

# DEVELOPMENT OF KEY MACROECONOMIC INDICATORS AND COMMERCIAL INSURANCE IN V4 COUNTRIES IN 1995 – 2004

## POLAND

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*The objective of this contribution is to track the development of key indicators of commercial insurance in Poland, for the period 1995-2004, against a background of changes in the macroeconomic environment. This article also brings to a conclusion a survey of macroeconomic indicators and commercial insurance in the V4 countries.*

### The macroeconomic environment in Poland

The selected macroeconomic indicators of Poland for the period under review, 1995-2004, are shown in Table 1.

At the beginning of the period, Poland and Slovakia had the fastest growing economies in the V4 region. The pace of real GDP growth exceeded 6% right up to 1997. In Poland, domestic demand was creating the main stimuli for economic growth and the fact that foreign demand was again rising also had a positive effect. The pace of price decline continued, but inflation remained in double digits, reflecting the fact that the exchange rate regime was, as in Hungary, built on continuous devaluation of the currency. At the same time, the unemployment rate began to decline from 1997. The extensive cross-border trade in Poland, not included in the official data, relativised the trade balance deficit. The country proved less successful in keeping the budget deficit down.

Economic growth slowed in 1998, to below 5 %, while domestic demand provided the major stimulus for growth. Average annual inflation continued at a moderate pace, and the favourable development in production was reflected in declining unemployment. Meanwhile, the current account deficit increased to a level that remained accep-

table in the context of the capital account balance. Financial crises, particularly in Russia, placed the issue of financial stability at the centre of attention, while the government stressed that the economy should have a competitive structure with a healthy financial sector.

The further slowdown of growth in 1999 was caused by a fall in domestic demand, which helped curb inflationary pressures. A less desirable side effect of the deceleration in economic activity and structural economic changes was the rise in unemployment. Meanwhile, the current account deficit grew sharply.

Following the excessive growth expansion of the second half of the 1990s, Poland entered a correction phase in 2000, which reached its peak in 2001. Domestic demand, and especially investment demand, declined, and it was only with the help of net exports that growth was maintained. The slowdown in economic growth was expressed in the lower rate of inflation and the reduction of the external imbalance. On the other hand, the rate of unemployment grew. The current account deficit reported a more modest deficit, as it had in 2000, and with a high share of foreign investment ensuring sufficient funds, plus the prospect of EU membership, the country managed to retain the confidence of investors. The labour market was

Table 1 Macroeconomic indicators

Indicator	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
GDP at current prices (PLZ bn)	308.1	387.8	427.4	553.6	615.6	690.4	722.3	769.4	804.7	884.2	963.2*
Growth (%)	7.0	6.0	6.9	4.8	4.1	4.0	1.1	1.3	3.7	5.3	4.4**
Inflation (%)	21.6	18.5	13.2	8.6	9.8	8.5	3.6	0.8	1.7	4.4	2.1**
Unemployment (%)	16.0	14.9	13.2	10.5	13.0	15.0	17.5	18.1	18.0	19.1	18.3**

\* linear trend estimate, \*\* estimate of the National Bank of Poland (NBP)  
Source: NBP annual reports, Central Statistical Office of Poland (GUS).



adversely affected by the ongoing restructuring of the corporate sector.

Economic development in 2002 was affected by the dampening of economic activity in the EU, especially in Germany, Poland's main trading partner. Low inflation corresponded to weak demand at the bottom of the economic cycle and to public sector wage restrictions. After its growth fell sharply in 2001, the Polish economy made a slight recovery and GDP increased by 1.3 %. The growth was stimulated by private consumption and net exports, surging by 7.2 %, though fixed investments fell. The continuing corporate restructuring, especially in agriculture, mining, steelmaking and the railways, was accompanied by the haemorrhaging of jobs. This, together with demographic factors, was the main cause of an unemployment rate that reached up to 20%. Behind the year-on-year increase in the fiscal deficit lay mainly the weak level of economic activity and the relative relaxation of fiscal policy. The external imbalance that arose in the Polish economy during the subdued growth of 2001-2002 was brought under control.

