Inflation Report

August 2004

National Bank of Poland

Monetary Policy Council

Warsaw, August 2004

The Inflation Report presents the Monetary Policy Council's assessment of current and future macroeconomic developments influencing inflation. The inflation projection presented in Chapter 4 is based on macroeconomic models and has been prepared by a team of NBP economists led by Krzysztof Rybiński, Deputy Governor of the NBP. The NBP Management Board has approved the submission of the projection to the Monetary Policy Council. The projection is one of the inputs to the Monetary Policy Council's decision-making process.

Contents

SUMMARY

Since the publication of the last *Inflation Report* the annual CPI growth rate increased considerably and in July amounted to 4.6%, significantly exceeding the upper tolerance limit for deviations from the inflation target. At the same time, there was a marked increase in all core inflation measures. Acceleration in inflation resulted primarily from growth in food prices due to increased external demand. In the first months of Poland's EU membership the increasing pressure on price growth was also stemming from, *inter alia*, changes in regulatory mechanisms, in particular adjusting the VAT and excise tax rates. Additionally, inflation was further accelerated by strongly rising prices of raw materials in world markets, especially crude oil. The rise in all inflation measures since April 2004 was accompanied by a significant increase in inflation expectations of households, enterprises and retailers.

In the analysed period the world economy has been recovering. At the same time data on the Polish economy confirmed the high growth rate in Poland. According to NBP's estimates, Poland's GDP in Q2 2004 grew by approx. 6%. Surveys on business conditions point at continuation of positive trends in the future. However, the high GDP growth rate was accompanied by uncertainty as to the sustainability of the observed economic recovery. While the leading indicators of investment were rising, corporate credit volume was falling, and the high level of capacity utilization was accompanied by a slump in construction output. The publication of GUS data on investment growth and improvement in financial performance of enterprises in the first half of 2004 significantly reduced this uncertainty.

The Monetary Policy Council assessed that the significant rise of inflation expectations under conditions of strong economic recovery required a higher level of interest rates in order to secure price stability in the medium term. With the intention of ensuring that the increase in inflation is temporary, the MPC decided to raise key interest rates in their meetings in June, July and August by 0.5, 0.25, and 0.5 percentage points respectively, and to maintain the upside monetary policy bias. Given the uncertainty related to the persistence of negative supply shocks and the degree to which the present inflationary pressure will translate into the growth of wages and prices in the future, as well as the uncertainty as to the persistence of the recently observed considerable zloty appreciation, the MPC concluded that the process of increasing interest rates should be gradual.

The cumulative size of interest rate increases from June to August resulted from the assessment of threats to price stability stemming from the rise in inflation expectations, the

evaluation of the nature of shocks leading to inflation growth, and the evaluation of sustainability of the observed economic recovery. In August the scale of interest rate increase was largely influenced by the inflation projection presented in the *Report* and by the growing risk of wage pressure stemming from inflation expectations.

The inflation projection prepared by the NBP is based on the **assumption of unchanged interest rates** and does not take into account the August interest rate hike. According to the projection CPI growth rate will continue to rise in the next three quarters. This will result from the impact of negative supply shocks (high growth rates of crude oil and food prices) on the one hand, and the economic recovery on the other. With a relatively low dynamics of potential GDP, high rate of economic growth will lead to gradual strengthening of the inflationary pressure. Under a scenario of unchanged interest rates inflation will start falling in 2005, when analysts expect supply shock to wear off gradually. Nevertheless, inflation reduction will be a slow process. Inflation rate will return to the upper tolerance limit for deviations from the target in 2006. According to the projection, assuming that interest rates remain unchanged, the probability of inflation staying above the target of 2.5% in 2005-2006 exceeds the probability of its falling below the target.

1. INFLATIONARY PROCESSES

1.1. Inflation indices

After a steep increase in inflation[1] in April 2004 (0.8% m/m) a high rate of price growth continued in the following months (1.0% m/m in May and 0.9% m/m in June 2004 – see Figure 1). The growth of inflation was mainly caused by a considerable rise in food prices (Figure 2, Table 1). The decrease in CPI recorded in July for the first time in 2004 (0.1% m/m) resulted from typical seasonal food price fall. However, the annual rate of growth of food prices continued to rise. As a result the annual CPI inflation accelerated reaching the highest level since August 2001 (4.6%).

Growing pressure on price growth in the period preceding Poland's accession to the EU and during the first months of EU membership resulted mainly from changes in regulatory mechanisms, in particular adjusting the VAT and excise tax rates. A significant growth of food (especially meat) prices was to a large extent the result of an increased external demand for these goods. Additionally, world markets' trends led to a heavy increase in prices of raw materials, primarily crude oil and coal. Another factor contributing to the inflation growth was the increasing domestic demand, which is indicated by a strong increase in retail sales in some industries.

The effect of the above factors on the general price growth in subsequent months of Q2 2004 has been studied in an NBP's expert-based analysis. The results indicate a gradual weakening of pro-inflationary impact of supply shocks and, starting from June 2004, a significant drop in regulatory mechanisms' impact on price growth. Ever since June 2004, inflationary pressure has become more and more demand-driven, though this has largely resulted from the rise in external demand.

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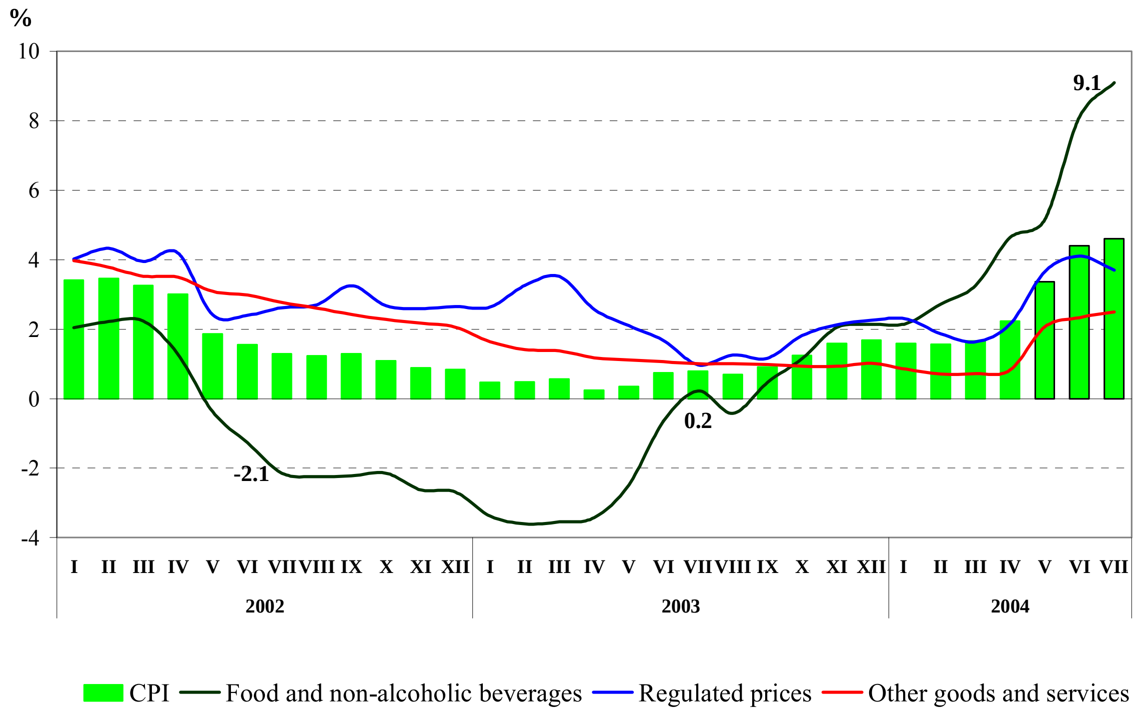
[1] Measured with CPI. The following abbreviations will be used throughout the *Report*:

y/y – analysed period compared to the corresponding period of the previous year
q/q – quarter compared to the previous quarter
m/m – month compared to the previous month

Figure 1

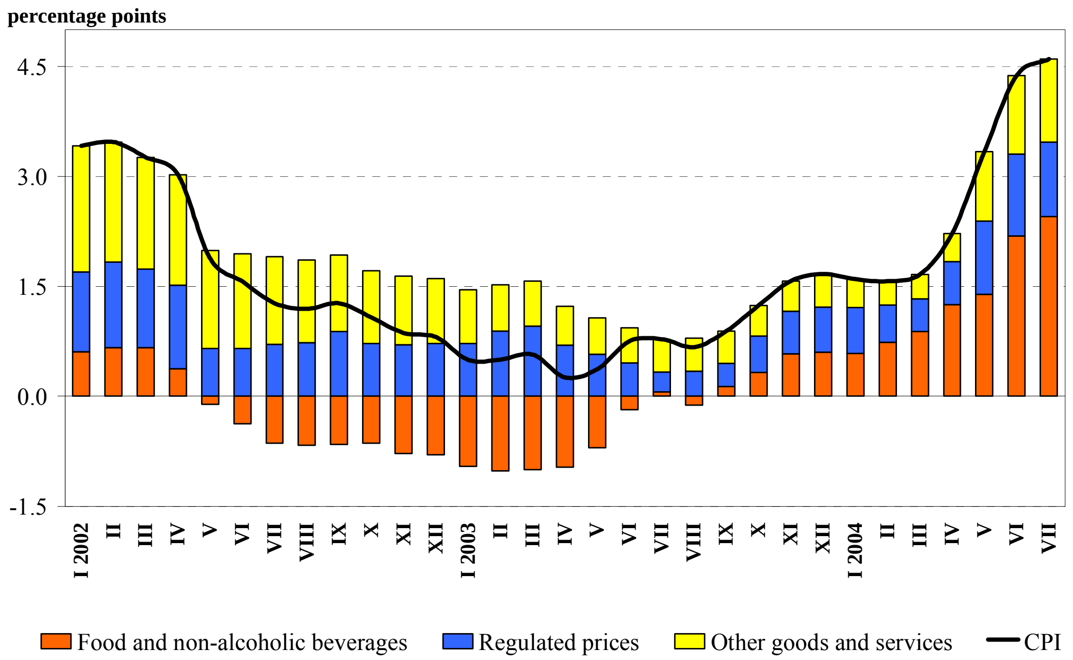
CPI and main price categories in period 2002 – July 2004 (y/y changes, %)



Source: GUS data, NBP estimates.

Figure 2

CPI breakdown in 2002 – 2004 (y/y)



Source: GUS data, NBP estimates

A heavy growth of prices persisted in *foods and non-alcoholic beverages*, which was the major contribution to CPI inflation acceleration. The annual rate of price growth in this group rose from 3.3% in March to 9.1% in July 2004 standing for nearly the double of the general price growth rate. A heavy increase in food prices was primarily caused by a rise in prices of meat, sugar, oils and other edible fats.

The rise in food prices resulted to a large extent from a heavy increase in external demand for certain food products (especially meat) after Poland's accession to the EU. Furthermore, for many months livestock production (pork) had been reduced. Until April 2004 the price growth was also driven by intensified domestic demand (e.g. for sugar) caused by consumers' fear of price increases after Poland's accession to the EU. Moreover, pro-inflationary effects of lower than the year before supply of many agricultural products (mainly grains) continued to play a role in the analysed period. In the coming months of 2004, a considerably better crop harvest is expected, which should contribute to a decrease of crop-based produce prices. This will in turn have a positive impact on the profitability of livestock production.

Regulated prices

In the group of regulated prices the major factor leading to inflation increase was the rise of fuel prices in the domestic market. Over the analysed period (May-July) the total rise in fuel prices amounted to 4.0% and their annual growth amounted to as much as 16.1% in July 2004 (4.7% in April). This rise was mainly the effect of the increase in crude oil and fuels prices in world markets. The prices of Polish producers are determined on the basis of the so-called import parity, which means that their fluctuations correspond to the changes in prices of fuels imported to Poland with all other costs taken into account. In the period between May and July 2004 the world price of fuels increased by 15%. This, however, was accompanied by strengthening of the zloty against the US dollar by 7.5%. As a result, the import price of fuels (being the product of the world price and the USD/PLN exchange rate) rose by 6.4%[2]. The rise of distribution margin (of over 31%[3]) and of excise tax on liquefied petroleum gas used for car engines (in May 2004) also contributed to the domestic fuel price increase. On the other hand, the effects of the rise of world prices of crude oil on the increase

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[2] Relatively lower rise in fuel prices in the domestic market resulted from the limited contribution of import price in gross retail price of petrol – it amounted to approx. 32% on average over the analysed period.

[3] Calculation of the structure of fuel prices has been based on the data from Nafta Polska S.A.

in domestic prices of fuels were moderated by a 3-precent reduction of excise tax on petrol in May 2004.

Above average increase in regulated prices was also noticed in tobacco products, which was the result of a rise in excise tax rate (from 25% to 26.67%), and also rise in oil-based products such as lubricants, oils and liquids. Passenger-traffic railway fares were also raised. No new tariffs for electricity[4] or gas were introduced in the period analysed.

Table 1

Price growth in the basic groups of consumer goods and services

	2004							
	weight							
	%	I	II	III	IV	V	VI	VII
	Corresponding month of the previous year = 100							
Total, in which	**100.0**	**1.6**	**1.6**	**1.7**	**2.2**	**3.4**	**4.4**	**4.6**
Food and non-alcoholic beverages, incl.:	**27.0**	**2.2**	**2.7**	**3.3**	**4.6**	**5.2**	**8.1**	**9.1**
Bakery and grain products	4.8	2.6	3.8	4.7	5.5	6.0	5.3	5.6
Meat	7.3	-0.7	0.6	2.4	5.4	6.5	12.1	16.3
Oils and edible fats	1.5	7.4	8.0	8.3	8.0	8.8	12.7	15.1
Fruit	1.3	10.1	8.8	9.8	7.2	3.8	8.5	-2.7
Sugar, jam, honey, chocolate and confectionary products	1.8	-1.4	0.3	1.2	17.4	19.0	21.8	23.2
Regulated prices, incl.:	**27.3**	**2.3**	**1.9**	**1.6**	**2.2**	**3.7**	**4.1**	**3.7**
Fuels	*3.8*	5.4	2.7	1.3	4.7	15.3	17.8	16.1
Alcoholic beverages	*3.7*	0.3	0.4	0.6	0.5	0.2	-0.2	-0.3
Tobacco products	*2.3*	5.5	5.5	5.2	6.1	7.3	7.8	8.7
Other products and services, incl.:	**45.8**	**0.8**	**0.7**	**0.7**	**0.8**	**2.1**	**2.3**	**2.5**
Non-food products	27.3	-0.2	-0.3	-0.2	0.0	2.0	2.2	2.3
housing maintenance materials	*3.1*	*0.4*	*0.6*	*1.1*	*1.7*	*13.3*	*13.7*	*14*
heating fuels	*2.1*	1.9	2.1	2.2	3.1	5.1	5.8	6.5
Services	18.5	2.4	2.3	2.1	2.1	2.4	2.7	2.8
water supply and other housing-related services	*2.2*	*5.6*	*5.6*	*4.9*	*4.7*	*4.8*	*4.8*	*4.7*
package tours	*1.0*	*-0.5*	*0.0*	*-0.2*	*-0.2*	*0.2*	*2.2*	*2.5*
	Previous month = 100							
Total, of which	**100.0**	**0.4**	**0.1**	**0.3**	**0.8**	**1.0**	**0.9**	**-0.1**
Food and non-alcoholic beverages, incl.:	**27.0**	**0.5**	**0.3**	**0.8**	**2.1**	**0.6**	**2.7**	**-0.8**

[4] According to a recent tariff regulation of the Ministry of Economy, Labour and Social Policy the current tariffs of electricity providers shall remain in force until the end of 2004. Thus, the tariff period will cover the calendar year.

Bakery and grain products	4.8	0.8	1.0	0.8	0.7	0.6	0.6	0.6
Meat	7.3	0.0	-0.1	1.0	2.0	1.5	5.8	5.2
Oils and edible fats	1.5	0.4	0.4	0.1	-0.4	0.7	3.6	2.1
Fruit	1.3	-0.9	-0.8	2.3	3.6	9.6	0.5	-11.6
Sugar, jam, honey, chocolate and confectionary products	1.8	-0.3	1.9	1.0	15.9	1.4	2.3	1.3
Regulated prices, incl.:	**27.3**	**0.6**	**0.2**	**0.3**	**0.4**	**1.0**	**-0.1**	**0.0**
Fuels	*3.8*	3.2	1.0	1.9	1.9	5.6	-0.6	-0.9
Alcoholic beverages	*3.7*	0.1	0.0	0.0	-0.2	-0.3	-0.2	0.0
Tobacco products	*2.3*	0.1	0.1	0.2	1.7	1.7	0.7	1.1
Other products and services, incl.:	**45.8**	**0.2**	**-0.1**	**0.0**	**0.2**	**1.3**	**0.3**	**0.2**
Non-food products	27.3	0.0	-0.4	0.0	0.1	1.8	0.2	0.0
housing maintenance materials	*3.1*	*0.1*	*0.2*	*0.5*	*0.6*	*11.4*	*0.4*	*0.2*
heating fuels	*2.1*	*0.1*	*0.0*	*-0.6*	*0.1*	*1.3*	*0.6*	*1.1*
Services	18.5	0.5	0.3	0.1	0.3	0.5	0.5	0.5
water supply and other housing-related services	*2.2*	*1.3*	*0.8*	*0.6*	*0.5*	*0.3*	*0.2*	*0.3*
package tours	*1.0*	*0.4*	*0.5*	*-0.1*	*1.2*	*1.1*	*3.5*	*3.2*

Source: GUS data.

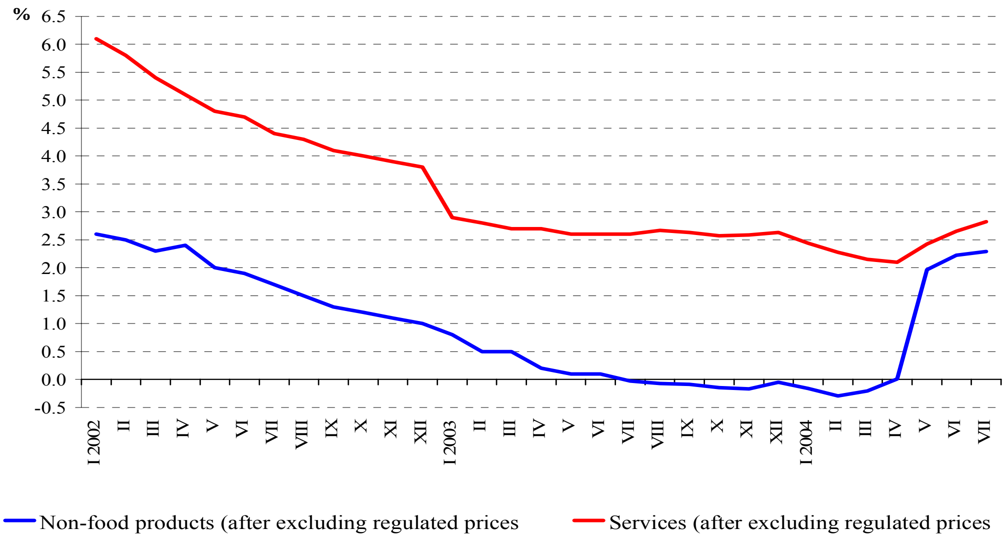
Prices of other consumer goods and services

In May-July 2004 the prices in the group of other consumer goods and services (excluding regulated prices) rose by 1.8% in total mainly as a result of a significant rise in non-food products' prices in May 2004 (by 1.8% m/m - Figure 3). This rise was brought about in the first place by the regulations related to Poland's accession to the EU. The biggest rise was recorded in house maintenance materials (11.4% m/m in May) as VAT on these products increased (from 7% to 22%) on 1 May 2004. In the same group, prices of heating fuels, including coke, soared as well, *inter alia*, as a reaction to an increase in world prices of coal.

In May-July 2004 a growth in the dynamics of the service prices was also noted, even though it was weaker than in the case of non-food products.

Figure 3

Prices of consumer goods and services (y/y changes, %)



Source: GUS data, NBP.

The above-outlined description of factors which influenced inflation processes indicates that in the analysed period the price growth resulted primarily from one-off factors (changes in indirect tax rates, other regulations related to Poland's accession to the EU) and from supply factors. However, the impact of demand factors on price growth was gradually rising, whereby the price increase was to a large extent driven by the increase in external demand.

The above conclusions are supported by the developments of core inflation indices (Table 2, Figure 4). The prominent increase (m/m) in all core inflation measures in May 2004 up to the level correspondent to CPI growth (with the exception of 15% trimmed mean of CPI which is more balanced by definition) illustrates the wide-ranging impact of changes of regulatory mechanisms after Poland's accession to the EU. In turn the deepening discrepancy between the annual growth rates of "net inflation" on one side and other core inflation measures and CPI on the other side indicates that the growth of food and fuel prices (amounting to 10.0% y/y in July) exerts strong influence on the acceleration in the general price growth rate.

Still, it has to be emphasized that after nearly two years of relatively stable rate of price growth (as measured by CPI and core inflation indices), since April 2004 there has been a strong acceleration in all analysed measures (between March and July 2004 annual indices of core inflation surged by 1.2 – 3.8 percentage points) including the "net inflation" growth of

1.2 percentage points. This proves that it is not only supply but also demand factors that exercise a pro-inflationary influence.

