

Business Development in Poland

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Poland Demographics



Population – 38.6 million

**Total GDP – 179.04 US\$bn
(2002)**

**GDP per capita – 4,637 US\$
(2002)**

Macro Economic Performance

- Highest economic growth in Eastern Europe since the fall of communism
- Private sector currently accounts for 72% vs. 45% in 1992
- Inflation has declined from over 20% in mid 90s to a forecasted level of 1.5% in 2003
- Central Bank intervention rate has declined from 23% in 1996 to 5.5% in 2003
- Public debt has increased to over 50% of GDP due to the budget deficit.

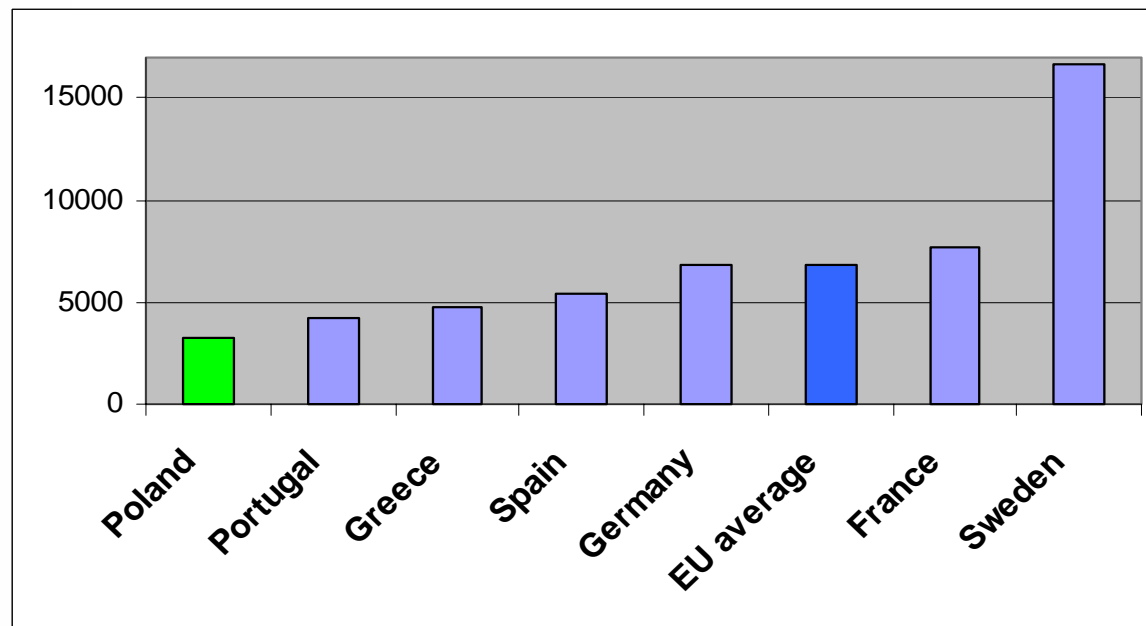
Macro Economic Projections

A modest recovery of the Polish economy is expected in 2003 with the growth accelerating from 2004