After slowing substantially over the previous two years, the Polish economy accelerated in 2003. Poland achieved a high export performance that was substantially helped by the zloty's depreciation against the euro. Weak growth in real income kept down private consumption and private investment fell for the third year in a row. An accommodating fiscal policy supported GDP growth, as did the favourable monetary conditions created by the loosening of monetary policy. The low level of domestic demand and no more than moderate growth in wages was reflected in the modesty of price growth. Amid weakened conditions for domestic demand there was nothing to drive up imports, while the fast growth in exports held the current account deficit at a low level.

The rate of unemployment reached a long-term high and not even the acceleration of GDP growth in 2003 brought it down. As restructuring continued in industry and agriculture, employment growth was being curbed by the high number of disappearing jobs. The slight relaxing of fiscal policy fed through to a year-on-year increase, albeit not dramatic, in the public finance deficit.

In 2004 came EU enlargement, and real GDP in Poland grew by 5.3 %. As in previous years, exports were the driving force of economic growth, and not even the zloty's appreciation during the year substantially affected their performance. Domestic demand, after three years of decline, recorded a strong recovery in investments, although household consumption grew only slightly, reflecting the weak growth in real income and the still high level of unemployment.

The fiscal deficit for 2004 stood at 4.8 % of GDP, substantially less than the budget projection. Consumer price inflation in June overshot the upper end of the central bank's target range ( $2.5 \pm 1$  %) and remained

above this level for the rest of the year. In order to eliminate the secondary effects of inflation growth, the central bank increased the base rate within a short period, adding 125 basis points between June and August to leave it at 6.5 %.

For 2005, the National Bank of Poland projected economic growth of 4.4 %, a lower average inflation of 2.1 %, and a further improvement in the rate of unemployment. The main risk to macroeconomic stability remained the development in public finances, with regard to the expansive trends in fiscal policy and the unemployment rate as a problem indicator.

### Selected insurance industry indicators

The author M. Theil has identified two common indicators to describe the extent of a national insurance industry. Insurance density is an indicator representing the ratio of gross written premiums to population in individual economies. It is shown as the per capita expenditure on insurance protection. Insurance penetration is an indicator showing the ratio of gross written premiums (written premiums not taking into account reinsurance) to GDP. For this reason, as in the previous articles (BIATEC, Volume 13, issues 8, 9, 11 and 12), we present here the gross written premium totals in life insurance and non-life insurance, for the whole insurance industry and per capita (Table 2).

It is clear from Table 2 that the aggregated indicator for the gross written premium totals in life and non-life insurance increased during the period under review. Total written premiums grew by 281.28 percentage points while written premiums in life insurance and non-life insurance were up by 390.80 and 226.94 points respectively.

Insurance penetration in the period under review reached a highest value of 3.4 % with the base year being 1995. In 2004, it fell by 7.94 percentage points in comparison with 1995. This shows that GDP during the period grew at a faster pace than did written premiums.

### Polish insurance market concentration

To find out the concentration of the insurance market over the period 2000-2004, we used the Herfindahl-Hirschman Index (HHI). The HHI value is affected mainly by the number of insurance companies operating in the market under review and by gross written premiums, through which the market share of individual insurers is expressed. The HHI values in Table 4 are only given for the period 2000 – 2004.

<sup>1</sup> Theil, M.: *The Coming of Insurance in Future EU Member Countries in Eastern Europe*; published by the Czech Insurance Association (\_AP) in "Pojistné rozpravy" (Insurance Papers), pp. 119-132, Prague, 2001, ISBN 0862-6162.