Table 2

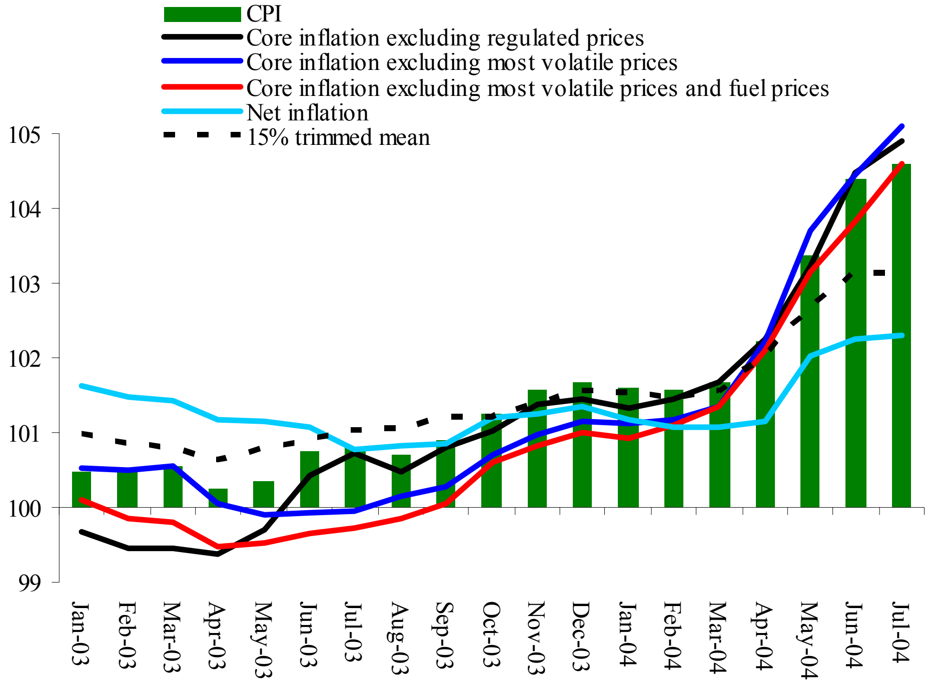
CPI and core inflation indices in 2004

	y/y change (%)							m/m change (%)						
	2004													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Jan	Feb	Mar	Apr	May	Jun	Jul
CPI	**1.6**	**1.6**	**1.7**	**2.2**	**3.4**	**4.4**	**4.6**	**0.4**	**0.1**	**0.3**	**0.8**	**1.0**	**0.9**	**-0.1**
Core inflation indices after excluding:														
Regulated prices	1.3	1.5	1.7	2.3	3.2	4.5	4.9	0.3	0.1	0.3	0.9	1.0	1.2	-0.2
Most volatile prices	1.1	1.2	1.3	2.2	3.7	4.5	5.1	0.1	0.1	0.2	0.7	1.1	0.0	0.8
Most volatile prices and fuel prices	0.9	1.1	1.3	2.1	3.2	3.8	4.6	0.0	0.0	0.1	0.7	0.9	0.0	0.9
Food and fuel prices (net inflation)	1.2	1.1	1.1	1.2	2.0	2.3	2.3	0.2	0.0	0.1	0.2	0.9	0.2	0.2
15% trimmed mean	1.5	1.5	1.5	2.0	2.7	3.2	3.1	0.2	0.1	0.2	0.2	0.4	0.2	0.2

Source: GUS data, NBP.

Figure 4

CPI and core inflation indices
(corresponding months of the previous year = 100)



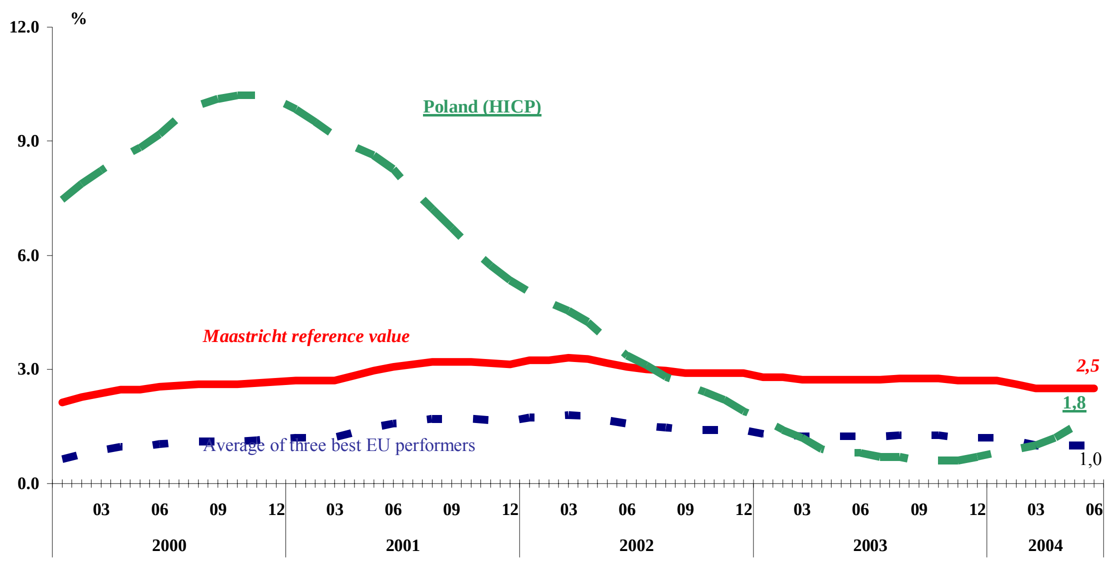
Source: GUS data, NBP estimates

Inflation and the Maastricht criterion

Inflation acceleration in Poland results in a steady rise in average annual inflation as measured by the harmonized index of consumer prices, HICP[5] (from 0.6% in November 2003 to 1.8% in June 2004 – Figure 5). In May-July 2004 the reference value for the price stability criterion[6] remained at the level of 2.5% still exceeding the average annual price growth rate in Poland. The average annual inflation will show an upward trend in the coming months due to the manner it is computed and the acceleration of current inflation.

Figure 5

Inflation in Poland (HICP 12-month moving average) and the Maastricht criterion (%)



Source: Eurostat data, NBP.

[5] The key difference between CPI and HICP is that the harmonized index additionally includes expenses incurred by foreigners buying goods and services in Poland, estimated expenses incurred by individuals staying at the so-called institutional households (for instance hospitals, prisons, rest homes) as well as expenditure on lotteries. Despite the fact that HICP and CPI baskets have different weight structure the differences between these indices are insignificant in practice.

[6] The reference value is calculated on the basis of average inflation in three EU countries with the lowest annual average price growth rate (as measured by HICP), increased by 1.5 percentage points. An accession country meets the price stability criterion when its annual average inflation does not exceed the reference value. For more information on the Maastricht criteria consult the *Report on the Costs and Benefits of Poland's Adoption of the Euro*, NBP, 2004.

1.2. Inflation expectations

After a slight decrease in May the consumers' inflation expectations continued to rise in the subsequent months, but at a pace lower than concurrent inflation growth (Figure 6). In July the expected annual inflation exceeded the upper tolerance limit for deviations from the inflation target (2.5% +/- 1 percentage point) for the first time.

The inflation expectations of enterprises went up for the next time. The median of the expected annual inflation (CPI) in 12 months' time reached 3.0% in Q3 2004 (Figure 7). Additionally, the results of the NBP's survey study[7] indicate that in Q3 2004 every one in two surveyed enterprises intends to raise the prices of its products. The expected price growth is also suggested by GUS economic climate surveys (Figure 8).

In the May *Inflation Report* issue it was emphasized that the major factor behind the growth of private individuals inflation expectations were the fears of price rises after Poland's entry to the EU. The findings of a survey study conducted in June show that in the opinion of its respondents Poland's EU membership had significantly contributed to price growth in the vast majority of groups of products considered (Table 3). Moreover, the respondents expect further price growth mainly in those groups of products and services where they have noticed the biggest acceleration. It is worth pointing out, however, that while the results of previous surveys indicated that the price growth was expected in all categories of products analysed[8], this time the respondents have recognized a fall in prices of some product groups (second-hand cars) or practically no change at all (telephone call charges).

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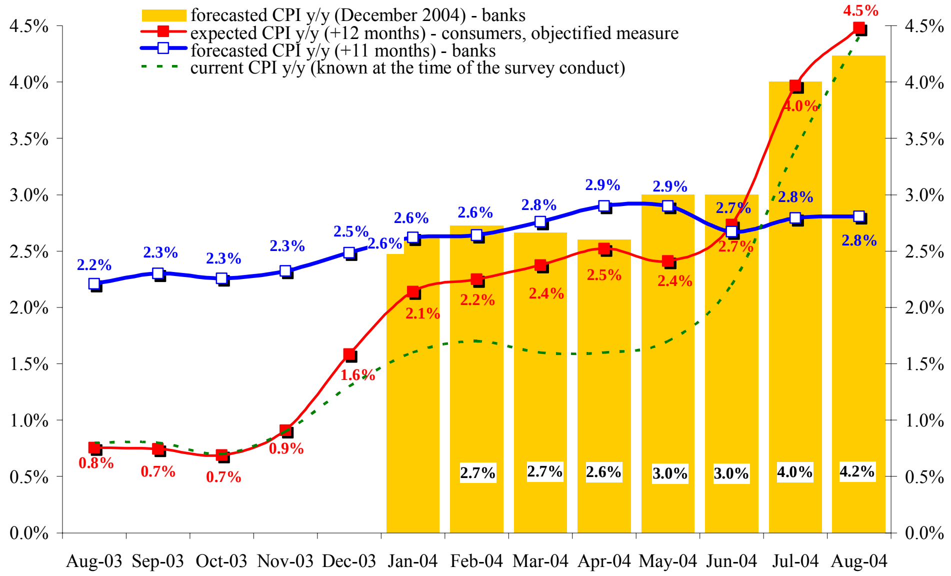
[7] *Preliminary information on the condition of the corporate sector with special regard to the general economic situation in Q3 2004, NBP.*
[8] See *Inflation Report May 2004*

Figure 6

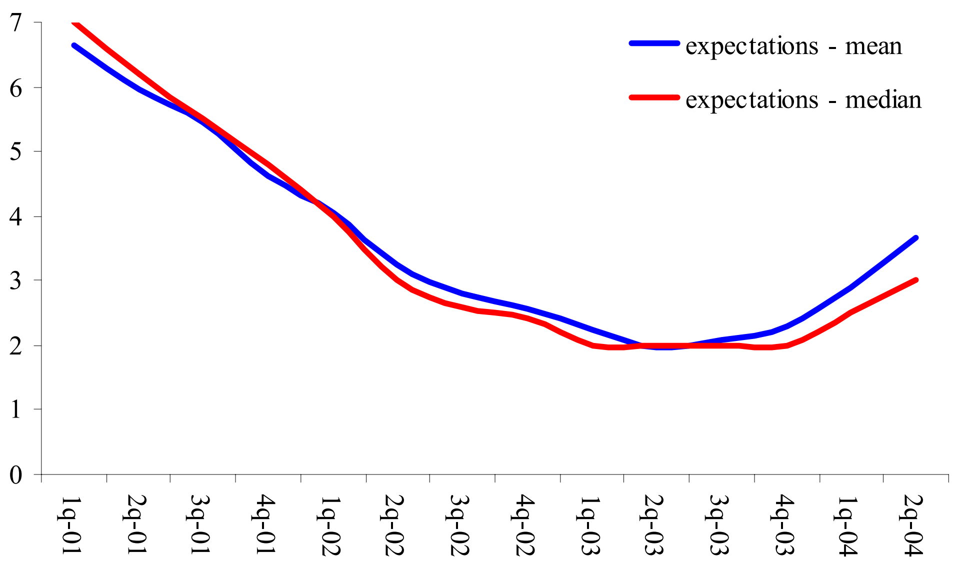
Inflation expectations of consumers and bank analysts' inflation forecasts in the period from August 2003 to August 2004[9]



Source: Reuters data, GUS, NBP estimates on the basis of Ipsos data.

Figure 7

Businesses' expectations of price increase in consumer goods and services in the next 12 months (in %)

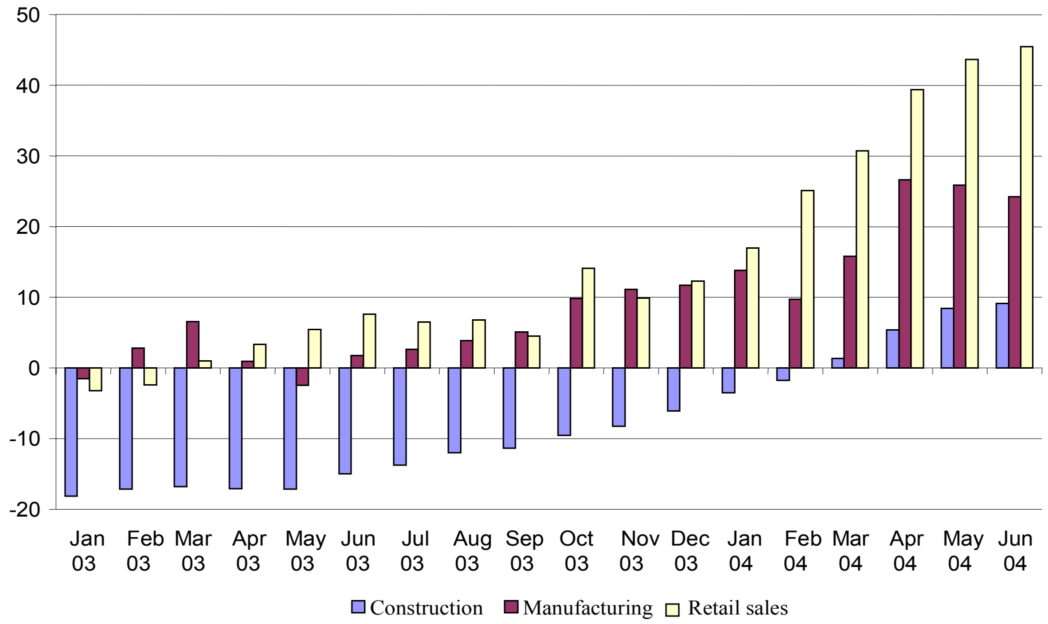


Source: NBP

[9] Inflation expectations of consumers and forecasts of bank analysts are not fully comparable because of different time horizons – bank analysts declare their forecasts for the month preceding the corresponding month of the following year, while consumers do so for the corresponding month of the following year. In addition, it should be taken into account that the inflation expectations of consumers are quantified on the assumption that the respondents perceive price movements against the background of official inflation statistics.

Figure 8

Forecasted price trend changes in construction, manufacturing and retail sales in the next 3 months – net balance



Source: GUS business conditions survey.

Survey question: "The expected retail prices of your company's products: (1) will rise; (2) will remain the same; (3) will fall". Net balance stands for the difference between the percentages of (1) and (3) answers.

Table 3

Responses to the question on price changes in selected goods and services after Poland's accession to the EU – June 2004

	Percentage of respondents who believe that after Poland's accession to the EU, prices:			
	(I) rose	*(II) remained the same*	*(III) decreased*	*(IV) it is hard to say how they changed*
	(1) will rise	**(2) will stay the same**	**(3) will decrease**	**(4) it is hard to say how they will change**
A. Food	*80*	*13*	*2*	*5*
	78	**7**	**2**	**14**
B. Clothing and footwear	*30*	*45*	*7*	*19*
	53	**19**	**10**	**18**
C. New cars	*39*	*24*	*10*	*27*
	50	**12**	**15**	**23**
D. Second-hand cars	*20*	*25*	*25*	*29*
	32	**14**	**31**	**24**

E. Electronics and household equipment	*22*	*35*	*15*	*27*
	33	**18**	**27**	**22**
F. Houses	*`48*	*21*	*4*	*27*
	62	**11**	**6**	**22**
G. Telephone call charges	*17*	*47*	*16*	*20*
	28	**18**	**33**	**21**

Source: Ipsos

Despite a significant rise in consumer inflation expectations, the disappearance of "EU-accession effect" is reflected in the May improvement in the structure of responses to survey questions concerning the expected price growth rate[10] (Figure 9), and also in the fact that the growth rate of inflation expectations is slower than the current inflation growth. In August 2003 the gap between the both significantly reduced – inflation expectations reached the level of 4.5%, i.e. only 0.1 percentage point above the current inflation rate.

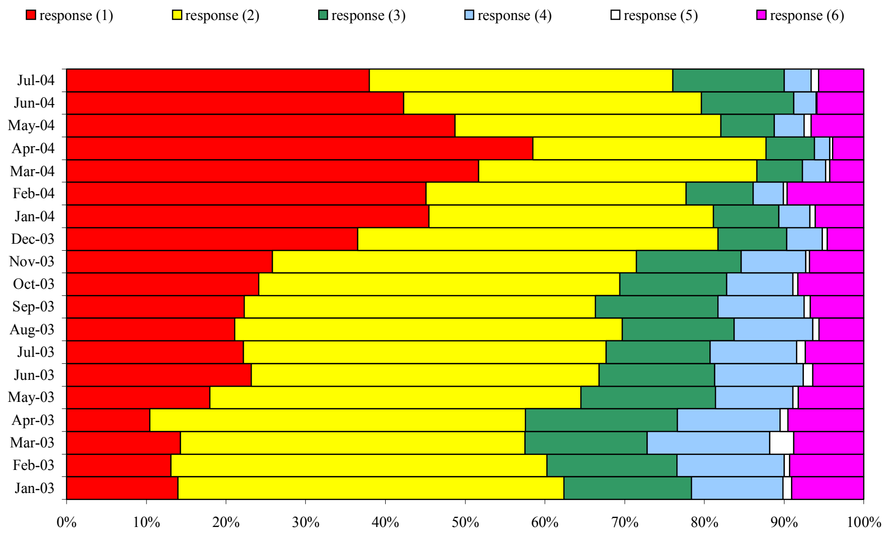
A strong rise in consumer inflation expectations in the period preceding Poland's EU-accession as well as its significant weakening in the first months of membership is also supported by GUS economic climate surveys (Figure 10).

Over the period covered by the analysis there was a significant rise in bank analysts' forecasts of the annual inflation at the end of 2004 with a rise of 1 percentage point in July alone (Figure 6). However, it is expected that such significant inflation acceleration will prove short-lived as the long-term inflation forecasts remain relatively stable. Still, the stabilisation of average expected inflation is accompanied by a steady rise of uncertainty about the price developments in the nearest future (extended spread between the maximal and minimal level of expected inflation – Figure 11).

[10] In May-August 2004 there was a significant decrease in the percentage of the most pessimistic respondents believing that in the next 12 months prices would grow even more quickly than they had so far.

Figure 9

Responses to the question asked by Ipsos

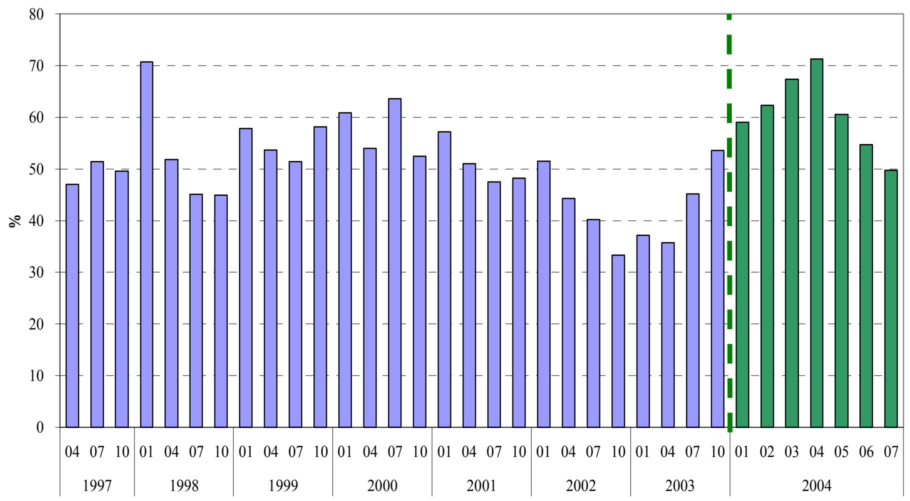


Source: NBP estimates on the basis of Ipsos data.

Ipsos survey question: "Considering the present situation, do you think that prices during the next 12 months: (1) will grow faster than they do now; (2) will rise at the same rate; (3) will grow at a slower rate; (4) will stay the same; (5) will decrease; (6) it is hard to say?"

Figure 10

Consumer expectations of trend changes in prices in the next 12 months – net balance (%)



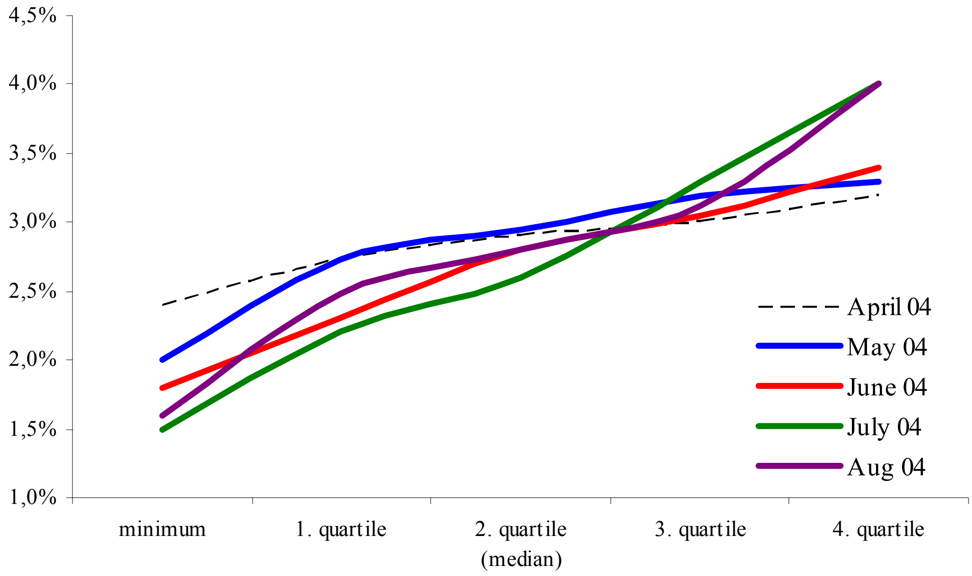
Source: GUS consumer economic climate survey.

Survey question: "Compared to the past 12 months, what is your prediction of changes in consumer prices for the next 12 months? (1) they will rise faster; (2) they will rise at similar rate; (3) they will rise more slowly; (4) they will stay at more or less same level; (5) they will fall; (6) I don't know"
Net balance of responses stands for the weighted sum of responses for each answer in the total number of respondents (answers are weighted as follows: 1 – answer (1); 0.5 – answer (2); 0 – answer (3) and (6); -0,5 – answer (4); -1 – answer (5)).