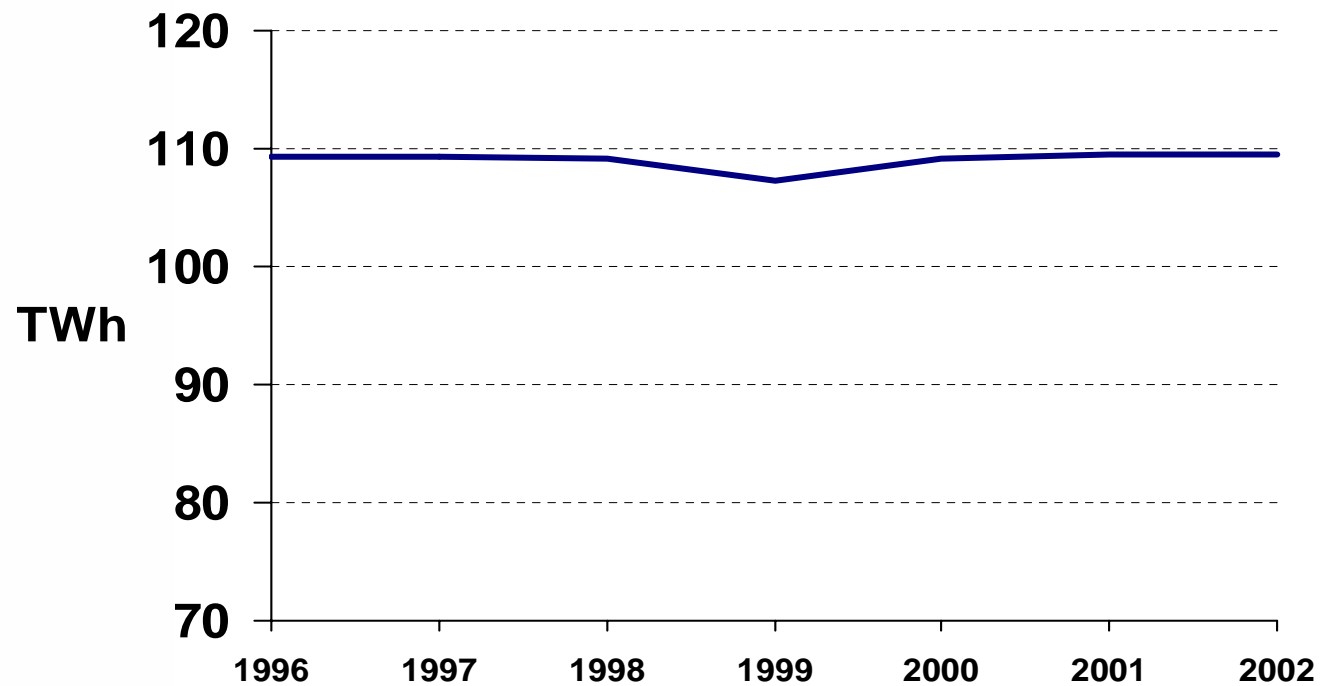
	2002	2003f	2004f	2005f	2006f
Real GDP growth, % y-o-y	1,3	3,2	4,3	4,4	4,4
Consumer prices (% y-o-y, period average)	1,9	1,5	2,5	2,4	2,3
State budget deficit (% of GDP)	- 5,1	- 5,1	- 5,3	- 5,7	- 5,5
Public debt (% of GDP, end period)	43,5	51,5	54,8	50,3	52,3
Unemployment rate (% end period)	18,1	18,2	17,4	17,8	17,7

Electricity Consumption in Poland vs. EU

The annual per capita consumption of electricity in Poland is 40% of the European Union average; this highlights the long term growth potential of the Polish energy market