**Table 2 Development of written premiums**

Indicator	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005*
<b>Written premiums (PLZ bn)</b>											
Total	9.83	12.04	15.72	17.80	20.82	21.66	22.05	22.40	24.00	27.65	29.10
– life	3.26	4.09	5.18	6.14	7.81	8.66	9.12	9.58	10.79	12.74	13.20
– non-life	6.57	7.95	10.54	11.66	13.01	13.00	12.93	12.82	13.21	14.91	15.90
<b>Written premiums per capita (PLZ)</b>											
Total	254.43	311.69	406.65	460.54	538.68	560.52	570.87	585.86	628.38	724.03	760.56
– life	84.39	105.86	134.09	158.89	202.03	224.20	236.17	250.62	282.53	333.63	345.12
– non-life	170.04	205.83	272.56	301.65	336.65	336.32	334.70	335.24	345.85	390.40	415.44

Source: Annual reports of the Polish Chamber of Insurance (PIU) and own calculations.

Note: a linear trend forecast is used for 2005.

**Table 3 Insurance penetration**

Indicator	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Index <sub>2004/95</sub>
Insurance penetration (%)	3.40	3.12	3.33	3.22	3.38	3.16	3.05	2.91	2.98	3.13	92.06

Source: PIU information for 2004.

The Polish insurance market had a low concentration between 2000 and 2002, and reached a moderately strong concentration in 2003 and 2004, when the HHI value exceeded 1800.

**Table 4 Development of the Herfindahl-Hirschman Index**

Indicator	2000	2001	2002	2003	2004
HHI	1788	1755	1652	2535	2298

Source: PIU information for 2001 – 2004.

In 1995, there were 40 insurance companies operating in Poland, of which 13 were in the life industry and 27 in the non-life industry. By 2004, the number of companies registered with the Polish Chamber of Insurance (PIU) stood at 71. Of them, 33 were life insurance companies and 38 specialised in other personal insurance and property insurance. The increase in the number of insurers, the improvement in the quality and quantity of their products, and thus the growth in written premiums, had positive effect on reducing insurance market concentration.

**Insurance benefits and burden of losses**

The development of insurance benefit expenses in absolute terms is shown in Table 5. The total expenses grew by 252.69 percentage points, while life insurance reported an increase of 368.68 percentage points and non-life insurance 204.35 points. The rise in insurance benefit expenses mirrored that in written premiums for the individual industries.

Burden of losses is an indicator representing the ratio between the amount paid in insurance benefits and the amount of written premiums. In general, the insurance situation is seen as economically balanced if the burden of losses is close to 60 % that is net premiums. Should the loss burden exceed 60 % over the long term, then the insurance has become economically imbalanced.

As regards the development of the loss burden in the Polish insurance market, the data in Table 6 clearly shows that the burden in the life insurance industry was below 60 % for the whole of the period under review. In non-life insurance the burden of losses exceeded 60 % in 1995,

**Table 5 Insurance benefit expenses**

Burden*	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Index <sub>2004/95</sub>
– life	1.67	1.85	1.99	2.17	2.45	2.78	3.45	4.31	5.15	6.15	368.68
– non-life	4.00	4.58	6.51	6.77	8.21	8.19	7.98	7.80	7.66	8.18	204.35
Total	5.67	6.43	8.50	8.93	10.65	10.97	11.43	12.11	12.81	14.33	252.69

Source: PIU information for 1995 – 2004 and own calculations.

\*Note – Burden of losses (PLZ bn).

**Tab. 6 Burden of losses**

Burden* (in %)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Index <sub>2004/95</sub>
– life	51.17	47.32	38.49	35.29	31.32	32.09	37.81	44.99	47.75	48.27	- 2.90
– non-life	60.93	57.56	61.78	58.03	63.10	62.98	61.71	60.86	57.98	54.86	- 6.07
Total	57.69	53.40	54.10	50.18	51.18	50.63	51.82	54.07	53.38	51.83	- 5.86

Source: PIU information for 1995 – 2004 and own calculations.

\*Note – Burden of losses.