Please note: Monthly data starting from 2004; only quarterly data available before.

Figure 11

Distribution of bank analysts' inflation forecasts of the annual inflation rate in 11 months



Source: NBP estimates on the basis of Reuters data.

Inflation expectation developments in the period analysed allows the conclusion that despite the growth in current inflation, its impact on the expected long-term price growth rate has diminished. Nevertheless, inflation expectations remain at a high level and the developments of inflation predicted by the surveyed display large uncertainty.

2. DETERMINANTS OF INFLATION

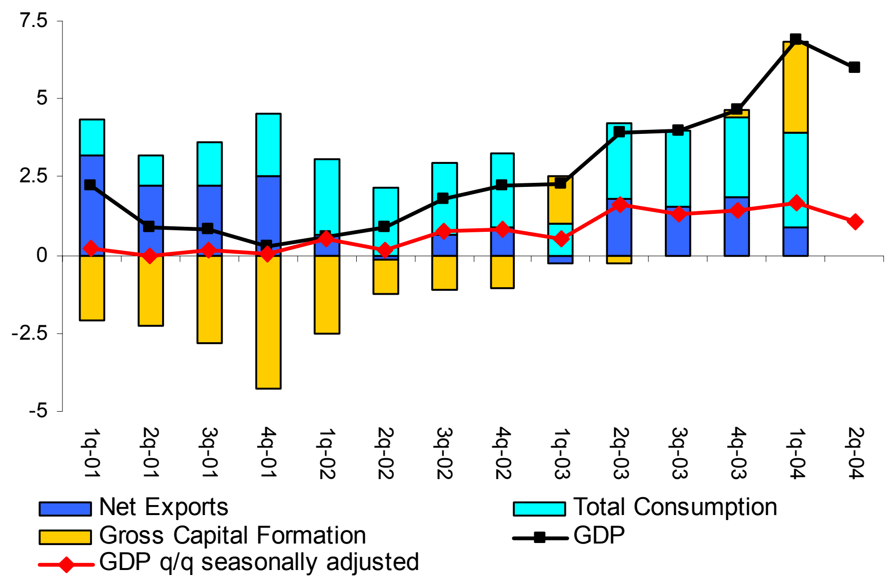
2.1 Demand

Q1 2004, in contrast to three previous quarters, saw a significant decrease in net exports contribution to GDP growth, while the acceleration of the economic growth (to 6.9% y/y) was mainly driven by domestic demand growth (Figure 12). This situation resulted from a considerable acceleration of imports on the one hand, and on the other from a very high growth of *gross capital formation* primarily caused by a strong increase in inventories. The acceleration of imports was accompanied by a still dynamic rise of export, which together with consumption remained the main growth factors in the analysed period.

Economic recovery was sustained in Q2 2004. As the very strong GDP growth in Q1 2004 partly resulted from "EU pre-accession effect" in Q2 it was slightly weakened. Still, it can be estimated that Q2 2004 GDP growth rate amounted to 6%, which represents preserving positive growth trends in Polish economy. It is believed that GDP growth rate's slowdown in Q2 2004 resulted from a significantly lower increase in inventories compared to Q1. Consumption and exports remained the main factors of growth.

Figure 12

Contribution of final demand components to GDP growth



Source: GUS data.

2.1.1. Consumption demand

The profile and structure of retail sales in Q2 2004 (see chapter *Output*) indicates that the individual consumption growth rate in this period was very similar to that recorded in Q1 (according to NBP estimates approx. 4% y/y). However, the data on retail sales is not entirely representative[11] and partially includes purchases of enterprises so the foregoing estimates have to be treated rather cautiously.

The rate of consumption growth was maintained with lower than in Q1 profile of gross disposable income of households. In nominal terms income growth was similar to that recorded in the previous quarter (approx. 6% y/y), but the inflation acceleration resulted in lowering the real growth to approx. 2.5% y/y (from 4.5% y/y in Q1).

For a second consecutive quarter the growth of primary incomes stemming directly from production exceeded social transfers. According to NBP estimates, the growth of income of private businesses and private owners was particularly high (8.8% y/y). It is estimated that income from paid employment rose, similarly to Q1, by more than 4% (y/y) in nominal terms, and social security transfers by 4.2%.

Because in Q2 2004 the annual growth of consumption spending exceeded the rise of purchasing power of households, the savings rate in this sector fell down again after an increase in Q1. According to NBP estimates gross household savings in Q2 2004 were lower than a year ago by 1.5 billon zloty mainly due to a deep drop in financial savings (see chapter *Credit and Money*). Still, gross household savings remained positive amounting to approx. 13 billion zloty, which was due to a significant climb of non-financial savings. It is estimated that the rise in household gross capital formation was mainly the result of the increase in housing investments and the purchase of production equipment and means of transport by small businesses included in the households sector.

2.1.2. Government demand

The analysis of the influence of the public finance sector on the domestic demand has been limited to the state budget, because of the lack of data on the other segments of this sector[12].

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[11] Data from retail outlets employing over 9 people.
[12] Data on the consolidated public finance sector are only available in annual terms, five months after the reporting period.

The state budget influences the domestic demand and its structure through budget expenditure and income policy.

High tax revenues, coming mainly from indirect taxes and corporate income tax, had a positive effect on the state budget revenue (Table 4). The highest revenue was recorded in March and April 2004 due to the fact that many purchases planned for the next months of the year were advanced because of fears about price growth after Poland's accession to the EU. Subsequent weakening of domestic demand and consequently of retail sales resulted in lower revenue from indirect taxes. Also, starting from 1 May 2004 there appeared two factors diminishing the state budget revenues: the changes in the value added and excise tax on products imported from the EU countries, and reduction in customs receipts due to the fact that its large proportion is now transferred to the EU budget. So far, the reduction of these takings has been partially compensated by the transfers from EU (special cash flow facility from EU budget) and the NBP profit transfer in June.

In the first six months of 2004 the state budget expenditure was in comparable terms[13] 1.2% y/y higher in real terms than in the previous year. This means that the state budget had a positive effect on the GDP rise, although it was significantly lower than that recorded in the first half of 2003 (the rise in expenditure amounted to 6.1% in real terms). State budget expenditure structure indicates that demand created by the state budget is dominated by consumption spending. Despite the rise in current state budget expenditure for the salaries in the budgetary sector and the purchase of materials and services (nominal rise of 6.1%), and a rise in transfers to private individuals (10.3% in nominal terms), the contribution of the public finance sector to the aggregated consumption demand was lower in the analysed period in comparison to the corresponding period of the previous year. This was the result, *inter alia*, of lower than last year expenditure on subsidies for the Labour Fund and on public debt servicing.

Investment expenditure of public finance did not have a significant bearing on rising domestic investment demand in the analysed period. After 5 months of 2004 the state budget investment spending was at a level similar to the corresponding period of the previous year, while local governments[14] lowered their investment expenditure by 2.4% y/y. The reduction

[13] Central budget expenditure adjusted for budget subsidies to Social Security Fund as a compensation for the reduction of social security contribution transferred to open pension funds. Central budget expenditure in 2004 adjusted for EU membership contribution constituted 99.6% of the expenditure in 2003.
[14] Data on the execution of local governments' budget refer to Q1 2004.

of investment spending was probably connected with accumulating means for co-financing investments from EU funds.

Table 4

Central budget in January – June 2004

	2004					2003	2004
	II quarter	I half of year	I quarter	II quarter	I half of year	I half of year	
	billion zloty		Corresponding period of the previous year = 100			Level of completion 2003 r.	Percentage of the annual plan
			%				
Total revenue, incl.:	38.51	74.52	107.8	100.0	103.6	47.3	48.4
- taxes	29.78	62.41	106.4	99.4	102.9	44.7	46.2
indirect	23.27	47.85	111.0	101.6	106.2	46.9	45.9
private income tax	4.58	8.79	80.2	90.3	85.2	40.1	40.1
corporate income tax	1.93	5.77	117.2	97.0	109.6	37.3	62.8
- other	8.74	12.11	123.7	102.2	107.4	69.0	64.0
Total expenditure, incl.:	46.58	94.40	97.9	99.3	98.6	50.6	47.3
- public debt servicing costs	6.52	11.47	91,9	94,8	93,5	51,0	43.0
- subsidies (Social Security Fund, Labour Fund, Farmer Social Insurance Fund) and general subsidies to local governments	17.07	39.82	94.4	87.6	91.4	55.1	56.5
Primary expenditure	40.07	82.93	98.7	100.1	99.4	50.6	47.9
Central budget deficit	-8.07	-19.88	76.5	96.2	83.4	64.3	43.6
Primary deficit	-1.56	-8.41	68.2	102.7	72.8	89.0	44.4

Source: Ministry of Finance, NBP calculations.

Good situation on the revenue side and the level of expenditure lower than in the previous year both resulted in a significant fall in the percentage of the state budget's deficit completed after the first six months in comparison to the previous year. However, it is predicted that in the second half of the year it will be hard to sustain this positive trend mainly because of expected increased activation of resources for co-financing projects from EU structural funds and EU Cohesion Fund, and also for direct farming subsidies at the end of the year.

In the mid- and long-term, significant savings in public finance should emerge after the Polish Parliament passes the bill amending pension and disability benefit indexation. However, there persists uncertainty as to the implementation of other postulates of the government Austerity Plan (*Public Expenditure Reform and Reduction Programme*). This uncertainty is reinforced by any decision which preserves the structure of excessive spending (e.g. dismissing the motion for pension verification). The introduction of the complete set of saving solutions is vital for halting the growth of public debt and thus avoiding the breach of the constitutional debt limit, and last but not least, for sustaining the economic recovery in Poland.

2.1.3. Investment demand

Q1 2004 saw a visible acceleration of investment demand. Gross fixed capital formation rose by 3.5% y/y in comparison to a 0.9% decrease in the entire 2003. The data evidences to the process of a steady rebound in investments after they had been continually falling since the beginning of 2000. However, it has to be emphasised that the micro data from corporate sector indicate that a significant proportion of fixed capital formation rise resulted from increased demand for means of transport (due to expected changes in tax regulations from 1 May 2004), while investment in machinery or buildings and construction was significantly less dynamic. Investment growth in Q1 was also fuelled by higher than previously exploitation of EU pre-accession funds for the purchase of farming equipment.

According to the survey data from F-01 questionnaires[15] the strongest growth of investment in Q1 2004 was recorded by exporters (over 24% y/y), especially those with a less-than-50-percent share of exports in their total income (more than 28% y/y). Investment outlays were dynamically rising also in foreign-owned enterprises (20% y/y) and in enterprises employing between 250 and 1999 employees (17% y/y). However, the overall investment growth was significantly lower (6% y/y) due to, *inter alia*, a fall in investments in non-exporting enterprises' group (of nearly 15% y/y) and in entities employing at least 2000 people (a fall of 13% y/y).

In spite of the fact that some of the foregoing factors of investment growth were of one-off nature the rate of fixed capital formation growth continued to accelerate in Q2. A particularly strong increase was recorded in the corporate sector (in the first half of 2004 it amounted to 8.7% y/y – Figure 13). The rise of enterprises investment was visible mainly in buildings and construction (in the first half of 2004 a rise of 12.7% y/y), while the rise in the investment in machinery and equipment was significantly lower (in the first half of 2004 of 1.4% y/y).

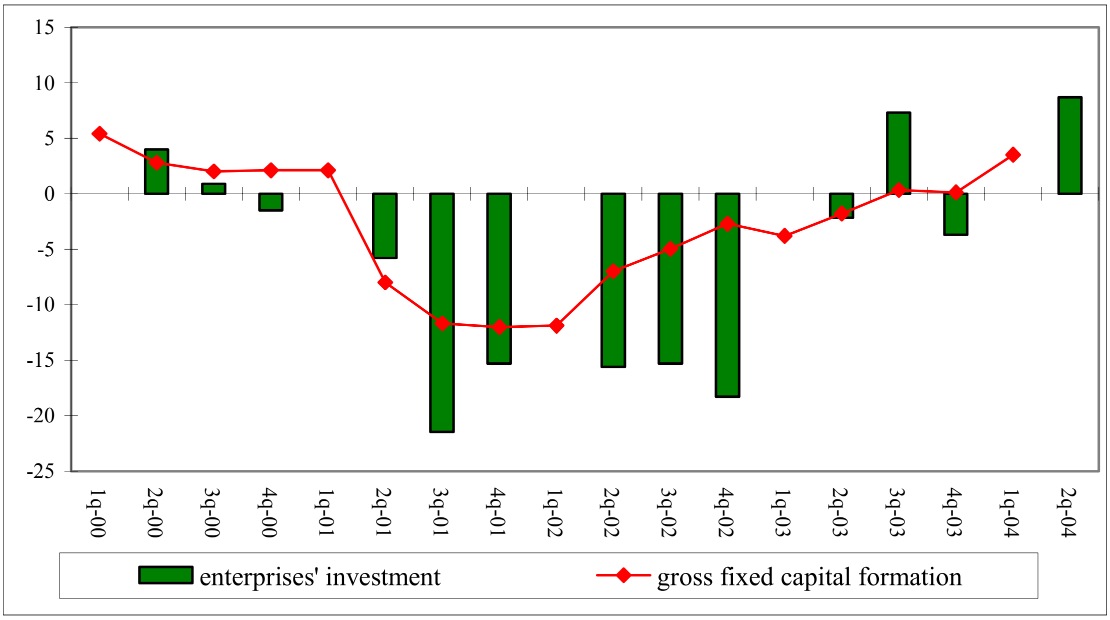
The expectation of investment growth in the quarters to come finds support in the following factors. Growing profits (especially on the part of exporters), the reduction of

[15] Filled in by enterprises with at least 50 employees.

corporate income tax as well as more favourable depreciation deductions all increase the opportunities of financing new investment. Another contributing factor should be offered by positive outlook for marketing the production from new investment. Moreover, capacity utilisation in manufacturing is constantly growing. At the moment, it is only slightly lower from the all-time maximum of 1997 (Figure 14), which in the view of growing domestic and external demand limits the possibilities of non-investment-based production growth in this sector. Investments should also be uplifted by the growing absorption of EU funds. Also the NBP's survey study results[16] evidence that the index of demand forecasts in enterprises producing investment inputs has reached the highest value since the beginning of the survey's history (i.e. since 2000).

Figure 13

Investment outlays (y/y changes, %)



Source: GUS data

* for enterprises: I half of the year, 3Q and 4Q

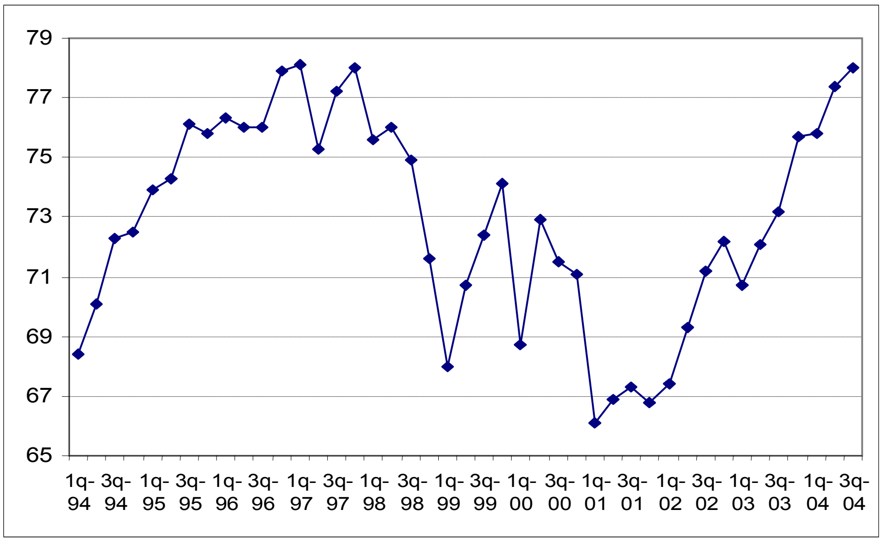
Still, the same survey study suggests that the percentage of newly-planed investments for Q3 2004 has been slightly lowered, even though the rising trend in investments has been sustained. What's more, despite the fact that the majority of enterprises still believe that the access to credit has deteriorated, the share of enterprises which negatively assess the

[16] *Preliminary information on the condition of the corporate sector with special regard to the general economic situation in Q3 2004, NBP.*

accessibility to this form of financing has shrank. In spite of a steady growth in demand for credit among the surveyed enterprises, the role of own resources in financing is growing, especially in investments.

Figure 14

Production capacity utilisation in manufacturing [%]



Source: GUS business tendency surveys.

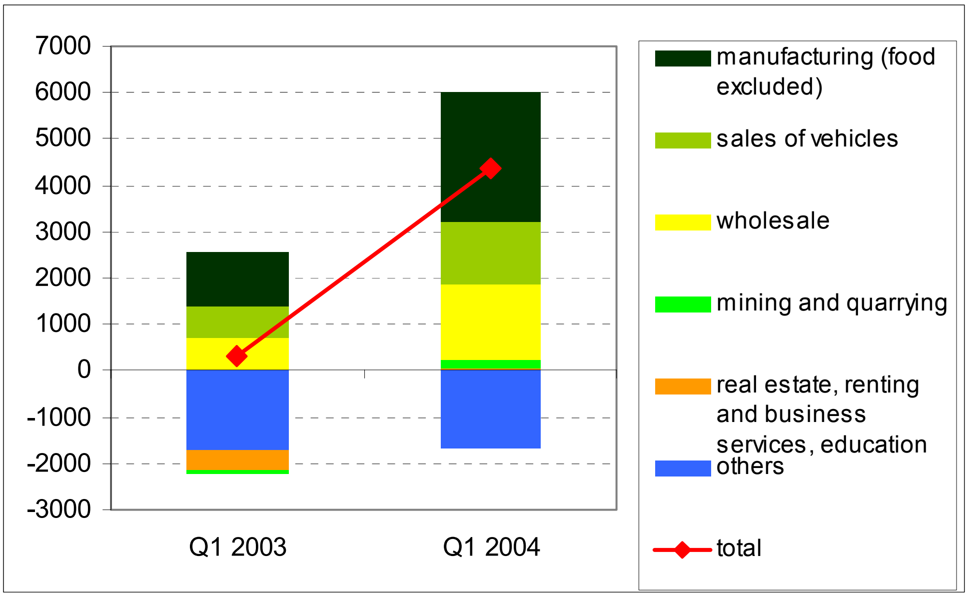
Inventories

Extremely high growth of gross capital formation in Q1 2004 resulted mainly from a strong growth of inventories. The contribution of inventories' growth to the growth rate of GDP reached a record level of 2.4 percentage points, which resulted from a number of factors (Figure 15). An increase in inventories of materials and work in progress in industry (which accompanies dynamic output growth) as well as the acceleration of growth in inventories of products in enterprises supplying industry (mainly the wholesale ones) is typical for the beginning of economic recovery phase. In turn the expectations of price growth after Poland's accession to the EU led to intensive growth in inventories (mainly cars) because of expected rise in sales in April, the month immediately preceding the accession.

In Q2 2004 inventories were almost entirely driven by factors characteristic for the phase of economic recovery alone. As a result, the impact of this category on the gross capital formation growth rate, though still substantial, was no longer as significant as in Q1.

Figure 15

Inventories growth in corporate sector (billion zloty, current prices)



Source: GUS Statistical Bulletin.

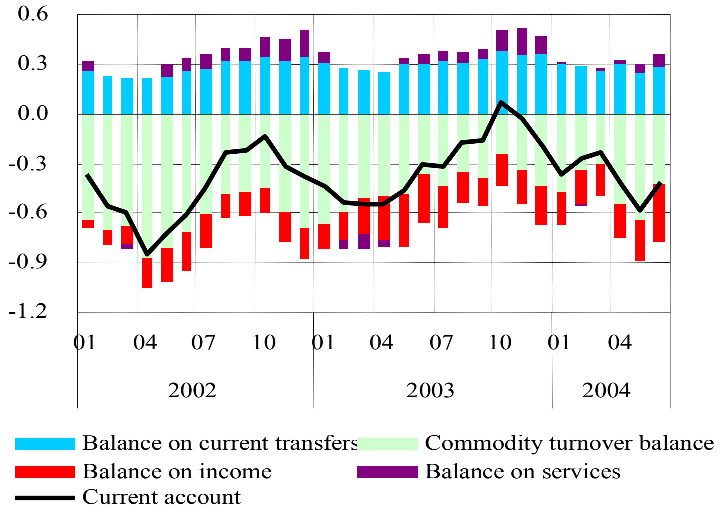
2.1.4 External demand and current account of the balance of payments

In the first six months of 2004 the trend of improving the current account balance continued. In January-June 2004 current account deficit amounted to 1.93 billon EURO (according to preliminary estimates), while in the corresponding period of 2003 it was 2.57 billon EURO. In the first half of the year the current account balance improved mainly due to improvement of trade balance and surplus in services. On the other hand, the deterioration in income and current transfers balance (Figure 16) had the opposite effect.

The trend of lowering trade deficit was accompanied by rising growth rates of both exports and imports. In January-June 2004 the value of exports rose by 23.1 % y/y, while the imports value grew by 19.4%, which means a significant acceleration in the trade turnover in comparison to the previous year (in January-June 2003 the value of exports rose by 6.8% and that of imports only by 0.1%).