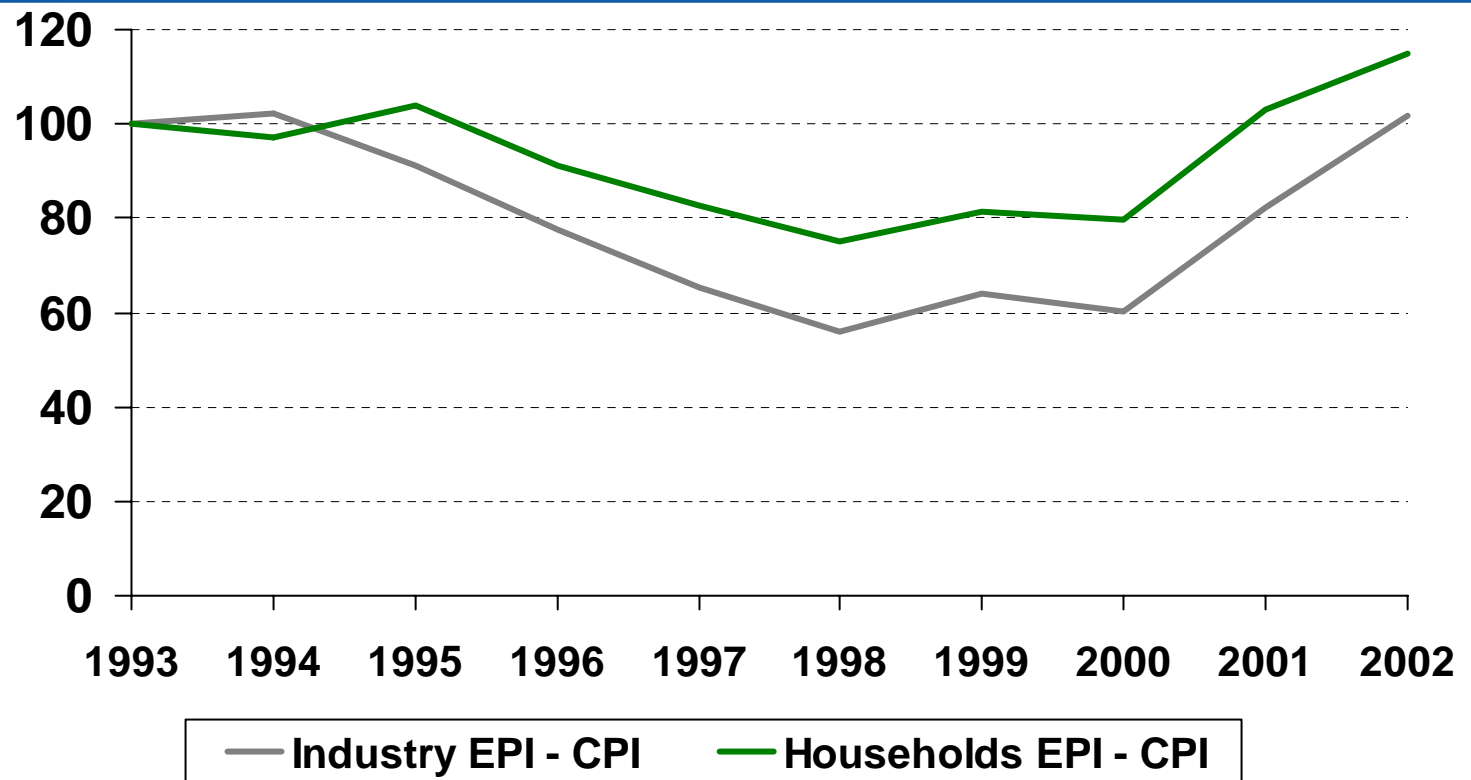
Electricity Market Demand*



*Including consumption from industrial CHPs

Source: ARE S.A.