**Table 7 Volume of technical reserves**

Technical reserves*	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Index <sub>2004/95</sub>
– life	1.916	3.113	5.060	7.753	10.784	14.395	21.605	26.855	31.6023	37.255	1944
– non-life	1.885	2.931	4.962	7.055	8.848	10.424	12.219	14.005	15.205	16.314	865
Total	3.801	6.044	10.022	14.808	19.632	24.819	33.825	40.860	46.808	53.569	1409

Source: bulletins of Poland's Insurance and Pension Funds Supervisory Commission (KNUiFE) for the years 1998 – 2004.

(\* Note.: in PLZ bn)

**Table 8 Volume of investments and investment activity**

Indicator	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Index <sub>2004/95</sub>
Investments (PLZ bn)	7.04	9.78	14.17	19.91	28.35	35.24	42.45	50.42	58.52	68.46	972
TR (PLZ bn)	3.80	6.04	10.02	14.80	19.63	24.82	33.83	40.86	46.818	53.569	1409
IA* (%)	185.21	161.81	141.39	134.45	144.41	141.99	125.50	123.40	125.02	127.80	69

\* Investment activity

Source: KNUiFE bulletins for the years 1998 – 2004.

1997, and 1999-2002, indicating imbalanced activity among some insurance companies in these years. In the life insurance industry, companies made an "additional gain" – the gain arising from the difference between the calculated values (especially the technical interest rate and mortality tables) and the actual values.

The burden of losses, which declined in both life and non-life insurance, was positively affected above all by the strengthening of competition in the insurance market and the increase in the share of foreign capital. Foreign capital as a share of registered capital rose from 14.6 % in 1995 to 72.1 % in 2004, when the Polish insurance market was considered to be fully liberalised. (The total registered capital of insurance companies in 1995 and 2004 stood at PLZ 839.11 m and PLZ 4.24 bn, respectively.)

### Technical reserves

The technical reserves (TR) of commercial insurers – temporarily free funds which must be created in accordance with the law – are set aside for the payment of insurance benefits upon the occurrence of insurance events.

Given the centrality and significance of technical reserves to the whole insurance process, their creation is strictly regulated in all V4 countries. It is subject to regular control, including the control of portfolio investments, which must comply with the forms and limits for the placement of technical reserve funds.

The data values for the period 1995 – 2004 show that the volume of technical reserves grew throughout this period in both life and non-life insurance – in life insurance (reserve-creating) they increased by 1944 percentage points, and in non-life insurance by 865 percentage points.

A key indicator of the appreciation of technical reserve funds is investment activity (the ratio of investments to technical reserves), whose value represents the rate of appreciation of technical reserves. The volume of investments and investment activities of insurance companies is shown in Table 10.

The investment activity value reached an all-time high of 185.21 in 1995 and a lowest value of 125.02 in 2003. The value basically fell over the course of 1995 – 2004, but it nevertheless always remained above the recommended threshold of 100. The value of this significant indicator, which the rating agency Standard & Poor's uses within its evaluation of the financial situation of insurance companies, exceeded the recommended value for the duration of the period under review. Investment activity posted highest values in the years 1994 to 1996, fell gradually from 1997 to 2002, and then returned to slight growth. Based on the calculated indices in the volume growth of technical reserves, investment operations, and investment activity, a substantial disproportion may be noted in this area. While investments grew by 972 percentage points, technical reserves increased by 1409 percentage points and investment activity recorded a substantial fall. This negative development was due to restructuring of the investment portfolio and changes in the valuation of the assets that covered the insurers' technical reserves.

### Conclusion

A comparison of the development of macroeconomic indicators and commercial insurance in the V4 countries will be published in the next issue.

### Bibliography

1. Theil, M.: The Coming of Insurance in Future EU Member Countries in Eastern Europe; published by the Czech Insurance Association (ČAP) in "Pojistné rozpravy" (Insurance Papers), pp. 119-132, Prague, 2001, ISBN 0862-6162.
2. KNUiFE bulletins for the years 1998 – 2004
3. Polish Chamber of Insurance, 2001 – 2004
4. NBP annual reports – www.nbp.pl
5. Central Statistical Office of Poland (GUS) – www.NBPportal.pl