Figure 16

Current account of the balance of payments – monthly data* (in billons EURO)

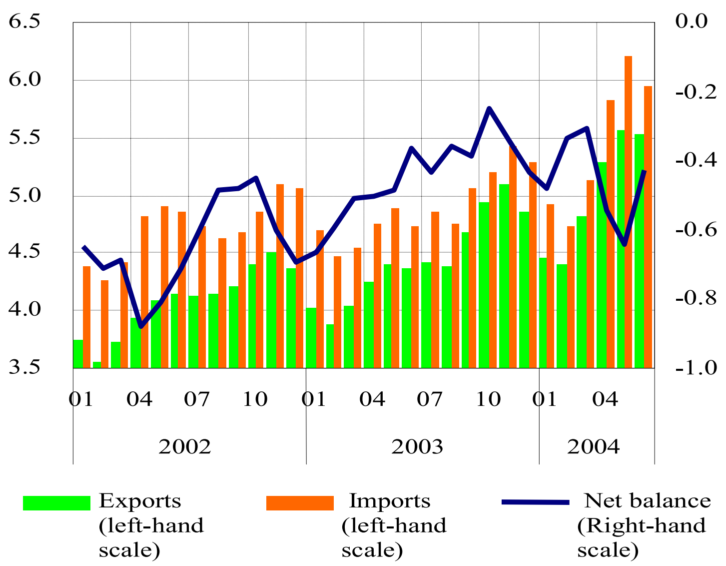


* 3-month moving average

Source: NBP data.

Figure 17

Poland's foreign trade – monthly data (in billions EURO)



* 3-month moving average

Source: NBP data.

Trade turnover developments displayed great volatility in the first six months of 2004. Due to changes in recording the foreign trade turnover in place since Poland's accession to the EU, revisions of the trade turnover figures are expected in the months to come (see Box 1).

This is also supported by a significant revision of earlier released data presented in the NBP information on the balance of payments published recently.

A strong increase in exports growth rate in March-April 2004 (up to 27/6% y/y) stemmed *inter alia* from acceleration of supplies foreseeing temporary difficulties connected with introducing the European tax payer's identification number on 1 May and from new reporting standards for Polish exporters. Another factor contributing to growth in exports to other accession countries could be offered by Polish exporters' fears related to the necessity of implementing EU foreign trade norms and standards from 1 May on. At the same time, Polish exports to Central and Eastern European countries increased because of considerable rise in import demand in these countries due to the anticipated effects of their accession to the EU. Exports of agricultural products were rising much more slowly compared to manufactured goods, which largely resulted from the expected improvement in conditions of agricultural trade after Poland's entry to the EU (the most important change being complete elimination of customs duties).

Similarly as in the case of exports strong growth in imports in March-April 2004 (by 30.7% y/y) stemmed from factors related to EU accession. The rise in imports from EU countries and from other accession countries was caused by the value added tax rates increase for some products after 1 May 2004. In the case of imports from new member countries the effect was reinforced by expected introduction of tougher standards and norms binding the trade between Poland and those countries. This was of a special importance in the case of low-manufactured goods.

Increase in the imports of selected manufactured articles from third-party (non-EU) countries resulted from the rise of some customs duties on 1 May 2004 (due to the introduction of the Common Customs Tariff[17] and to EU protective measures which apply to the Polish market after the accession). The biggest growth in imports was recorded in those groups where highest customs duty rise had been expected, that is in base metals and metallurgical articles (especially aluminium), ceramics and glass as well and chemical products.

[17] According to the Ministry of Economy's estimates customs duties were reduced on 35% of imports from non EU-countries and raised on almost 7% of the imports (the estimates were based on the structure of 2002 imports). Relatively small changes in customs duties apply to industrial articles. The customs rates of almost 60% of the value of imports of industrial articles did not change after Poland's EU accession. Customs duties on over a third of Poland's imports decreased. Change in the opposite direction – a rise in customs duties – applies to a relatively small group of goods (approx. 4% of the value of imports). However, in the case of trade in agricultural products the change of customs duties affects a greater proportion of imports. Customs duties remained unchanged for only 24% of goods imported to Poland from the third-party countries, while they were reduced for 38% and also raised for 38% of the imports.

Lower growth rates of imports of agricultural products from the EU and accession countries (in whose case even a drop in the value of imports was recorded) probably resulted from the importers' expectations for improvement in imports conditions (elimination of customs duties in trade in agricultural products), or from the termination of subsidies for EU-15 exports to Poland. In contrast, the imports of agricultural products from third-party countries rose dramatically, especially in those groups where custom duties were raised after 1 May 2004, that is in the case of grain, fresh fish as well as meat and fish products.

Box 1

One of the effects of Poland's entry into the EU customs area and single market are the changes in the way of recording trade flows between Poland and other EU countries. In consequence of abolishing controls on the intra-EU borders and resignation from the use of the unified customs document SAD (which will now be only applied in relations with third-party countries), a new system of recording trade within the EU – Intrastat – has been introduced. The system is based on collective data on sales and purchase transactions conducted in other EU countries in a specific period. The data is submitted by enterprises and verified on the basis of the value added tax collection system.

The foregoing changes limit the comparability of the May and subsequent months data with earlier data (acquired from SAD documents), both from this year and from the previous years. Thus, in the coming months significant revisions of trade value can be expected. It is also confirmed by the experience of other countries which had introduced similar changes to the recording systems before.

An important reason for the improvement in trade balance is the improving competitive position of Polish enterprises in relation to their foreign partners (Table 5). Contributing factors are the growth in labour productivity still higher than wage growth rate[18] and the zloty exchange rate – despite its recent appreciation – relatively profitable to exporters. NBP research[19] indicates that in the opinion of the half of surveyed enterprises, the zloty exchange rate securing the profitability of their export does not exceed 4.20 PLN/EURO.

[18] See chapter *Wages and productivity*

[19] *Preliminary information on the condition of the corporate sector with special regard to the general economic situation in Q3 2004, NBP.*

Table 5

Polish export and import competitiveness measures
(% change in comparison to the corresponding period of the previous year)

	Q1 2003	Q2 2003	Q3 2003	Q4 2003	Q1 2004
Export prices / Unit labour cost*	13.1	18.6	11.1	20.8	25.6
Import prices / Producer prices	8.5	8.8	3.8	4.0	4.8
REER ULC**	-15.0	-19.5	-11.9	-23.2	-23.3

* – Unit labour cost index is calculated as the ratio of the payroll per employee growth to the labour productivity growth, measured as output (volume) in manufacturing per person employed in this sector.

** – Real effective exchange rate, unit labour cost-deflated, negative value denotes depreciation.

Source: Own estimates based on the NBP, EC and GUS data.

Acceleration of Polish exports should be soon supported by the economic recovery in the euro-zone, in particular in Germany. In Q1 2004 German GDP rose by 0.8% (y/y) being the largest rise from the second half of 2001, but its largest components i.e. private consumption and investments decreased in comparison to last year (Table 6). As a consequence, export was the main factor driving the GDP growth. According to EUROSTAT preliminary data the Q2 2004 German GDP growth amounted to 1.5% (y/y) and external demand continued to be the main factor contributing to Germany's economic rebound. Continuation of positive trends in German economy and the central role of exports in the GDP growth are also signalled by German institutes' forecasts which were revised upwards in the last weeks[20].

Table 6

Developments of main GDP components in the euro-zone and Germany (changes in relation to corresponding period of the previous year in %, in constant prices)

	Euro-zone				Germany			
	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2003	Q3 2003	Q4 2003	Q1 2004
Gross Domestic Product	**0.1**	**0.4**	**0.7**	**1.3**	**-0.3**	**-0.3**	**0**	**0.8**
Domestic demand	**1**	**0.9**	**1.3**	**1**	**0.4**	**-0.3**	**0.4**	**-0.5**
Private consumption	1	0.8	0.6	0.7	0	-0.5	-0.6	-0.9
Public consumption	1.2	2	2	1.7	0.8	0.9	1.3	0
Gross fixed capital formation	-0.5	-0.6	-0.4	0.2	-2.2	-1.7	0.2	-0.8
Exports	**-1.2**	**-0.1**	**0.1**	**3.2**	**-0.1**	**1.4**	**0.9**	**5.8**
Imports	**1**	**1.3**	**1.7**	**2.7**	**2**	**1.7**	**2.2**	**2.8**

Source: Eurostat data.

[20] The July DIW forecast assumes that in 2004 German GDP will grow by 1.8% (i.e. 0.3 percentage point more than in the spring forecast). The main growth factor will be a remarkable acceleration of exports (by 8.7% y/y). A fast growth of GDP is also predicted in IWH forecast, which, however, foresees an even faster growth of exports (of 9.8%).

Taking into account that the Polish exports to Germany is mainly of supply nature[21], it is German exports (more than imports) that exercise greater influence on stimulating Polish exports to this country. Low share of consumption products (slightly over 30%) and investment goods (only 10%) results in a situation where consumption and investment demand in Germany have relatively less bearing on Polish exports.

Invariably high demand for Polish goods and the effects of Poland's accession to the EU boosted the dynamics of the euro zone imports from Poland. In January-May 2004[22] the growth rates of imports from Poland along with those from China were the highest among major EU-suppliers (rise of 18% y/y)[23] and also significantly higher than in the corresponding period of 2003 (when imports from Poland rose by 9%).

Favourable trends in the balance of payments in Q1 2004 were accompanied by the improvement in its financing structure. Despite a decrease in foreign direct investments (0.6 billon EURO compared to 1.2 billion EURO in Q1 2003), it financed 86% of the current account deficit (compared to approx. 73% in Q1 2003).

Preliminary monthly-basis balance of payments data for Q2 2004 also indicate that a high level of current account deficit financing by the inflow of direct investment will be sustained: in April (85%) and May (71%). In June a surplus in current account was recorded. However, the data has to be treated cautiously because of their preliminary status and the use of estimating methods (see Box 1).

In Q1 2004 improvement was recorded in four out of six early warning indicators selected for the assessment of the external imbalance (Table 7). The other two indicators, although deteriorated, remain at a safe level. According to preliminary data for Q2 2004, all the indicators continue to display a favourable profile.

In 2004 a reduction in current account deficit in comparison to 2003 is expected. It should result mainly from the decline in trade deficit caused by exports rising faster than imports and also by growing surplus in current transfers due to the inflow of EU funds. Current account deficit will remain at a safe level. Moreover, it will be wholly financed by FDI inflow. Starting from 2005 a steady deterioration of the current account balance due to faster growing imports is expected. However, the FDI inflow will still continue to finance the current account deficit to a large extent.

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[21] In 2003 supplying goods constituted almost 60% of Polish exports to Germany.
[22] Most recent available data on foreign trade is for May 2004.
[23] Euro-indicators – news release, 102/2004, Eurostat 20 August 2004.

Table 7

Selected warning indicators

Warning indicator	Q1 2003	Q2 2003	Q3 2003	Q4 2003	Q1 2004	Q2 2004**
Current account balance / GDP*	-2.7%	-2.3%	-2.2%	-2.0%	-1.5%	-1.6%
Trade balance/ GDP*	-3.6%	-3.2%	-3.1%	-2.7%	-2.4%	-2.5%
Direct investment / current account deficit	73.0%	82.4%	115.7%	146.0%	85.9%	108.0%
(Current account balance plus direct investment) / GDP	-1.0%	-0.4%	0.2%	0.6%	-0.2%	0.2%
Foreign debt service / revenue from export of goods and services	29.9%	35.7%	24.9%	31.9%	28.9%	-
Foreign reserves expressed in terms of monthly import of goods and services	5.4	5.1	4.8	4.4	5.2	4.5

* calculated yearly

** calculated on the basis of preliminary data, basing on the total of monthly data

Source: NBP estimates.

2.2 Output

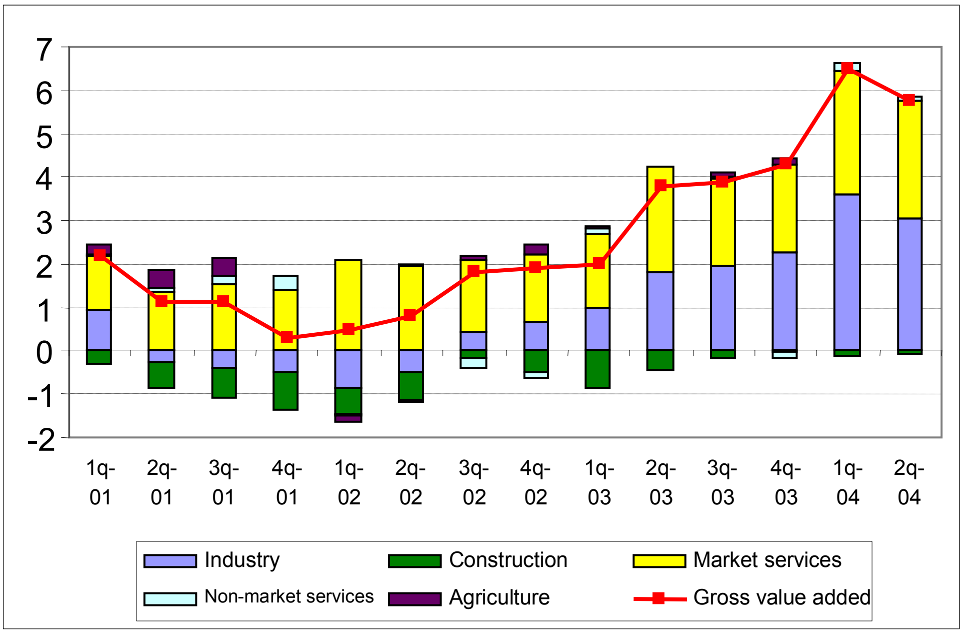
On the basis of preliminary data for April-June 2004 it can be estimated that the gross value added in Q2 2004 exceeded the level of the year before by approx. 6% (in Q1 2004 by 6.5%). Similarly to 2003 and Q1 2004, the rise was mainly brought about by the industry and service sectors (Figure 18).

The high growth rate of industrial enterprises output of was maintained. In Q2 2004 their output increased by 16.3% y/y (19% y/y in Q1). The high growth in industry was still upheld by a strong rise in the output of manufacturing enterprises, though a growth rate of 12% was also recorded in mining.

Export-oriented sectors displayed high growth, especially the production of means of transport as well as electronics and household appliances. A significant growth in the electronics output (radios and television sets) was prompted by production from investments initiated in 2002-2003. In addition, similarly to Q1 2004 the improving market of metals led to a sharp increase in production of metals and metal products.

Figure 18

Share of sectors in gross value added (percentage points)



Source: GUS data, NBP estimates for Q2 2004.

Q2 2004 confirmed the presumptions that the output growth rate of over 20% in March and April had been largely the consequence of the so-called "EU-effect". This was particularly visible in mineral industry (e.g. construction materials output), where the output growth rate was reduced to one-digit level in May (in January-April a rise of 45% had been recorded). Business tendency indicators suggest that the continuation of positive trends in industry should be expected, although at a rate lower than in the first half of 2004.

According to the NBP's estimates, the dynamic growth of gross value added in service sector was also continued in Q2 2004. As in the case of industry, the record-breaking trade turnover in March and April to a large extent resulted from the price growth expected after Poland's accession to the EU. This was confirmed in the next months by a drop in retail sales and to a lesser degree in wholesale. However, the slowdown in trade turnover annual growth rate (11.3%) compared to Q1 (13.6%) was not as significant. Similar situation occurred in transport services, whereas the growth rate of sales in telecommunication services upheld its high level.

Data on enterprises employing over 9 people indicate that the construction output continued to fall in Q2 2004, though at a slower rate than in the previous quarter. Poor performance of the sector stemmed from a decrease in investment-type construction work.

Nevertheless, in Q2 (particularly in April) a rise in renovation works was recorded owing to the change of the regulations of value added tax on construction.

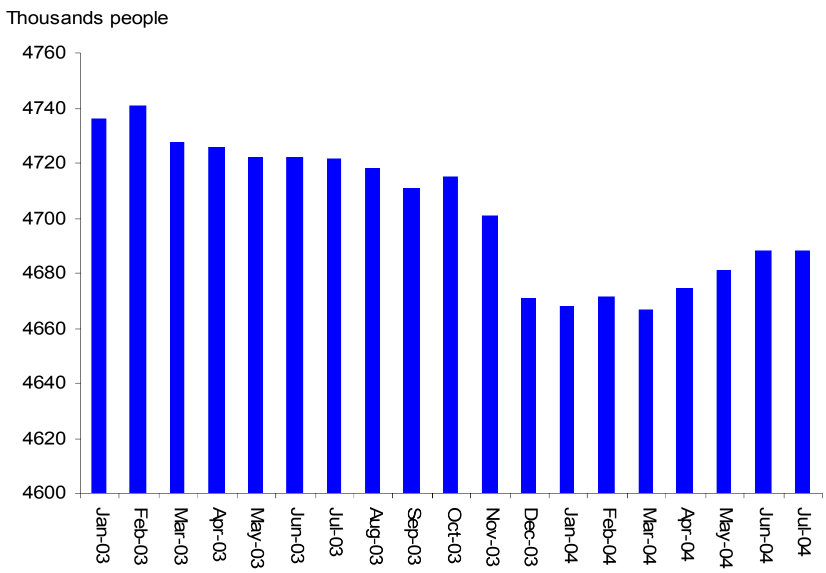
2.3. Labour market

2.3.1. Employment and unemployment

In May-July 2004 some positive trends in the labour market were enhanced. Corporate sector data point out that a long-lasting downward trend in employment has been reversed and employment has been rising slowly since Q2 2004 (Figure 19). Since the end of Q1 employment in enterprises has grown by the total of 21,000 people. The rise is relatively small, but after years of decline it is a long awaited sign of gradual recovery in the labour market. Moreover, according to the NBP's surveys[24], in Q3 2004 (for the first time in the survey history i.e. since 2000) more enterprises project employment growth than its decrease in the nearest future, which means that such rise may indeed come soon.

Figure 19

Employment in the corporate sector (thousands people)



Source: GUS

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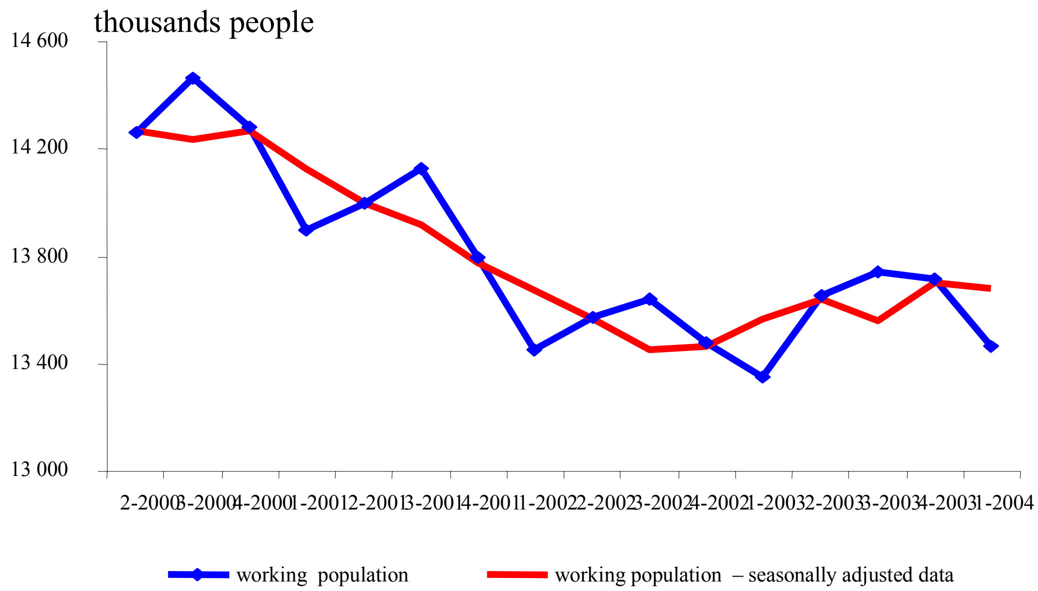
[24] *Preliminary data on the condition of the corporate sector with special regard to the general economic situation in Q3 2004, NBP.*

According to Labour Force Survey (LFS) data, Q1 2004 was the fourth subsequent quarter of growth in the number of people who declare to be working (by 117,000 i.e. 0.9%) in relation to the corresponding period last year[25] (Figure 20). A significant rise in the number of employed was recorded in the private sector (excluding private farms) – of 5.1% y/y – which indicates labour demand rise in this sector (Table 8). Still, the total rise in the number of employed was considerably weaker owing to a decrease in the number of employed in the public sector and in private farming.

Figure 20

Working persons according to LFS (thousands)



Source: LFS data, NBP estimates.

LFS data confirms the growing popularity of fixed term contracts versus a fall in permanent contracts (Table 8), which is a sign of the labour market becoming more flexible. However, after Poland's accession to the EU and the re-introduction of a Labour Code regulation stating that the third subsequent job contract must be permanent, the dynamic development of fixed term employment may be halted.

[25] Possible reasons for the differences between LFS data and the data submitted by enterprises were listed in *Inflation Report May 2004.*

Table 8

Changes in the number of working persons according to LFS in selected sections

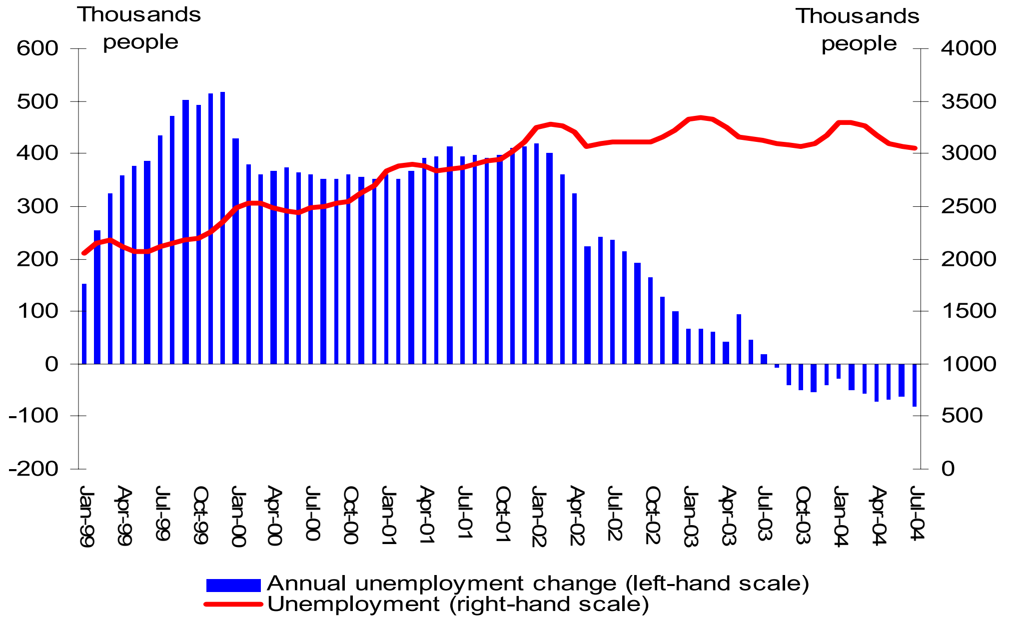
	Working persons in Q1 2004 (thousands)	**Growth y/y**
Total	13 465	0,90%
Place of residence		
urban areas	8 295	0,2%
rural areas	5 170	2,1%
Economic sector		
agriculture	2 285	-3,0%
industry	3 832	2,1%
services	7 347	1,5%
Ownership sector		
public	4 312	-3,7%
private (excluding farms)	7 033	5,1%
private (farms)	2 120	-2,6%
Employment status		
hired employees	9 986	1,9%
employers and self-employed	2 814	-3,3%
contributing family workers	665	3,9%
Type of job contract		
Fixed-term contract	7 958	-2,0%
Permanent contract	2 028	20,6%

Source: LFS.