Real Electricity Prices

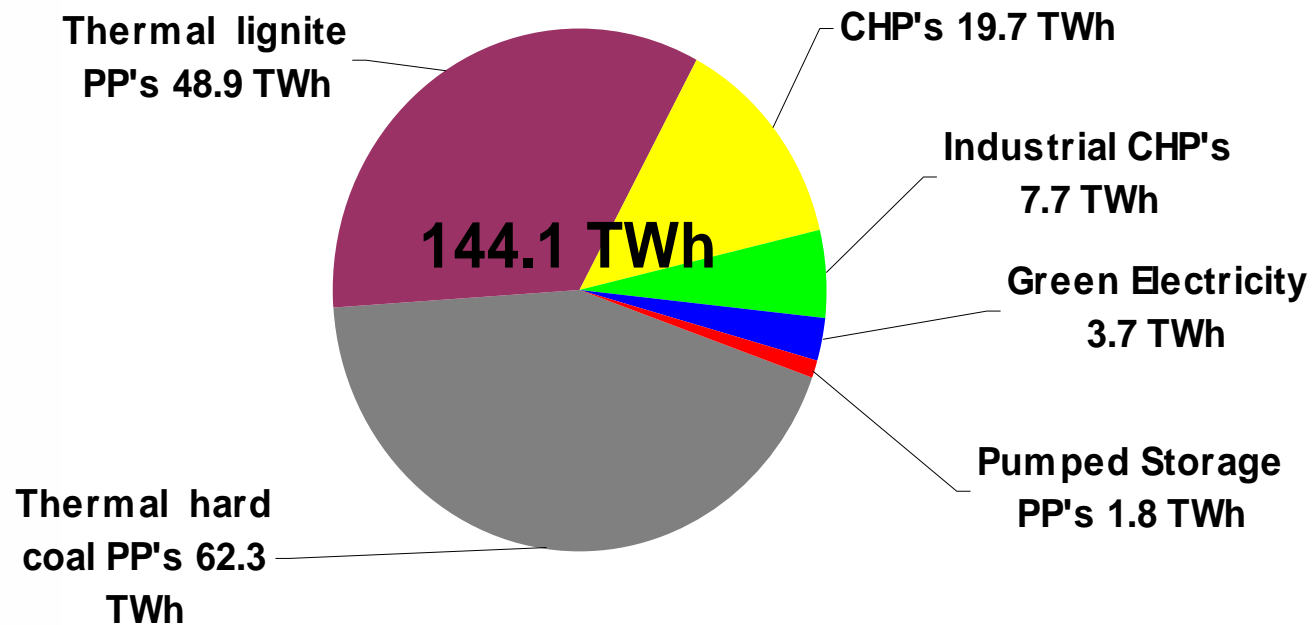


Transmission charges and VAT are excluded, 1993 = 100

Source: International Energy Agency, GUS

Structure of Electricity Generation

Electricity Production in 2002

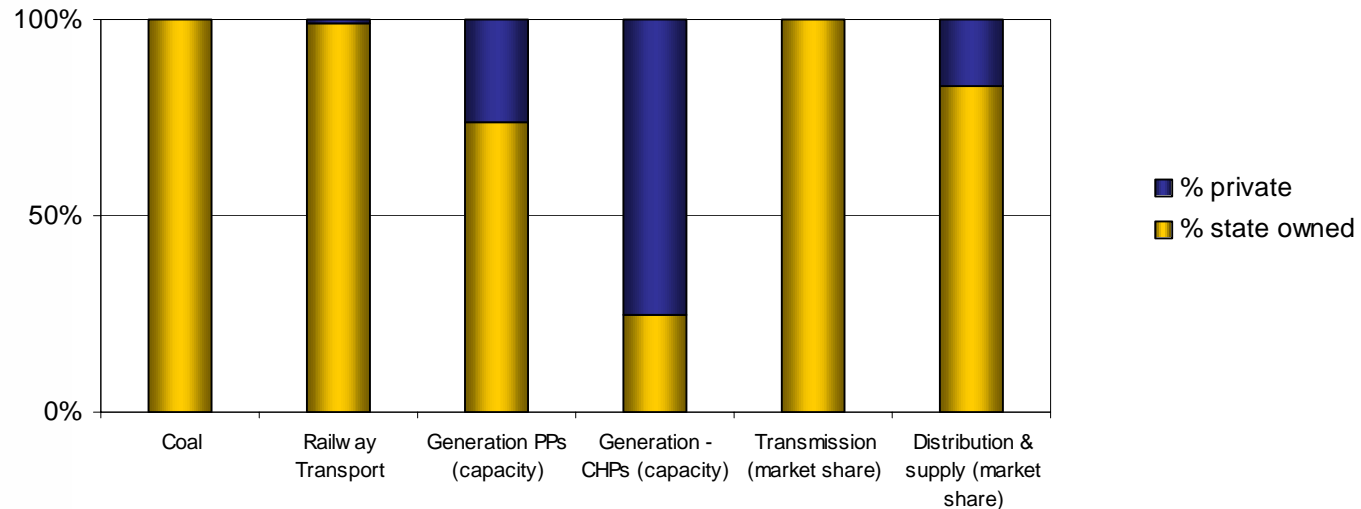


Supply & Demand Balance

- Installed capacity 34.0 GW
- Down Time 4 - 6 GW
- Available capacity 28 - 30 GW
- Peak Demand 25.0 GW
- Reserve Margin 10-15%

