the euro
<b>25. At what exchange rate may there be problems with selling goods produced by the company, as the prices of similar imported goods will be substantially lower than the prices offered by the company:</b>
a. of USD
b. of the euro
<b>26. What is the share of input imports in the company's general expense? (%) If the company obtains its supplies solely in the domestic market, please enter 0:</b>
<b>27. How does the company estimate its current economic condition, excluding seasonal fluctuations typical of this period?:</b>
a. very good
b. good
c. poor
d. bad (there are real chances for the company surviving and improving its condition)
e. bad (liquidation or bankruptcy should be taken into consideration)
<b>28. Does the company anticipate any major changes in its economic condition in the period from January to March 2006?</b>
a. yes, the condition will improve
b. yes, the condition will deteriorate
c. no, the condition will not change much
<b>29. Is the company planning to increase wages in 2006 Q1? [yes/no]?</b>
<b>30. If yes, by what percentage will the average wage increase?</b>
<b>31. Were there any wage pressures exerted by the employees in the Q4?</b>
a. yes, the pressures increased as compared to the previous quarter
b. yes, but they are not stronger than usual
c. no
<b>32. State the share of liquid fuels in the total tax-deductible expenses of the company (%):</b>
a. in 2004 Q3

b. in 2005 Q3
<b>33. What was the prevailing response of the company to the rise in fuel prices in 2005:</b>
a. the rise was fully passed onto the customers
b. the rise was only partially passed onto the customers
c. despite the rise in fuel prices the prices of products offered by the company did not increase – profit margin decreased
d. despite the rise in fuel prices the prices of products offered by the company did not increase – other costs decreased
e. despite the rise in fuel prices the prices of products offered by the company did not increase – the company underwent a reorganisation leading to resignation from using its own transport
f. not applicable – the costs of fuels are relatively low in the company
<b>34. Indicate what would be the reaction of the company at the moment if liquid fuel price went up.</b>
a. the rise would be fully passed onto the customers
b. the rise would be partially passed onto the customers
c. prices would not rise – profit margin would decline instead
d. prices would not rise – other costs would be cut instead
e. prices would not rise – the company would stop using its own transport
f. not applicable – the costs of fuels are relatively low in the company
<b>35. Please, briefly indicate the problems (in approx. 10 sentences) that may prove crucial in the near future (six months) to the economic standing of the company. Special attention should be paid to the issues that impact the output volume (possibility of its increase or, alternatively, reasons for reducing the company’s scope of activity), liquidity of the company, its outstanding loans and profitability of its exports. If the company does not encounter any major difficulties, nor does it expect them to occur in the above-mentioned period, please enter “no problems”:</b>
<b>Economic climate reports can be downloaded from the website of the National Bank of Poland: <a href="http://www.nbp.pl">www.nbp.pl</a>, under the following path: Publications &gt; Research papers &gt; Economic climate. You are welcome to use them!</b>