Gradual increase in the number of people working has not fed through into a significant fall in unemployment as yet, though in July 2004 there were 3,042,000 unemployed registered in labour offices i.e. 80,600 less than the year before. Labour offices' data confirm that in 2004 the negative trend was reversed and unemployment started to ease off. Despite such positive changes unemployment remains at a high level, both according to LFS and to labour offices' statistics (Figure 21). The unemployment rate registered at the end of July 2004 amounted to 19.3%.

Figure 21

Number of unemployed registered in labour offices and its annual changes (thousands people)



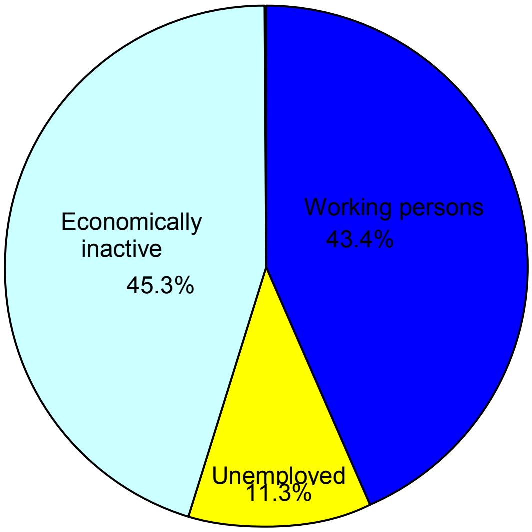
Source: GUS data.

Persistent high unemployment, accompanied by a slight growth in the number of working persons, to a large extent results from the fact that for several years the working age population has been dynamically increasing. According to LFS, in the period between Q1 2003 and Q1 2004, the number of persons aged 15 and more rose by almost 200,000. Despite the fact that in Q1 2004 the number of working persons was 117,000 larger than the year before, in the same period the number of unemployed increased by 56,000 and the number of economically inactive people – by 21,000. All these factors evidence that despite increasing labour demand, unemployment in Poland may stay on a high level due to the parallel significant increase in potential labour supply.

Poland's structure of economically active population is still very unfavourable so that the labour force potential remains largely underutilized. Only less than 44% of people over 15 years of age are working, and the remaining 56% either cannot find employment, do not wish to take up a job, or live on (OA or disability) pensions (Figure 22). This means that, statistically, for every working person there is over one not working person over 15.

Figure 22

Structure of population aged 15 and above in Poland – Q1 2004



Please note: The category of *Economically inactive* includes old age and disability pensioners.

Source: LFS.

Such an unfavourable economic structure of Polish population results in decreasing tax revenue, while at the same time it increases public expenditure (especially social spending), which is often financed by increasing taxation levied on working population. This in turn enlarges the size of tax wedge. Wide tax wedge decreases demand for work as well as labour supply and so reinforces low level of official employment and high unemployment.

Small proportion of working population in the total population stems primarily from institutional factors, which on the one hand decrease demand for legal work on the part of employers and on the other weaken the stimuli to active job seeking and taking up legal employment on the part of the unemployed. These adverse factors include, among others, high tax burdens, extremely costly social security system and insufficiently flexible Labour Code regulations.

In the second half of 2004 some improvement of the situation in the labour market is expected as the first effects of the 20th April Act on employment promotion and labour market institutions should become noticeable. Entrepreneurs should be encouraged to raise employment by, *inter alia*, the possibility of receiving reimbursement of: work station equipping and re-equipping costs, employee's insurance premiums costs, remuneration costs, underage apprentice training costs, employee training costs and the costs of work of the unemployed temporarily replacing employees sent on training course. Employment level should also be advanced by the Act on economic liberty.

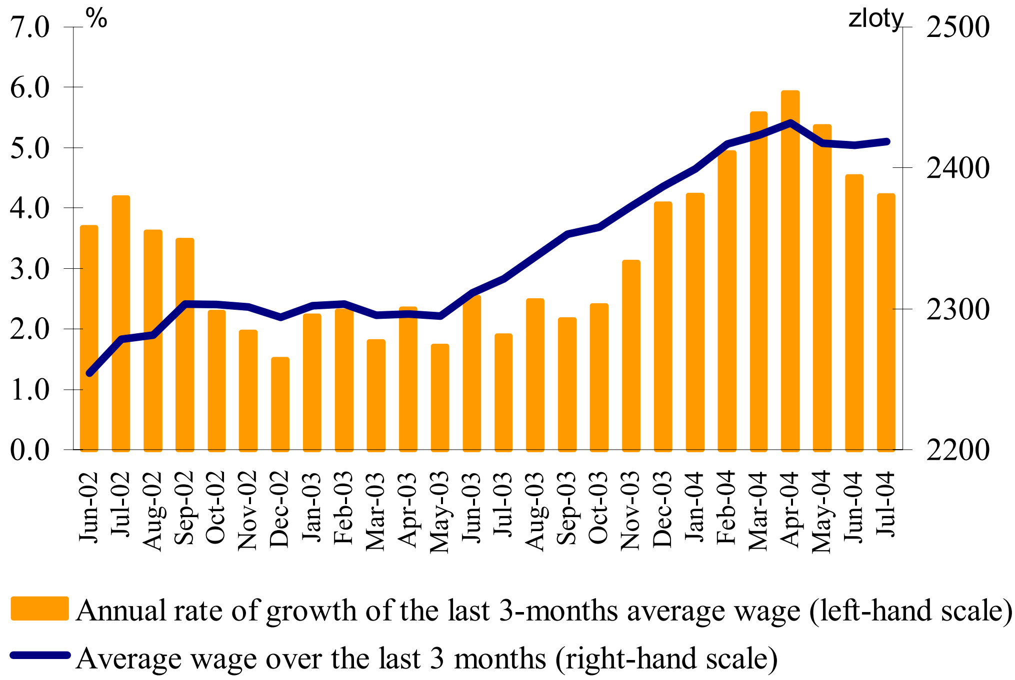
2.3.2. Wages and productivity

In May-July 2004 average wage level in corporate sector rose by 4.2% y/y in nominal terms, i.e. by 1.2 percentage points less than in the first four months of 2004 (Figure 23). As a result of a steady inflation growth being recorded since April 2004, the annual dynamics of remunerations was extremely low in real terms (real wage growth of 0.1% y/y, i.e. 3.4 percentage points less than in the first four months of 2004).

Despite a lower than in Q1 average wage level in the corporate sector, in Q2 payroll fund was advanced as a result of a small rise in employment. However, payroll fund growth rate was moderate, and the annual growth rate figures even display a downward tendency (Figure 24).

Figure 23

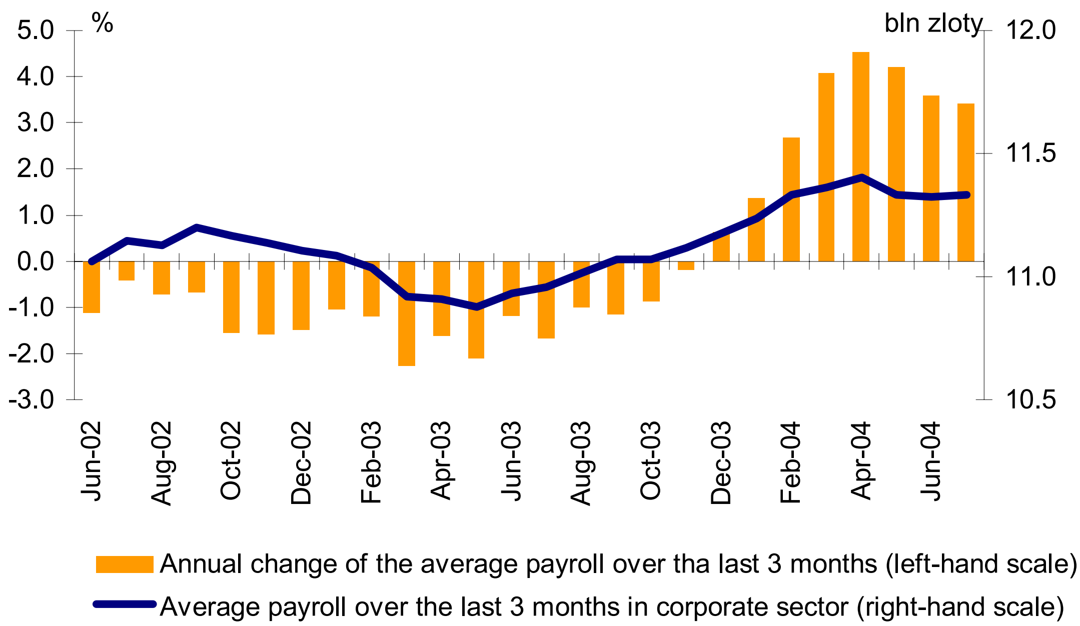
Wages in corporate sector (seasonally adjusted)



Source: GUS data, NBP estimates.

Figure 24

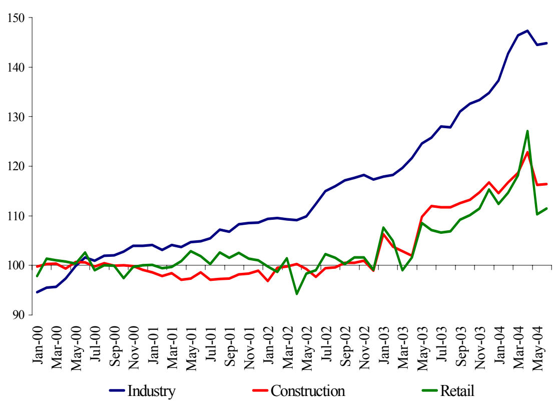
Payroll in corporate sector (seasonally adjusted)



Source: GUS data, NBP estimates.

Figure 25

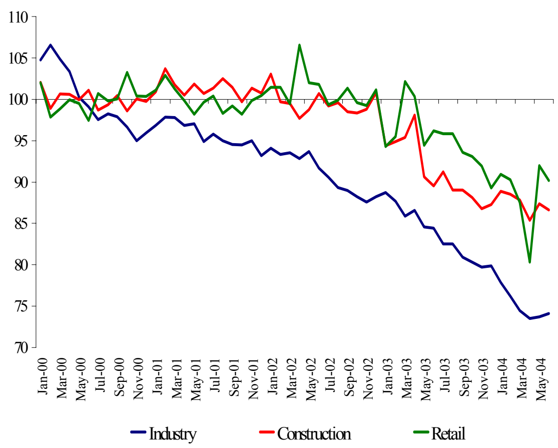
Labour productivity in selected sections of corporate sector (2000 average = 100)



Source: GUS data, NBP estimates

Figure 26

Unit labour costs in selected sections of corporate sector (2000 average = 100)

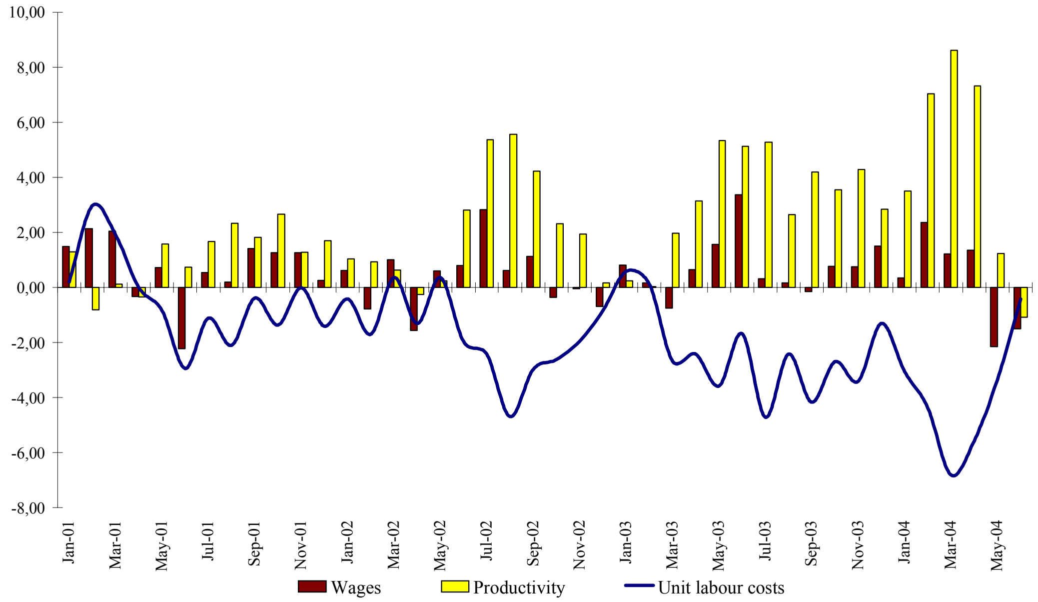


Source: GUS data, NBP estimates

Constantly high growth of industrial output and retail sales not accompanied by a significant rise in employment results in increasing labour productivity in corporate sector (Figure 25). Over the analysed period the annual rate of growth of labour productivity still surpassed the growth rate of wages, which led to a decrease in unit labour costs (Figure 26, Figure 27).

Figure 27

Wages, labour productivity and unit labour costs in industry
(change in the past 3 months over the previous 3-month period)



Source: GUS data, NBP estimates.

The situation in the labour market has been gradually improving, even though the dynamic economic growth has not instigated a significant growth in employment so far. A big number of not working people, i.e. unemployed or professionally inactive, points out to the size of Poland's unused labour resources. On one hand thus, high labour supply may limit the wage pressure and the increasing labour demand may lead to rise in employment. On the other hand, if the structure (professional, geographic, sector) of the growing labour supply is not compatible with the structure of labour demand, and if workforce is not sufficiently flexible and mobile (ready to relocate or change profession), then the wage pressure may continue to rise despite the considerable disposable labour resources. The share of the long-term unemployed in the total number of the unemployed, growing constantly over the last few years (now amounting to 53% - the highest figure in all EU 25 countries), confirms the existence of large structural unemployment in Poland.

2.4 Other costs and prices

2.4.1 Import prices

In Q2 2004 further price increase in international markets of raw materials was recorded (Table 9). The rise in non-energy raw materials was driven mainly by high demand for metals, especially in the USA and China. Demand pressure on the prices of metals, especially those of copper, will probably persist till the end of 2004.

Table 9

World prices of main raw materials' groups in USD (y/y change in %)

	Q3 2003	Q4 2003	Q1 2004	Q2 2004	03.2004	04.2004	05.2004	06.2004
Total	**6.8**	**13.4**	**13.1**	**36.2**	**20.6**	**35.5**	**40.5**	**32.7**
Non-energy raw materials	**8.3**	**16.4**	**25.4**	**25.5**	**29.5**	**29.4**	**23.1**	**24**
Food	-3.4	3.7	18.4	25.3	28.4	28.4	22.9	24.6
Industrial raw materials	14.7	23.4	29.1	25.6	30	29.8	23.1	23.8
Agricultural	16.3	23.6	17.3	11	13.4	11.6	11	10.5
Metals (non-ferrous)	14.3	24.8	39.8	41.4	44.4	51.2	35.5	37.5
Energy row materials	**6.1**	**12**	**7.6**	**42**	**16.5**	**38.9**	**50.1**	**37.1**
Crude oil	5.7	10.8	3	35.2	10.6	32.7	43.9	29

Source: HWWA – Hamburg Institute of International Economics.

Crude oil prices also strongly increased in Q2 2004. The rising trend in the oil prices has been visible ever since May 2003, but a significant annual growth has been observed only since April 2004 (Figure 28). This contributed to the rise of producer and consumer prices in the biggest world economies.

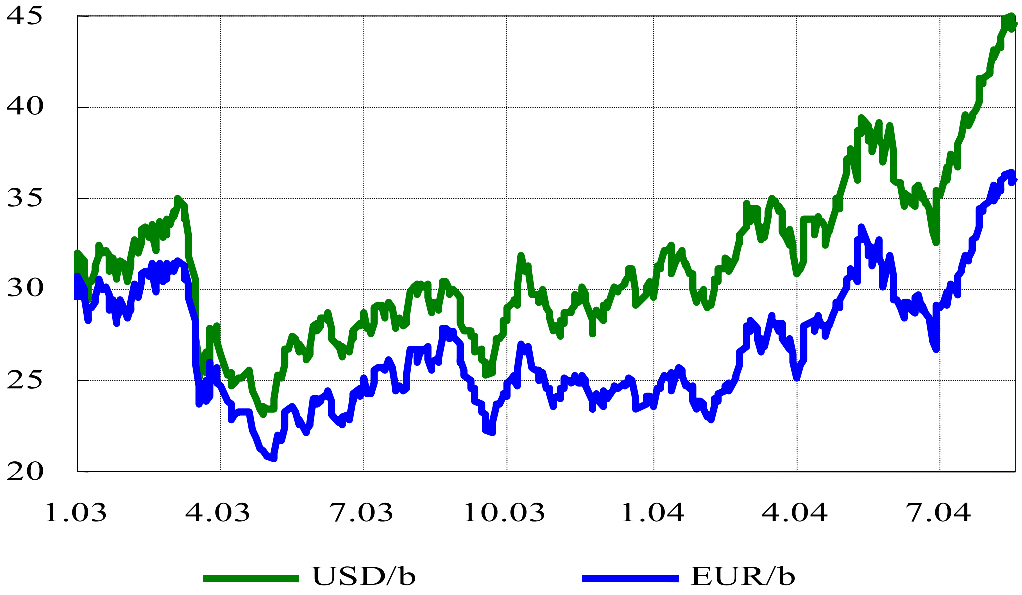
The pressure on rising crude oil prices has been occasioned by growing demand related to a visible recovery in world economy in general, and China and the USA in particular. According to the estimates of International Energy Agency (IEA), the growth of world demand for crude oil in 2004 will be the largest in 23 years[26]. At the same time IEA expects that over a third of the world demand will be created by the Chinese market.

[26] *Oil Market Report*, International Energy Agency, 10 June 2004. According to the presented estimates of demand for oil in the first half of 2004 and to the forecasts for the second half, the highest rise in demand occured in Q2 2004. From April through June 2004 world demand for oil rose by 3.5 millions b/d (while it is estimated that in the whole of 2004 it will rise on average by 2.3 billion b/d). Such a high level of demand was a result both of the recovery in the world economy and of the low base effect caused by a sharp decrease in demand in the second half of 2003 related to the SARS epidemic and the war in the Gulf.

High demand for oil results in a situation where the stocks of oil and oil products both in the USA and in the other developed countries still remain below many years' average. Moreover, in the summer an important factor creating price growth pressure in the USA is the decreasing gasoline reserves.

Figure 28

Brent crude oil prices in USD and EUR in 2003-2004



Source: Bloomberg.

Among the supply factors, the most important influence on crude oil prices is exercised by the destabilisation in Iraq. Moreover, serious problems of the biggest Russian oil company Jukos created anxiety about the continuity of supplies from the country which has so far had a stabilising effect on the situation in oil markets thanks to the steady rise of Russian oil production. Steep prices of oil are also upheld by an evident decrease of the OPEC's production capacity surplus, which in practice renders OPEC incapable of alleviating possible unexpected future disruptions of oil supply.

Forward market quotations as well as the forecasts of major think thanks[27] dealing with oil market indicate that oil prices will remain high in the coming months despite the fact that demand factors (demand growth in the second half of 2004 will probably fall to below 2 million b/d) will put pressure on price reduction.

[27] In its July report the US Dept. of Energy once more revised its forecast for oil prices upwards. According to the forecast the average world price of oil in 2004 will reach 34.9 USD/b.

The growth of oil prices did not reduce the world economy growth in any significant way so far. This is so because in historical perspective the present price hike is in real terms relatively small, and the world economy's dependence on oil has been considerably reduced since the first oil crisis. Also the experiences from the previous period of intensive price growth in 1999-2000 show that the world economy is now able to absorb higher oil prices more effectively than it used to be the case. Nevertheless, in the event of persisting rising trend in the prices of oil, the risk of weakening world economy's growth rate will build up. So far, the rise of oil prices translated into accelerated inflation in the world's two largest economies.

2.4.2. Producer prices

Since the beginning of 2004 a dynamic growth of producer prices in industry (as measured by PPI index) has been observed. In May it reached a peak of 9.6 % y/y (Table 10), which had been the highest value ever since 1997. In July PPI lowered to 8.6% y/y and in the NBP's opinion it will continue to fall in the coming months.

The rise in producer prices was mainly cost driven, resulting from rise in prices of raw materials including non-ferrous metals and crude oil. In those sections of industry that are not much dependent on raw materials' prices the rise was significantly lower. The situation in world markets of raw materials incited producer price growth also in the largest world economies (Figure 29). However, PPI growth in the euro-zone countries was significantly lower than in Poland and the USA.

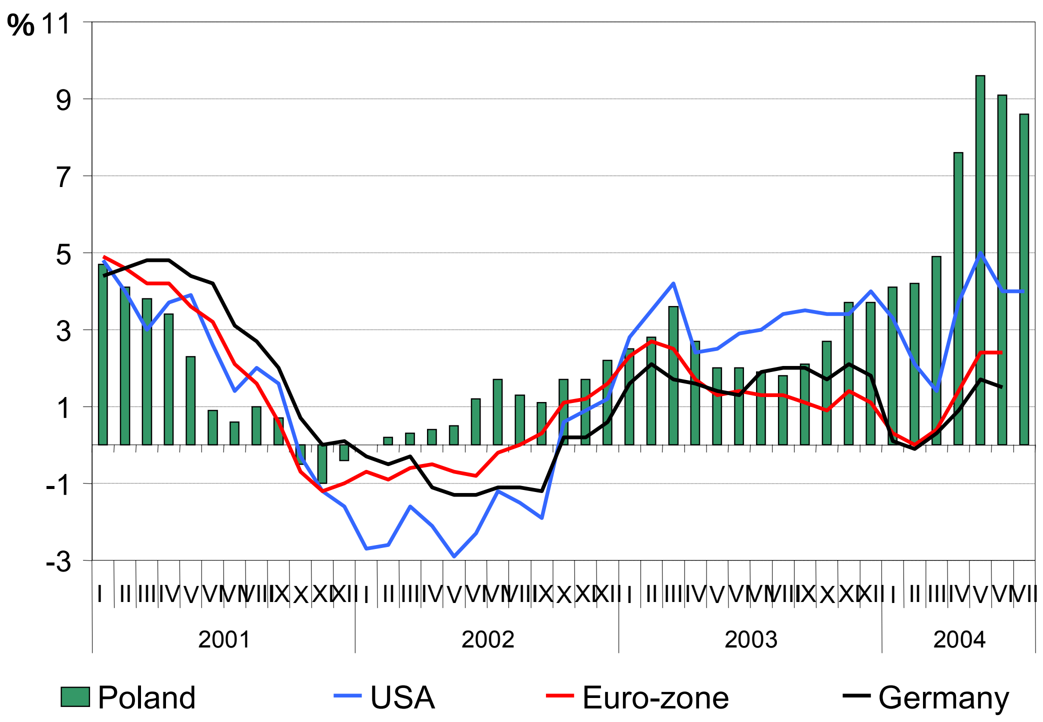
Table 10

Producer prices in industry and construction

Specification	2004							2004						
	I	II	III	IV	V		VII	I	II	III	IV	V	VI	VII
	corresponding month of the previous year =100							previous month =100						
PPI INDUSTRY, incl.:	104.1	104.2	104.9	107.6	109.6	109.1	108.6	100.8	100.7	101.5	102.1	101.2	99.8	100.2
-mining and quarrying	114.4	118.8	121.5	131.2	132.9	129.8	127.5	105.5	103.8	103.1	105.8	98.6	97.9	101.6
-manufacturing	103.7	103.5	104.1	106.9	109.2	108.7	108.5	100.6	100.7	101.6	102.1	101.6	99.8	100.1
-electricity, gas and water production and supply	103.2	103.1	103.1	102.9	102.9	102.8	101.3	100.0	100.0	100.1	100.1	100.1	100.1	100
CONSTRUCTION	99.3	99.5	100.2	101.4	102.2	102.8	103.4	100.2	100.1	100.6	101.0	100.8	100.7	100.5
PPI INDUSTRY – seasonally adjusted								100.7	100.6	100.8	100.8	100.8	100.6	100.6

Figure 29

PPI in Germany, Euro-zone, the USA and Poland
(y/y changes, %)



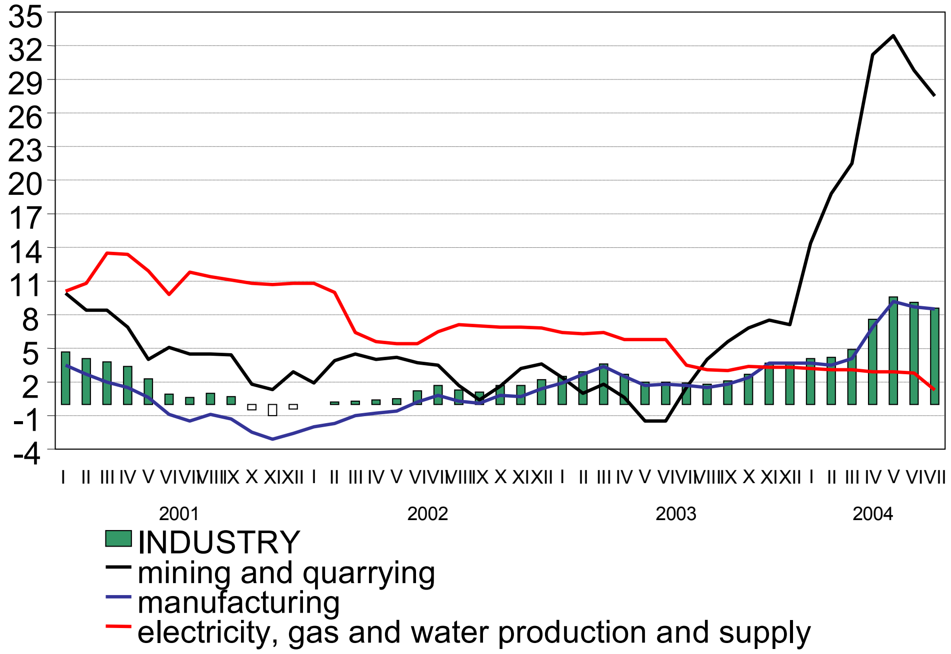
Source: Bloomberg, GUS.

The most significant contribution to PPI growth in Poland was the change in prices in industrial manufacturing – mainly because of this section's weight in the index. Still, since mid-2003 the contribution of mining and quarrying price growth in the rise of PPI (Figure 31) increased.

The acceleration of price growth in industrial manufacturing mainly stemmed from price growth in sections *coke production* and *crude oil refining* (in May of as much as 63.2% y/y) as well as in *metal production* (in May of 37% y/y). Since the beginning of the year there has also been a rise in the PPI in *food production* (in June of 11.2% y/y) as a result of high grain price after 2003 crop harvest being weaker than the year before, low supply of livestock (pork) and the rise in external demand for Polish food produce after EU enlargement. Out of the mentioned factors the better 2004 crop harvest, as forecasted by GUS, should alleviate the price growth in the second half of 2004.

Figure 30

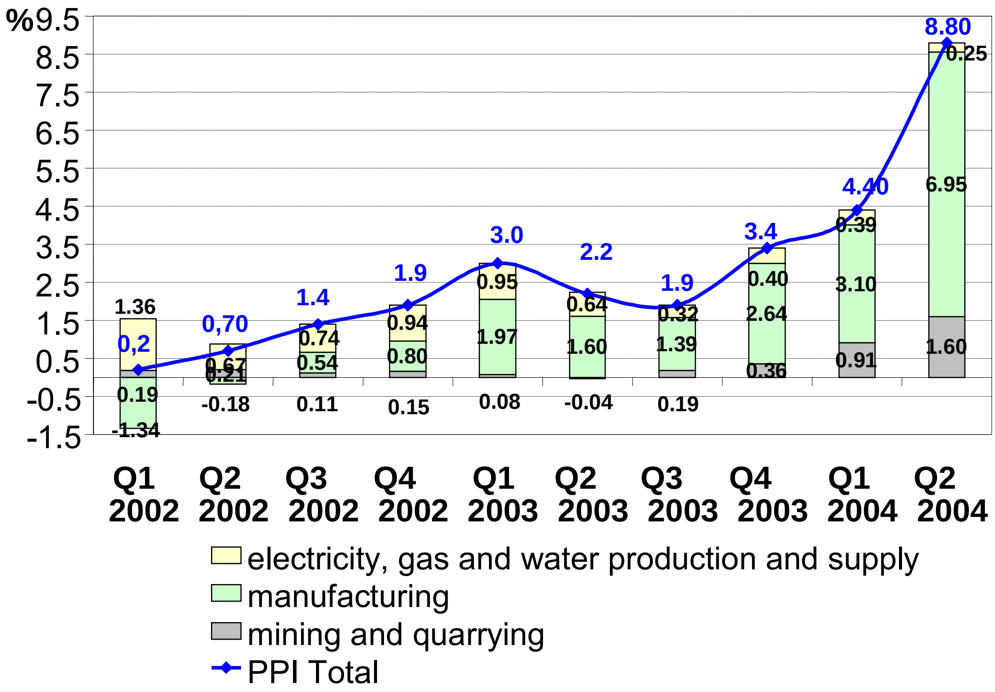
PPI in industry and its sections
(y/y changes, %)



Source: GUS data

Figure 31

Contribution of producer prices growth in sections of industry in total PPI growth (y/y changes, %)



Source: GUS data.

Producer prices in section *electricity, gas and water production and supply* are to a large degree regulated (e.g. by ERA – The Energy Regulatory Authority). After they had been changed in July 2003, the price index remained stable in the following months (with annual rate of growth of approx. 3%). Without a rise in July 2004, a fall of annual growth rate to 1.3% has been recorded. This situation should continue until next changes of tariff, scheduled for the beginning of 2005.

The structure of PPI growth indicates that the zloty's appreciation since April had a mitigating effect on the growth of export prices, and the growing producer prices resulted mainly from the growth of prices in the domestic market. Along with growing inflation expectations and the recovery of domestic demand, such a situation enhances the risk of cost effects passing through to the growth of prices of consumer goods and services.

2.5. Financial markets

2.5.1. Asset prices / Interest rates

In June and in July, the Monetary Policy Council raised NBP key rates by 0.5 and 0.25 percentage points, respectively[28].

The market participants' inflation expectations heightened before the May meeting of the MPC as a result of published data indicating i.a. larger than expected industrial output and retail sales in April and also higher food prices in the first half of May. The high probability of further rise in inflation was also pointed out by the MPS in the Information after its May meeting, when it decided to maintain the restrictive policy bias. The May CPI figures released in June and food prices for the first half of June added additional concern about as to the strengthening inflation threat. As a result, the June MPC's decision to raise the rates did not surprise the market, however the hike size exceeded what had been already discounted in the contracts. This is confirmed by an upward shift of the three-month forward rate curve constructed on the basis of FRA contracts (Figure 32).

FRA rates increased again on July 15 in response to the June CPI (4.4%), which significantly exceeded market expectations (3.4%). At the turn of August, the contract rates reflected subsequent NBP rate rises (July 28 – an increase of 25 basis points, August 31 – an expected increase of 25 basis points). July CPI figures released in August proved in line with market expectations (4.6% y/y versus the 4.7% expected).

Over the mid-May – end-June period FRA rates exhibited increased volatility (Figure 32). The increasing inflation expectations contributed to rate rises while the diminishing political risk favoured their downward movements. In July, the dynamic increase in FRA rates was the result of the intensification of expectations for the hikes of NBP rates, enhanced by the June inflation figures and statements by persons representing public institutions pointing to possible acceleration of inflation in the subsequent months. Contract rates have remained high since the second half of July, reflecting market expectations regarding further NBP rate rises.

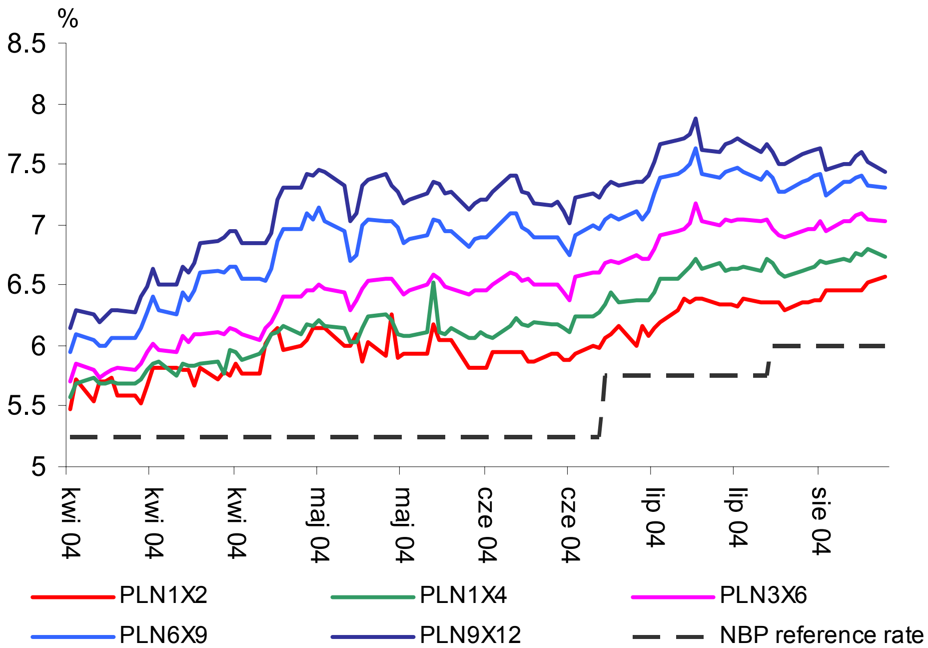
As of August 17, 2004, the expected rise in NBP rates based on the WIBOR 3M forward contracts amounts to around 50–75 basis points by the end of the year, and 100 basis points over a one year horizon. However, interest rates derived from yield curves reflect not only the

[28] The data presented in this chapter refer to the period from May to August 17, 2004 and do not take the decision of the MPC taken on August 25, 2004 into consideration.

market participants' expectations regarding the level of nominal interest rates but also the required compensation for the investors' risks. This risk premium factor should not influence the expected rate level calculated on the basis of survey results. The increase in interest rates by the end of 2004 anticipated by most analysts surveyed was 50 basis points while over the one-year horizon (August 2005), the median forecast was 75 basis points (Figure 34). The discrepancy between survey results and the expectations concerning interest rate levels derived from forward contracts, widening with time, reflects the increasing uncertainty (risk premium) of future investment decisions.

Figure 32

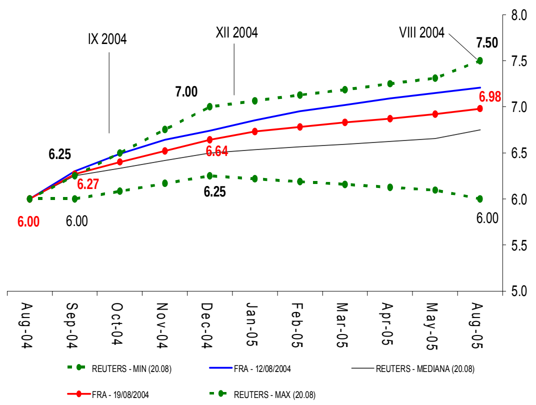
NBP reference rate and WIBOR 3M FRA rates



Source: Reuters data

Figure 33

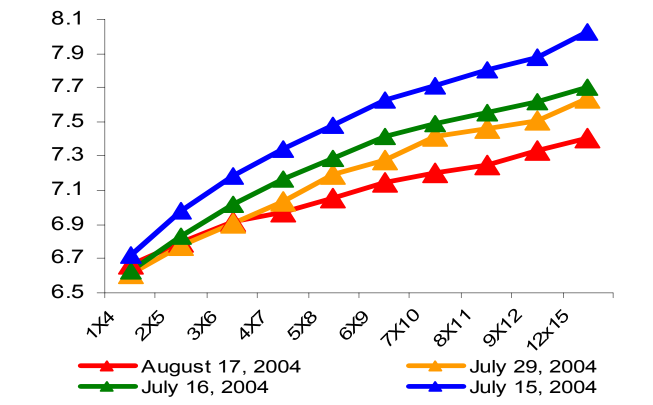
Three-month forward curves



Source: Reuters data

Figure 34

Expected changes in the reference rate based on WIBOR 3M FRAs and on Reuters survey of August 19



Source: Reuters data, NBP estimates

Trends in international financial markets

In the United States interest rates were raised for the first time since 2000 at the June meeting of the Fed (by 0.25 percentage points to 1.25%). Another increase (also by 0.25 percentage points) took place in August. Analysts expect further rises in 2004 and 2005 (Figure 35); the Fed Chairman statement indicated that interest rates would probably be changed gradually, in increments of 25 basis points. Nevertheless, the recently published worse-than-expected macroeconomic data regarding GDP growth and the labour market have fuelled anxiety concerning the sustainability of economic growth in the USA and thus influenced market expectations concerning subsequent interest rate rises.

In response to worries concerning the permanence of the recovery in the euro zone, the ECB has left its interest rates unchanged although the June inflation (2.4% y/y) exceeded the target level. Currently analysts do not expect any interest rates hikes in eurozone by the end of 2004 (Figure 36).

Figure 35

Evolution of expectations concerning changes in FED rates

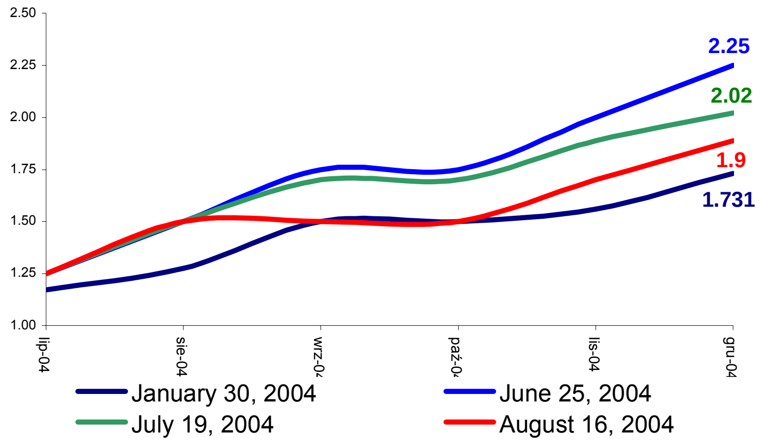
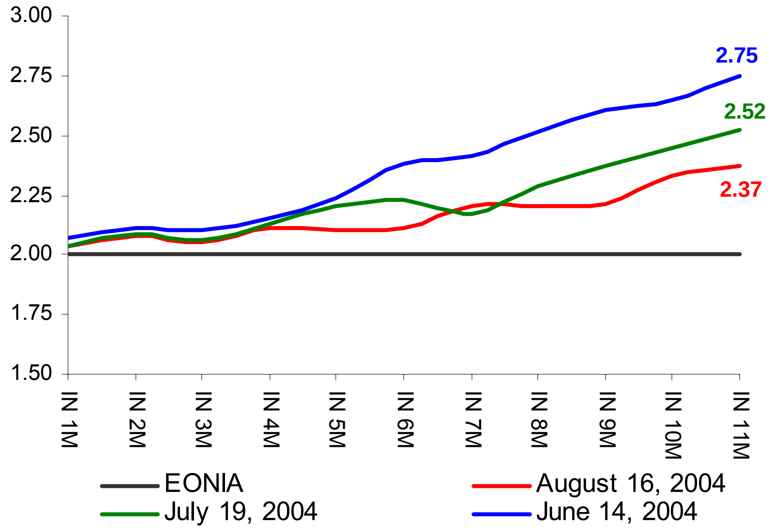


Figure 36

Expectations concerning changes in ECB rates



*based on EONIA swaps (overnight index swaps)

Source: NBP estimates

Long-term interest rates

Due to the government having won the vote of confidence at the end of June, the political risk which was one of the most important factors shaping bond prices in the second quarter of 2004, diminished. Political stabilisation contributed to a decrease in the yield of Treasury securities.

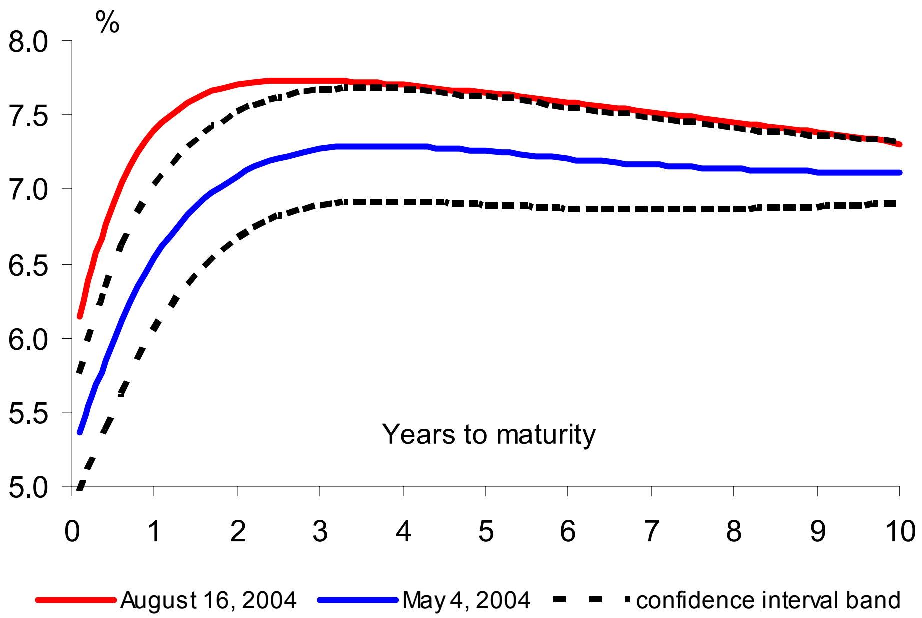
Another factor favourable to the bond market was the strong appreciation of zloty, which despite a decrease in the prices of Treasury bonds kept the market attractive to foreign investors. As a result, mid-August saw a record involvement of foreign investors in the domestic Treasury securities market (measured as the nominal value of bonds in non-residents' portfolios).

The major factors driving the short term trends in the Polish T-bond market and influencing the bond yields in the period under consideration were the changes of investors expectations as to the future path of interest rates and developments in the international markets (Fed Chairman statements, US Labour Market data).

Over May 4 – August 16 the yield of Polish Treasury bonds went up by 42 basis points on average, however the shift in the zero-coupon yield curve was not a parallel one. Short and medium segment rates went up further than the long-end rates (Figure 37). The non-parallel shift in the zero-coupon curve reflects the investors' expectations that the rise in inflation is temporary and will not significantly contribute to an increase in long-term inflation expectations, since long-term interest rates are largely shaped by inflation expectations.

Figure 37

Zero-coupon yield curve movements in the period from May 4 to August 16, 2004

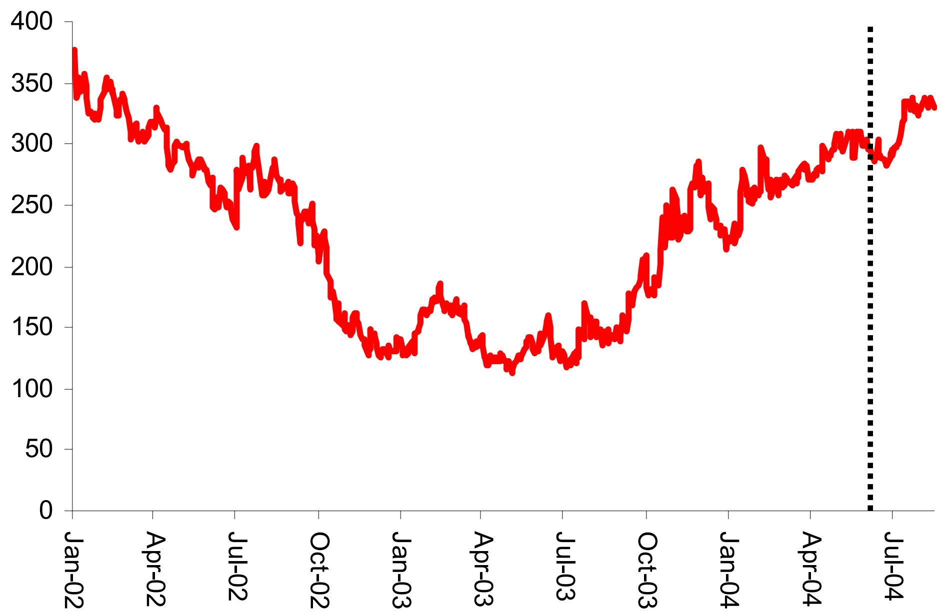


Source: Reuters data, NBP.

During the period under consideration, the spread between the yields of Polish and German 10-year government bonds further widened (Figure 38). At the beginning of July 2004, it reached 300–350 basis points, i.e. the highest level since the first quarter of 2002. This increase of spread results from a dominant role of local factors in the pricing of domestic Treasury securities, which prevails for a considerable period already. This unfavourable tendency has been reflected in the average annual yield level of Polish government bonds exceeding the reference value for the Maastricht interest rate criterion from April 2004 (Figure 39); meeting this criterion is one of the conditions of Poland's accession to the euro zone.

Figure 38

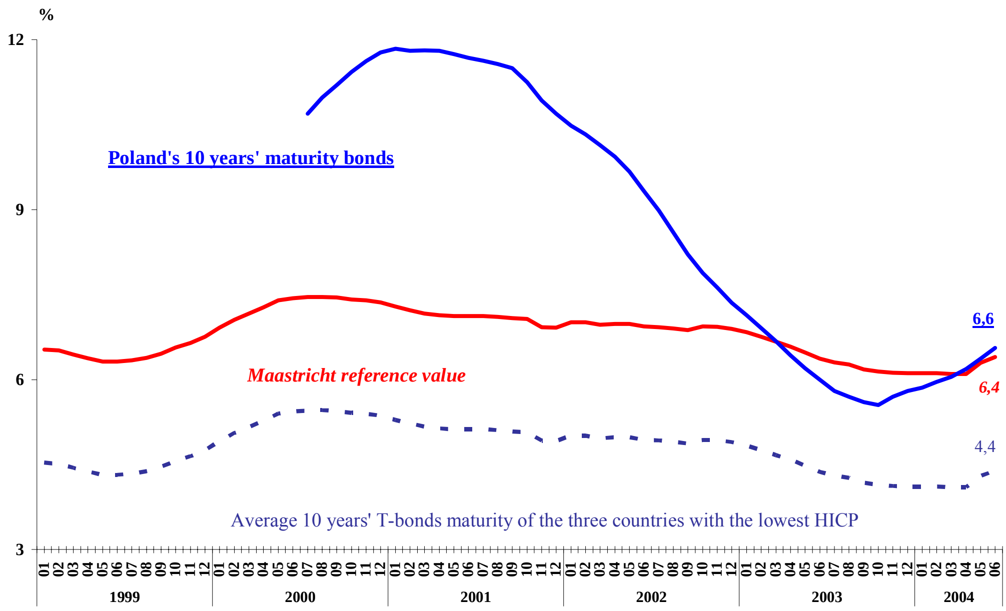
Polish and German 10-year government bonds spreads (in basis points)



Source: Reuters data, Bloomberg.

Figure 39

Average annual yield (12-month moving average) for long-term Treasury bonds in Poland versus the reference value for the Maastricht criterion



Source: Eurostat

2.5.2. Exchange rate

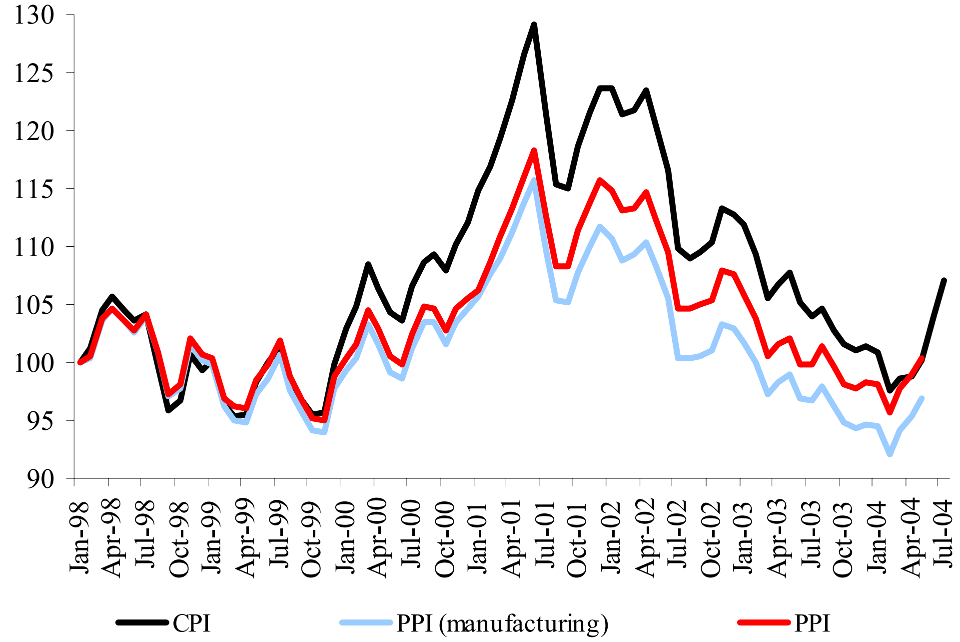
The downward trend of zloty starting in 2001 has been reversed since 2004 Q1. From February till July 2004 the CPI-deflated real effective exchange rate (REER) strengthened by 9.6%. Nevertheless, in June 2004 it was still 11.9% weaker than in June 2001 (Figure 40).

Several factors contributed to the appreciation of the zloty – the most important ones were favourable trends in the economy such as: safe current account balance, moderate increase in unit labour costs and strong economic growth. The strengthening of zloty was also fuelled by intensified expectations for rates hikes implying the growth of the attractiveness of Polish assets. The appreciation was additionally supported by the diminishing political risk as the government had won the vote of confidence in June.

A factor weakening zloty during the period under consideration was the downgrading of the long-term rating of the Polish debt in zloty by the Fitch agency. However, this had probably already been accounted for by the market.

Figure 40

Real effective PLN exchange rate (January 1998 = 100)



Source: NBP estimates

In the nearest future, the zloty exchange rate will probably be influenced mainly by the decisions related to the fiscal consolidation program as well as changes in interest rate disparity between Poland and its trading partners.

In the medium and long term, zloty should strengthen due to the expected rise of foreign direct investment as well as the net inflow of EU funds. Moreover, zloty appreciation should be stimulated by faster economic growth in Poland compared to its main trading partners and the safe current account deficit.

2.5.3. Credit and money[29]

Loans and bank interest rates

From April to July 2004 there was a decrease in loans and other claims on other domestic residents[30] (Table 11), which, however, resulted entirely from the appreciation of the

[29] This chapter is based on balance sheet data for the period ending in July 2004, adjusted for exchange rate movements.
[30] Other residents include: non-monetary financial institutions, non-financial entities, local governments, and social security funds.

zloty. After adjusting for exchange rate movements, a small increase in lending was recorded by commercial banks. An increase in household debt was accompanied by a decrease in loans to businesses.

Table 11

Loans and other claims

	As of July 31, 2004	Change July 2004 / April 2004		Change July 2004 / July 2003	
	PLN billion		%	PLN billion	%
LOANS AND OTHER CLAIMS	261.3	-5.7	-2.1	11.3	4.5
Households	109.9	2.1	1.9	14.9	15.7
of which individuals	80.0	1.7	2.2	12.6	18.8
Non-monetary financial institutions	10.7	0.0	-0.2	0.8	8.3
Non-financial corporations	126.1	-6.2	-4.7	-4.9	-3.7
Non-profit institutions serving households	0.8	0.0	-3.8	-0.2	-15.9
Local government institutions	10.1	0.0	-0.2	0.5	5.6
Social security funds	3.7	-1.4	-27.9	0.0	1.2

Source: NBP data

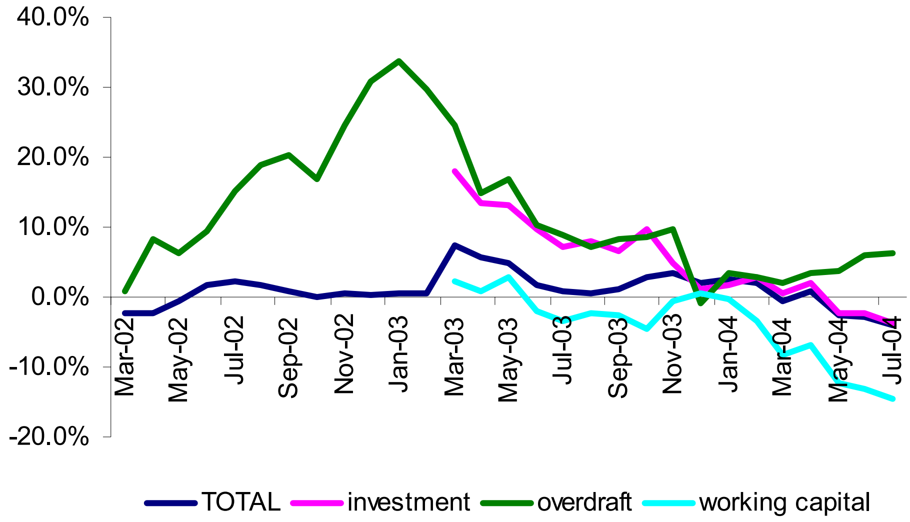
Loans to businesses

After a small increase in lending to businesses in the first four months of 2004, in the period from April to July businesses reduced their liabilities to banks by PLN 6.2 billion (-4.7%). The annual growth rate of corporate loans went down from -0.1% in April to -3.7% in July. After adjusting for movements in exchange rates, the fall in claims on businesses was much smaller and amounted to PLN -2.7 billion (-2.0%).

The large decrease in corporate debt at commercial banks was primarily caused by a reduction in working-capital loans amounting to PLN 3.6 billion (-9.4%). Moreover, in the period under consideration, the expected increase in activity in the investment loan market did not materialize. After a decrease amounting to PLN 0.2 billion in the first four months of 2004, from April to July the amount of investment loans fell by PLN 2.0 billion, i.e. 4.8%.

Figure 41

Loans to businesses (y/y changes, %)



Source: NBP data

From the middle of April, there was a rise in interest rates in the interbank market, accompanied by increase in interest rates on loans to businesses. The weighted average interest rate on credits in zloty in the banking sector was 7.8% at the end of July against 7.3% in April. Interest rates on loans with a maturity of over 5 years, which are used for financing investment activity, rose from 7.6% to 8.0% during the same period (Table).

Table 12

Interest rates on corporate loans in zloty

	Mar 04	Apr 04	May 04	Jun 04	Jul 04
authorised overdraft	6.8	7.1	7.1	7.1	7.5
1 year	6.8	7.1	7.2	7.3	7.6
2 years	7.4	7.6	7.7	7.8	8.1
3 years	7.9	8.0	8.2	8.2	8.6
5 years	7.5	7.8	7.8	7.9	8.3
over 5 years	7.4	7.6	7.7	7.7	8.0
Total	**7.1**	**7.3**	**7.4**	**7.4**	**7.8**

Source: NBP data

The surveys conducted by the NBP in Q3 2004 indicate that the cost of credit is not numbered among the main obstacles to the business activity of enterprises. Moreover, the assessment of the availability of bank loans by surveyed enterprises is improving. Both external and internal barriers, the latter resulting from the businesses' poor standing and the low credit rating, with regard to credit availability are diminishing. However, in Q2 2004 only 42% of the enterprises that perceived credit availability as improving and declared to start new investment activity, planned to finance them with bank loans. The enterprises' own resources remained the primary source of financing both day-to-day and investment activity. The constantly improving liquidity in virtually all groups of firms surveyed was a contributing factor here. Liabilities to other businesses, were another way of financing everyday operations. Among the surveyed enterprises only 15% declared that they used bank loans to finance their day-to-day business; the same number of enterprises would take out a loan when starting investment activity.

Foreign debt of Polish enterprises

The foreign debt of Polish enterprises went up from EUR 39,452 million at the end of 2003 to EUR 40,412 million at the end of Q1 2004, mainly due to an increase in outstanding debt securities and foreign trade credits granted. The maturity structure of corporate foreign debt it still dominated by long-term liabilities (approx. 75%)[31]. The liabilities are also still highly concentrated – over half of foreign debt in this sector are loans of 50 enterprises. Similarly as in 2003, enterprises using this form of financing are mostly telecommunications, fuel, transport and energy companies. With regard to the currency structure of corporate foreign debt, the euro continues to dominate (around 61%) and the share of the zloty is still growing (from 14% at the end of 2003 to 20%), while the share of the US dollar is decreasing (from 20% to 15%). The highest liabilities of Polish corporations were to creditors from the Netherlands, Germany, Luxembourg, and France.

Household loans

After a significant rise in loans to households in April 2004, resulting probably from increased purchases before Poland's accession to the EU, from April to July 2004 the growth of lending to this sector slowed down. Claims on households rose by PLN 2.1 billion (1.9%).

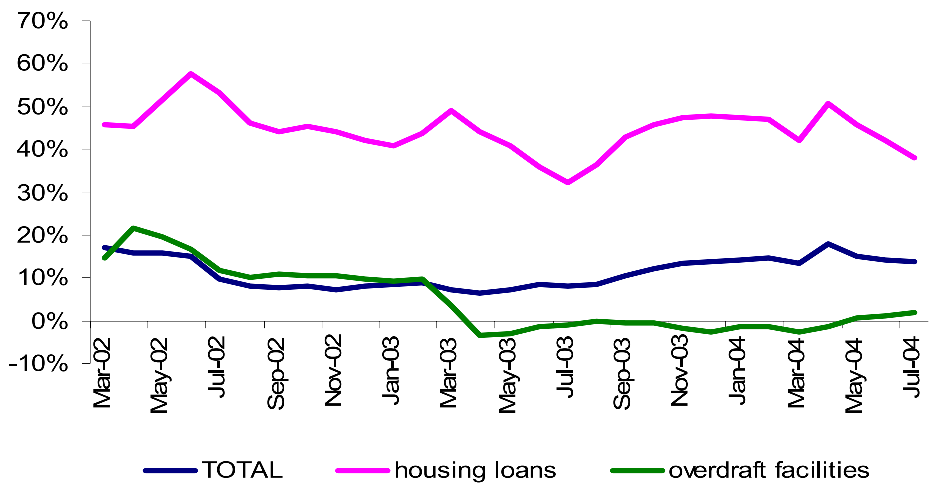
[31] The entire foreign trade credit is included in short-term debt.

However, after adjusting for exchange rate movements, the increase in claims on households was larger and amounted to PLN 4.8 billion (4.5%).

The largest increase took place in the overdraft credits (by PLN 0.4 billion, i.e. 3.4%) and housing loans (by PLN 0.4 billion, i.e. 1.2%). Compared to previous months, in the period from April to July the demand for housing loans decreased considerably. The annual growth rate fell from 50.7% in April to 38.2% in July (Figure 42). During the period under consideration, the appreciation of the zloty contributed to a decrease in the amount of housing loans. The instability of the foreign exchange market, which has persisted for a long time, has stimulated the demand for loans in zloty. Since the beginning of the year the share of housing loans in zloty in this market segment has increased from 36.9% to 42.6%.

Figure 42

Households loans (y/y changes, %)



Source: NBP data

Net debt of the central government

In the period from April to July 2004 there was an increase in the net debt of the central government, which amounted to PLN 3.1 billion (5.4%). When compared to the same period of the previous year, the debt decreased by 11.8%.

Bank deposits and notes and coin in circulation

In the period from April to July, deposits and other liabilities[32] included in M3 money fell by PLN 1.1 billion (-0.4%). Similarly as in the first four months of 2004, there was a rise in corporate deposits, while banking sector liabilities to households decreased (Table 13). Movements in exchange rates strongly influenced nominal changes in liabilities in the banking sector.

During the period under consideration, corporate deposits went up by PLN 1.7 billion (2.3%). After a sharp increase in deposits in April, which was related to strong growth in the industrial production and retail sales, the growth of corporate deposits slowed down. The annual growth rate of banking sector liabilities to enterprises decreased from 39.2% in April to 30.1% in July. After adjusting for exchange rate movements, however, the increase in corporate deposits was larger and amounted to PLN 3.0 billion (4.2%).

In the period from April to July, the downward trend in household deposits continued. Household deposits decreased by PLN 2.3 billion, i.e. by 1.2%. At the end of July 2004, the annual rate of growth in liabilities to households was -1.7%. However, the decrease in deposits resulted entirely from appreciation of the zloty. After adjusting for exchange rate movements, households deposits rose by PLN 1 billion (0.5%).

Due to a decrease in deposits and a rise in indebtedness, households net savings in the banking sector were negative again. Negative bank savings were not offset by an increase in non-banking financial assets. The assets of households in investment funds declined and the value of treasury bonds held by households did not increase. It is estimated that the value of equities in private accounts at brokerage offices and houses grew, which compensated for the decrease in net household financial savings to a certain extent.

After the increase of notes and coin in circulation in April, which was the highest in 2004 and amounted to PLN 1.6 billion, it fell by PLN 1.3 billion in May. From April to July, the amount of notes and coin in circulation (outside banks) decreased by PLN 0.5 billion (-0.9%), while its the annual growth rate dropped from 12.0% in April to 7.2% in July. The current developments in notes and coin in circulation show a return to normality after unusual

[32] Demand deposits with an agreed maturity of up to 2 years, blocked deposits and deposits redeemable at notice up to 3 months constitute 99% of liabilities to other residents included in M3 money.

changes in the previous period - in 2000–2001 there was a rapid fall in notes and coin in circulation resulting from high interest rates on deposits at commercial banks, whereas in 2002-2003 declining bank interest rates were followed by a strong increase in notes and coin in circulation. A comparison with other countries in the region indicates that share of notes and coin in the broad monetary aggregate in Poland is at present on an average level and does not exhibit any extraordinary changes.

Monetary aggregates

From April to July, the supply of M3 money increased by PLN 1.9 billion (0.5%). After reaching 8.5% (the highest level since December 2001) in April, the annual growth rate of the broad monetary aggregate went down to 7.0% in July (Table 13).

Table 13

Money supply

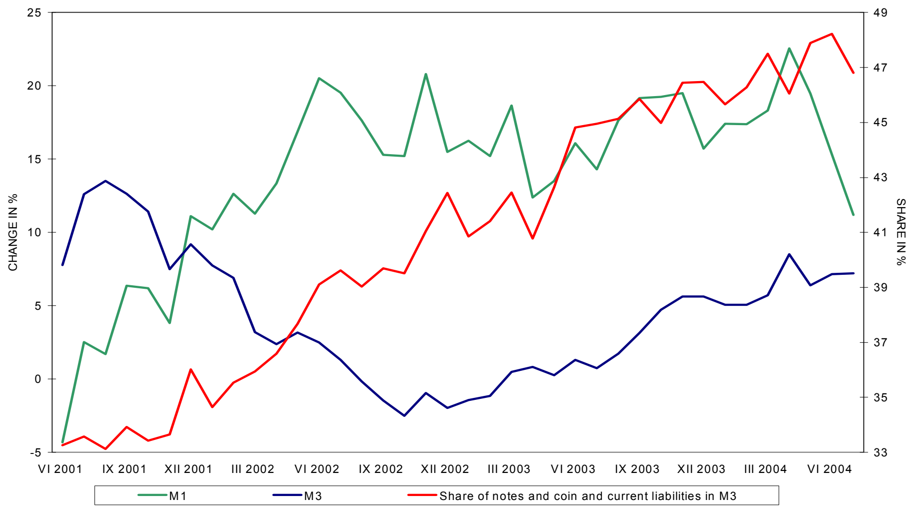
	As of July 30, 2004	Change July 2004 / April 2004		Change July 2004 / July 2003	
	PLN billion		%	PLN billion	%
I. M1 money	163.4	3.3	2.0	16.5	11.2
II. M3 money	349.6	1.8	0.5	22.7	7.0
1.Notes and coin in circulation (outside banks)	51.0	-0.5	-1.0	3.4	7.2
2. Deposits and other current liabilities	293.1	-1.1	-0.4	17.6	6.4
2.1 Households	188.1	-2.3	-1.2	-3.2	-1.7
2.2 Non-monetary financial institutions	7.8	-1.8	-18.7	-0.2	-2.9
2.3 Non-financial corporations	74.0	1.7	2.3	17.1	30.1
2.4 Non-profit institutions serving households	9.0	0.5	6.1	0.8	9.8
2.5 Local government institutions	12.3	0.7	6.0	2.6	27.2
2.6 Social security funds	1.9	0.1	5.3	0.5	32.1
3. Other M3 components	5.6	3.4	0.1	1.7	45.2

Source: NBP data

During the period under consideration there was a small growth in M3 liquidity, which is indicated by the increased share of M1 in M3 from 46.1% in April to 46.8% in July (Figure 43).

Figure 43

Share of M1 in M3 and the annual growth rate of narrow and broad money



Source: NBP data

3. MONETARY POLICY IN JUNE – AUGUST 2004

The Monetary Policy Council raised the NBP key rates three times in June, July and August 2004, by 0.5, 0.25 and 0.5 percentage point respectively. As a result, at the end of this period the reference rate amounted to 6.5%, the lombard rate was at 8.0% and the deposit rate at 5.0%. Despite nominal increases in the NBP interest rates, real interest rates[33] decreased, in case of the reference rate from 2.8% in May 2004 to 1.9% in August. The Council maintained its upside monetary policy bias, introduced in April 2004.

Over the period in review the accelerating inflation, which in July exceeded the upper tolerance limit for deviations from the target, was accompanied by a significant increase in inflation expectations of individuals, enterprises and bank analysts. The MPC was particularly concerned with the strong growth in inflation expectations of households, which in June and July occurred even before the publication of the newest data indicating a significant acceleration in inflation. According to the GUS survey, there was also a continuous rise in retail price expectations, including food prices. However, in August its dynamics slightly abated. The Council was aware of the risk of increasing wage claims resulting from the growth in inflation expectations, which could lead to inflation persisting at the level well above the target of 2.5%. The potential influence of supply shocks on demand was also one of the factors taken into account by the Council. Although there was much uncertainty as regards the strength of inflation expectations influence on wage demands, the intention of MPC decisions to raise interest rates was to give a clear signal to the market participants that the central bank is determined to meet the inflation target in the medium term. This means that current rise in inflation is transitory.

The Council considered that substantial rise in inflation expectations, accompanied by strong economic revival, required the higher interest rate level to ensure price stability in the medium term. However, both the assessment of the overall scale of the targeted rise in interest rate level and the individual decisions of the MPC were determined by several factors. **Firstly**, although the economic recovery in itself constitutes an independent factor of inflationary pressure, the growth of inflation is primarily the effect of negative supply shocks (particularly the high prices of crude oil and poor crop harvest in 2003), as well as the expected and unexpected price shifts resulting from Poland's entry to the EU. The MPC

[33] Deflated with consumer inflation expectations.

assessed that some of these effects should be transitory in nature, though the fact that e.g. the forecasts of crude oil prices have undergone considerable revisions in the past few months indicates that the assessment of supply shocks' persistence is subject to great uncertainty. Nevertheless, numerous factors indicate that the price growth stemming from Poland's EU accession is gradually weakening. **Secondly,** a fundamental role in assessing the sustainability of the economic recovery is played by investments in the economy. However, available economic data and surveys of economic condition do not yield unambiguous signals. In particular, The Council pointed that while the leading indicators of investment were rising, corporate credit volume was falling, and the high level of capacity utilization was accompanied by a slump in construction output. Nevertheless, the GUS data on investment growth and financial performance of enterprises in the first half of 2004 significantly reduced the uncertainty as to the sustainability of the investment recovery. **Thirdly**, the nominal wages and payroll fund dynamics lessened in June and July, which coupled with high labour productivity growth should limit inflationary pressure. **Fourthly**, in the past months the trend in currency market reversed and the zloty has considerably appreciated. However, the present level of the exchange rate should not influence significantly the profitability of Polish exports. Nevertheless, if the trend continued, it would be an important factor limiting the inflationary pressure in the future.

Considering the above factors as well as the related uncertainty, the MPC decided that the process of raising interest rates should be gradual. The scale of the rise in June exceeded the market expectations. It was primarily aimed at influencing inflation expectations. The subsequent rise in interest rates was smaller and it resulted from the assessment of threats to price stability stemming from the rise in the inflation expectations, the evaluation of the nature of shocks leading to inflation growth, and the evaluation of sustainability of the economic recovery. In August the scale of interest rate increase was largely influenced by the inflation projection presented in the *Report* and by the growing risk of wage pressure stemming from inflation expectations.

The interest rate increases took place in the environment of strengthening economic revival. According to preliminary NBP estimates, the GDP growth rate in Q2 2004 amounted to about 6%. In the opinion of the Council, the observed recovery indicates that economic growth rate is higher than that implied by the long-term trend. This means that demand factors will have stronger influence on inflation.

In June and July 2004 the high dynamics of industrial output was maintained. In July it was slightly lower, but taking into account the seasonal factors it was still high. The business tendency surveys confirm continuous upward trends in the economy. The August GUS survey points to a further improvement in the economic climate both in manufacturing (to the highest level since 1992) and in construction. Financial situation in manufacturing was still improving. Under growing domestic and foreign demand and increasing degree of production capacity utilization large enterprises and exporters were signaling an increase in investment activity. The NBP's surveys confirmed this positive trend. Moreover, they indicated that for the first time since 1998 the percentage of enterprises planning an increase in employment exceeded the percentage of those intending to reduce it. There have also been signs of planned larger foreign direct investments inflow to Poland, which - coupled with structural funds and the Cohesion Fund - should contribute to maintaining a high economic growth rate.

An important source of uncertainty as to the future formation of inflation remained the still loose fiscal policy and a lack of clear perspectives as to the scale of reforms necessary for the consolidation of public finance and halting the growth in public debt to the GDP ratio in the future.

In June-July, besides the above presented factors indicating a possible rise in inflation in the coming quarters, factors limiting inflation pressure were still present.

The continuously growth in labour productivity, although somewhat weaker than in the previous months, limited inflation pressure. The annual wage growth under persistent high unemployment was still lower than the labour productivity growth. However, there have already appeared first signs indicating the possibility of an increase in wage claims, which may lead to a faster future increase in wages. In the monetary area, there were no evident symptoms of economic recovery, which would give rise to a risk of inflationary pressure. The annual dynamics of both money supply and households loans decreased in May and June, after a significant rise in April 2004. The corporate credit volume fell. However, the demand for credit by enterprises could be limited due to high level of their own financial resources available for their disposal.

4. INFLATION PROJECTION

The inflation projection has been prepared with the use of macroeconomic models by NBP economists under the supervision of the NBP Deputy Governor. The Management Board of the NBP has approved the submission of the projection to the Monetary Policy Council. The projection is one of the inputs to the Monetary Policy Council's decision-making process.

4.1. Introduction

In 2003, the first signs of accelerated economic growth were recorded. The acceleration in growth primarily stemmed from rapid increase in exports supported by the depreciation of the effective exchange rate. An increase in domestic demand, stimulated by expansive fiscal policy and decreasing restrictiveness of monetary policy, also contributed to the increase in economic growth rate. Until the end of the first quarter of 2004, economic growth was not accompanied by any stronger inflationary pressure coming from the labour market because the rate of labour productivity growth in the economy exceeded that of wage increases. The GDP growth rate accelerated in a situation where falling employment and a slump in investment lasting for over 3 years limited the potential GDP growth rate. As a result, the relationship between the potential and actual GDP growth rates reversed. Thus, the anti-inflationary impact of the output gap weakened.

The depreciation of the zloty exchange rate last year also contributed to an increase in inflation. On the one hand, it stimulated GDP growth, while on the other it was a factor driving the costs up (import prices). With regard to the latter, due to the role of the US dollar in the financial and fuel markets as well as the predominance of the euro in the Polish foreign trade, changes in the euro/dollar exchange rate are also an important factor influencing inflation (other things being equal, an appreciation of the euro against the dollar accelerates inflation).

The higher CPI growth since the beginning of 2004 was also caused by the rapid rise in fuel prices (which may be considered a typical supply-side shock) as well as food prices. The increase in the latter was partly a supply-side shock and partly the result of increased demand for Polish food on the part of the "old" EU member states due to abolished barriers in food trade.

Thus it may be assumed that along with the economic recovery, which is usually accompanied by an upward trend in prices, two strong pro-inflationary supply-side shocks occurred: the increase in the prices of oil in world markets and the rise in food prices.

This inflation projection is based on two macroeconomic models of the Polish economy[34] as well as on the knowledge and experience of the experts. The experts' judgements were used when developing the assumptions concerning trends in the world economy (fuel markets, financial markets, economic growth in countries that are Poland's major trading partners) and the predicted changes in other factors determining inflation in Poland (situation in agricultural markets, the condition of public finance) as well as when conducting a qualitative analysis of new processes under way in the Polish economy.

The projection presented below has been based on information available by mid-July 2004. The projection **is based on a technical assumption that the NBP reference rate will not change within the projection horizon**. With this underlying assumption, the projection shows what the level of inflation and other macroeconomic variables would be if the interest rate remained at the mid-July level. This means that the projection does not represent the most probable outcome, particularly in the long run, because it does not take potential changes in NBP interest rates into account.

4.2 Projection assumptions related to international environment

External demand and euro zone inflation

One of the assumptions underlying the present projection is that economic recovery in the euro zone will be slow. Favourable signs and economic data for the euro zone indicating an economic revival in that region emerge (e.g. a stronger consumption growth in many euro zone countries in the first quarter of 2004 compared to the previous year, investment rising for the third subsequent quarter). On the other hand, the expected fiscal contraction within the monetary union will translate to a decreased impact of public sector expenditures on GDP growth within the projection horizon. The economic situation of the euro zone's major trading

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[34] The theoretical assumptions and a description of the previous versions of those models may be found in: B. Kłos, *Mały strukturalny model inflacji. Wersja 3.5.6.*, Materiały i Studia 154, NBP, Warszawa 2002, and in: R. Kokoszczyński, T. Łyziak, M. Pawłowska, J. Przystupa, E. Wróbel, *Mechanizm transmisji polityki pieniężnej - współczesne ramy teoretyczne, nowe wyniki empiryczne dla Polski*, Materiały i Studia 151, NBP, Warszawa 2002. A description of the current versions of those models will be published in NBP "Materiały i Studia" by the end of the year.

partners and the appreciation of the euro exchange rate make the presumption that the upward trend in net exports of the euro zone will be sustained improbable.

The slow growth in domestic demand will limit inflationary pressures within the monetary union. Actions aimed at increasing labour market flexibility in the euro zone countries (enhanced by increased competitive pressure from the new EU members) should also limit - through reducing unit labour costs dynamics - the rate of price growth in this area. As a consequence, within the projection horizon it is expected that inflation in the euro zone will decrease and then stabilise at a level consistent with the ECB target.

Economic recovery in the countries being Poland's major trading partners should contribute to an increase in demand for Polish exports and thus may slightly increase the demand pressure in the economy. However, prices in those countries will probably rise somewhat slower than in Poland, potentially reducing the competitiveness of the Polish economy.

Oil prices

Factors contributing to the rise in oil prices, i.e. the rising demand and supply-side issues, persist. The unstable situation in Iraq and the problems of the largest Russian oil company increase the risk of reducing oil supplies to world markets, particularly in view of the fact that the OPEC countries have almost reached their maximum production levels. Low oil stocks in the world's largest economies also make any slowdown in the upward trend of oil prices unlikely.

It was assumed in the projection that due to the above-mentioned factors the price of oil will remain high throughout 2004 and from the second quarter of 2005 it will decrease very slowly as a result of the expected slight drop in demand pressure. This means that the increase in oil prices will add to inflation growth until the end of 2004, while in 2005 will become a factor contributing to its decrease.

Dollar/euro exchange rate and foreign interest rates

The projection assumes that the dollar/euro exchange rate as well as foreign interest rates will change in line with the foreign exchange market expectations. However, while the investors' current interest rate expectations are stable, expectations concerning the dollar/euro exchange rate are very volatile due to contradictory signals related to the present state of the

US economy as well as to the perspectives of its revival. The projection is based on mid-July data – this means that the exchange rate within the projection horizon will fluctuate in the 1.23–1.25 range. Investors expect that the LIBOR will gradually rise from 1.2% in the second quarter of 2004 to 3.8% at the end of 2006.

4.3. Projection assumptions related to domestic environment

State budget expenditures

It was assumed in the projection that budget expenditure in 2004 will reach the level stipulated in the 2004 Budget Act. With regard to 2005, the assumptions of the 2005 Budget Act have been taken into consideration. It is assumed that only those acts from the *Programme of Consolidation and Reduction of Public Expenditures* that have already been accepted by the Parliament will come into force. Declarations of the Minister of Finance concerning the reduction of the budget deficit to PLN 35 billion have also been taken into account. Moreover, it is assumed that in 2006 budget expenditure will rise significantly due to the indexation of old-age and disability pensions that has been deferred until then (it is assumed that this will be accomplished through a budget subsidy for the Social Security Fund).

Food prices

At the moment when the projection was developed, the growth rate of food prices amounted to around 8.7% y/y. In the following months of 2004, a reduction in the prices of cereal products due to a much better harvest than in 2003 can be expected. The reduction in cereal prices will also be stimulated by the adoption of EU regulations related to intervention in the cereal market.

The currently high growth rate of food prices (around 9% y/y) will, however, be sustained until the first quarter of 2005 and then will decrease fairly quickly to the level of around 2% y/y in 2006. The high food price growth at the end of 2004 and in the first quarter of 2005 will to a large extent stem from rises of meat prices caused by increased external demand for meat produced in Poland in the second quarter of 2004 and from the slow recovery of livestock production. This means that food prices will probably keep inflation relatively high until the first quarter of 2005 and then will become a factor slowing down the CPI growth.

4.4. Inflation projection

The contribution of GDP components to the GDP growth will change over the projection horizon. We expect that already in 2005 net exports will cease to be a growth-stimulating factor. This role will be taken over by domestic demand, and particularly investment demand. A high rate of growth of investment outlays in the years 2005–2006 will be the consequence of the low base level, the closing up of the output gap and a decrease of the real interest rates (cost of capital) as well as the result of investments independent of the current economic cycle position (including those financed from EU funds) along with subsequent multiplier effect.

The closing of the output gap corresponds to a relatively high capacity utilization. Investments are essential to further increase production. The drop in the cost of capital results from a number of factors, the most important being the assumption of a constant interest rate under rising inflation as well as the expected appreciation of the zloty decreasing costs of imports, including investment imports. On the other hand, the uncertainty concerning the demand prospects within the economy, stemming from high inflation and only a small increase in employment in 2005 (with an average annual growth rate slightly over 1%), may hamper investment. Both these factors will dampen the growth of consumption. Concurrently, the expected real zloty appreciation will reduce external demand for Polish products. Under this scenario, the GDP growth rate in the years 2005–2006 will be around 4.5%–5.5%.

With relatively low increase in potential GDP, the forecasted economic growth rate will contribute to pro-inflationary changes in the output gap. The remaining factors accelerating CPI inflation over the next three quarters will be: shocks in the food market, the relationship between growth of wages and growth of labour productivity in the economy and the assumed initial increase and subsequent stabilisation of oil prices at a high level. Thus the rise in inflation will be a result of simultaneous unfavourable supply shocks (oil and food prices) and the economic recovery.

In 2005 – according to the experts – supply shocks will gradually begin to wane, in particular the rise in food prices will slow down sharply. This will cause inflation to decrease. This fall will also be facilitated by the appreciation of the zloty in real terms, i.a. through its impact on the output gap. Moreover, the changes of output gap caused by the potential GDP growth due to the investments increase will start to limit inflation in the middle of the projection horizon. The inflation will, however, decrease slowly, and – assuming constant interest rates – it will only approach the upper tolerance limit for deviations from the inflation target in 2006.

Uncertainty of projection

Every projection is a subject to uncertainty. Its major sources are the uncertainty of the assumptions themselves and the approximate nature of the models applied to replicate the economic reality while preparing projection. Expert judgements have been used not only in order to formulate the forecast assumptions but also to assess their possible deviations from agreed values. Currently, the largest uncertainty is associated with assumptions concerning the food prices, oil prices and the EUR/USD cross rate. In order to demonstrate the uncertainty, the fan chart presented below has been constructed.

Another important source of uncertainty is the exchange rate mechanism modelling approach. The public finance developments and unstable political situation have increased the FX risk for the zloty and Poland's membership in the European Union has offset this effect only partly. This means that the impact of interest rate disparity on the zloty exchange rate has changed, which has been already taken into account to some extent when preparing the present projection, but this relationship may change further in the future.

Poland's accession to the European Union may also precipitate other changes in the relationships between macroeconomic variables observed in the past. International trade after the accession may be one such relationship. Price arbitrage in the food market will cause an increase in trade volumes and this in turn may influence the net exports GDP component; this projection does not address that phenomenon.

Changes in the process of formulating inflation expectations may constitute another source of uncertainty. Inflation expectations in Poland have been adaptative so far, thus the decrease in inflation in 2005 presented in the projection should cause inflation expectations to drop. There exists a risk, however, that the lack of reaction on the part of monetary policy –

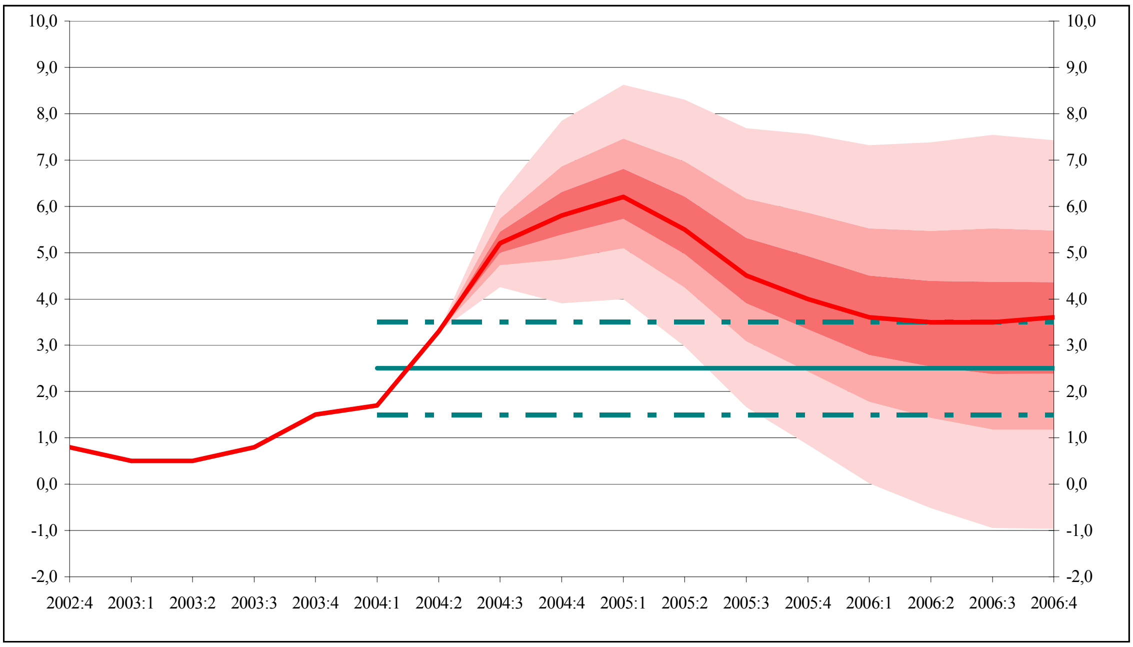
which is tantamount to the constant interest rate assumption within the projection horizon – could cause increased inflation expectations to persist and those could result, through a rise in wage claims, in inflation stabilising at a level much higher than the inflation target set at 2.5%.

Fan chart

Each projection of future values of economic variables is subject to risk and uncertainty. Central banks present the size and scope of quantifiable inflation projection risk using so-called fan charts. The width of the "fan" corresponds to the overall uncertainty level resulting from the uncertainty of the experts' assessments regarding the development of economic situation and the uncertainty associated with the econometric models applied, which assume a specific form of relationships between economic variables. Due to the fact that uncertainty usually increases with the projection horizon, the fan becomes wider as the horizon lengthens. A central projection value is determined for every quarter – this is the most probable rate of price increase – and a range is constructed around it, within which the inflation will fall with a probability of 30%. This range forms the central strip of the fan, which is drawn in darkest red on the chart. Subsequently, this range is extended for every quarter in order for the probability of the inflation falling within the new boundaries to rise by another 30 percentage points. The subsequent extensions form new strips of the fan, which are marked with increasingly brighter shades of red. The entire fan shows a range, within which the inflation will fall with 90% probability. The chart shows for example that the probability that the inflation in the fourth quarter of 2006 will fit into the +/-1 percentage point tolerance band around the inflation target is around 28%, the probability that it will be higher is around 49% and the probability that it will be lower approaches 23%.

Figure 44

Inflation projection with the assumption of constant interest rates and the inflation target – August 2004



Solid green line: inflation target
Dashed green line: tolerance limits for deviations of inflation from the target
Red line: CPI rate (quarter to the corresponding quarter of the previous year)

Source: National Bank of Poland

Annex A. The voting of the Monetary Policy Council members on motions and resolutions adopted in Q2 2004

Date	Subject matter of motion or resolution	MPC decision	Voting of the MPC members
26 April 2004	Resolution on approving the NBP Annual Financial Report prepared on 31 December 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
27 April 2004	Motion to change the monetary policy bias to upside		**For**: L.Balcerowicz J.Czekaj D.Filar M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against:** S.Nieckarz M.Pietrewicz
18 May 2004	Resolution on approving the Report on NBP Operations in 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
18 May 2004	Resolution on approving the Report on Monetary Policy Implementation in 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
18 May 2004	Resolution on the approval of the activity of the NBP Management Board in its implementation of monetary policy guidelines in 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
30 June 2004	Motion to raise all base interest rates by 0.25 percentage points	motion did not receive a majority vote	**For**: M.Pietrewicz **Against:** L.Balcerowicz J.Czekaj D.Filar

			S.Nieckarz M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
30 June 2004	Resolution on the level of the reference rate, lombard rate, deposit rate, and rediscount rate of the NBP.	all interest rates raised by 0.5 percentage points	**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against:** M.Pietrewicz