Source: ARE S.A.

Energy Sector Privatisation - Current Status

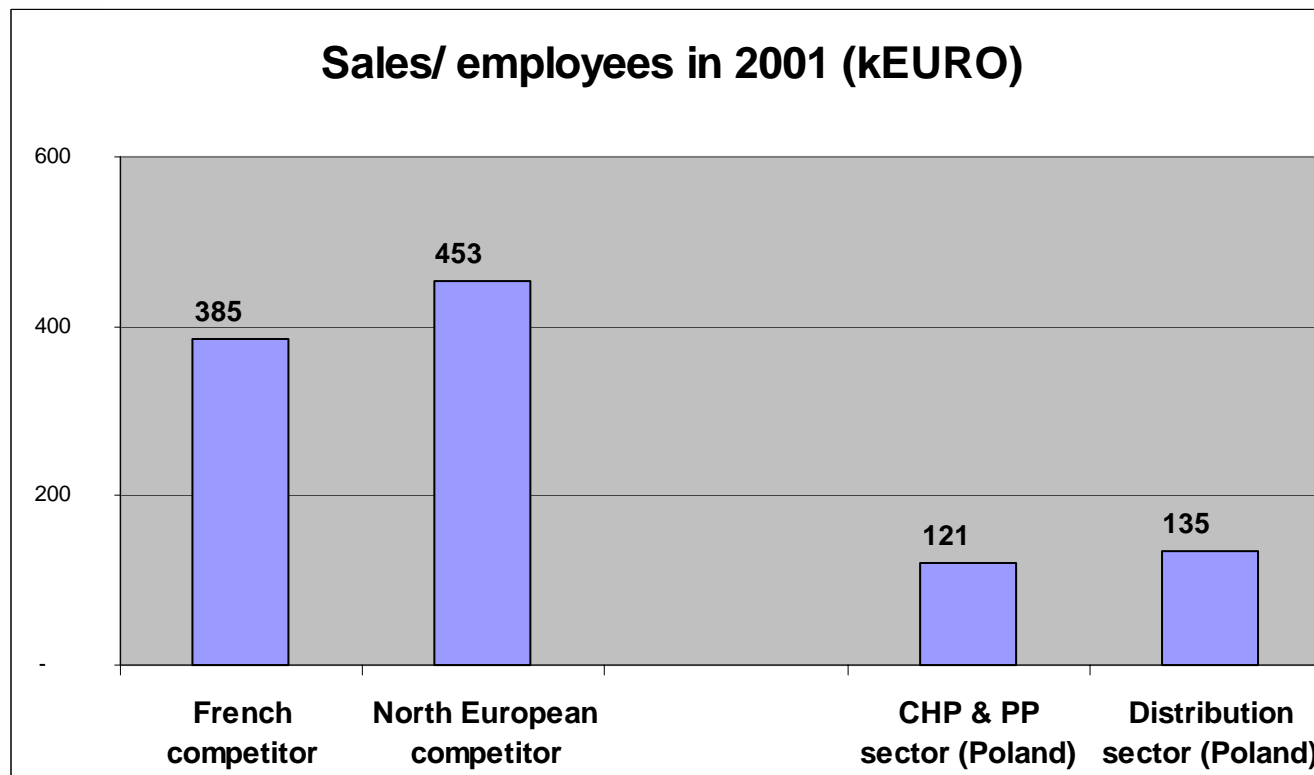


Slow progress with the majority of sector still state owned and the degree of privatization varies by sub-sector:

- Majority of CHPs privatized (representing 69% of total heat production in 2001)
- 26% of power generation capacity is in private “hands”
- two of the 33 distribution companies have been privatized, representing 18% of the sector

Energy Sector Productivity

The productivity in the Polish energy sector is one third of the Western-European level



Status of Market Liberalization

- The liberalization of power sector started with the introduction of the new energy law in 1997
- Energy sector regulator was established to set tariffs and to protect the interest of the consumer
- Some significant progress has been made to deregulate the market:
 - TPA available to large industrial customers since 1998
 - The Power Exchange was established in November 1999
 - A significant restructuring of the coal mining sector, which resulted in reduction in coal extraction capacity and a loss of 150,000 jobs

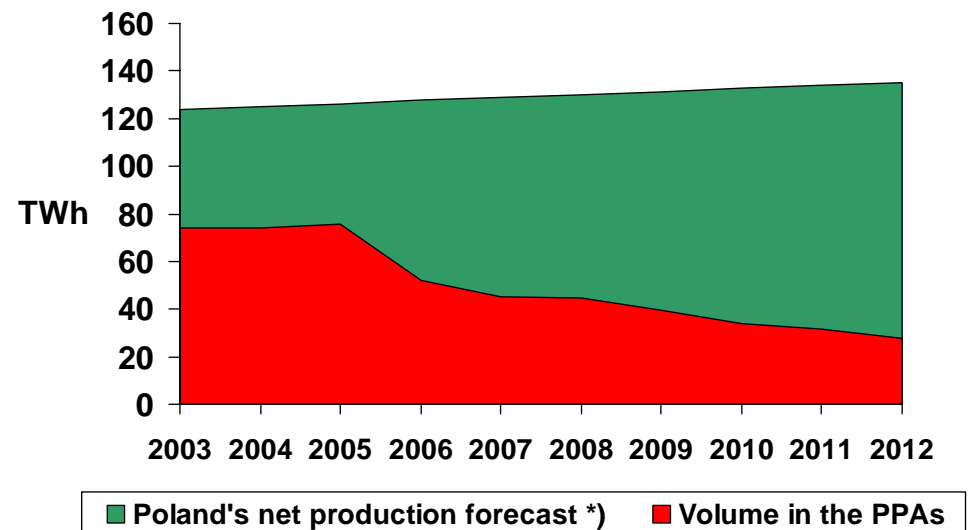
Key Challenges for Full Deregulation

Obstacles to deregulating the Polish energy market...

- Existence of long-term power purchase agreements
- Lack of liquidity
- Limited progress in privatizing and restructuring the sector
- Cross subsidies and state support
- Positioning and mind-set of PSE

Long-term Power Purchase Agreements

- Long-term power purchase agreements between PSE and electricity producers signed in the 90's
 - Used as a security for bank loans to the electricity producers
- Plan to terminate the PPAs in return for compensation to the producers
- To be approved by the parliament in Q4 2003
- Implementation in mid 2004



*) Incl. net production at pumped-storage power plants

Third Party Access - Timetable

- August 1998, the Minister of Economy issued Access Regulation
 - determines which groups of users that are entitled to third party access based on energy consumption. If more than 10 GWh (52% of total electricity consumption in Poland) a supplier can be chosen and terms negotiated
- The energy market is expected to be fully deregulated by the end of 2005, according to the following timetable

Timing of Access	Annual consumption	Number of consumers	Cumulative % of total consumption
6 August 1998	500 GWh	21	22%
1 January 1999	100 GWh	83	37%
1 January 2000	40 GWh	180	43%
1 January 2002	10 GWh	610	52%
1 January 2004	1 GWh	3300	60%
5 December 2005	less than 1 GWh	around 15 million	100%

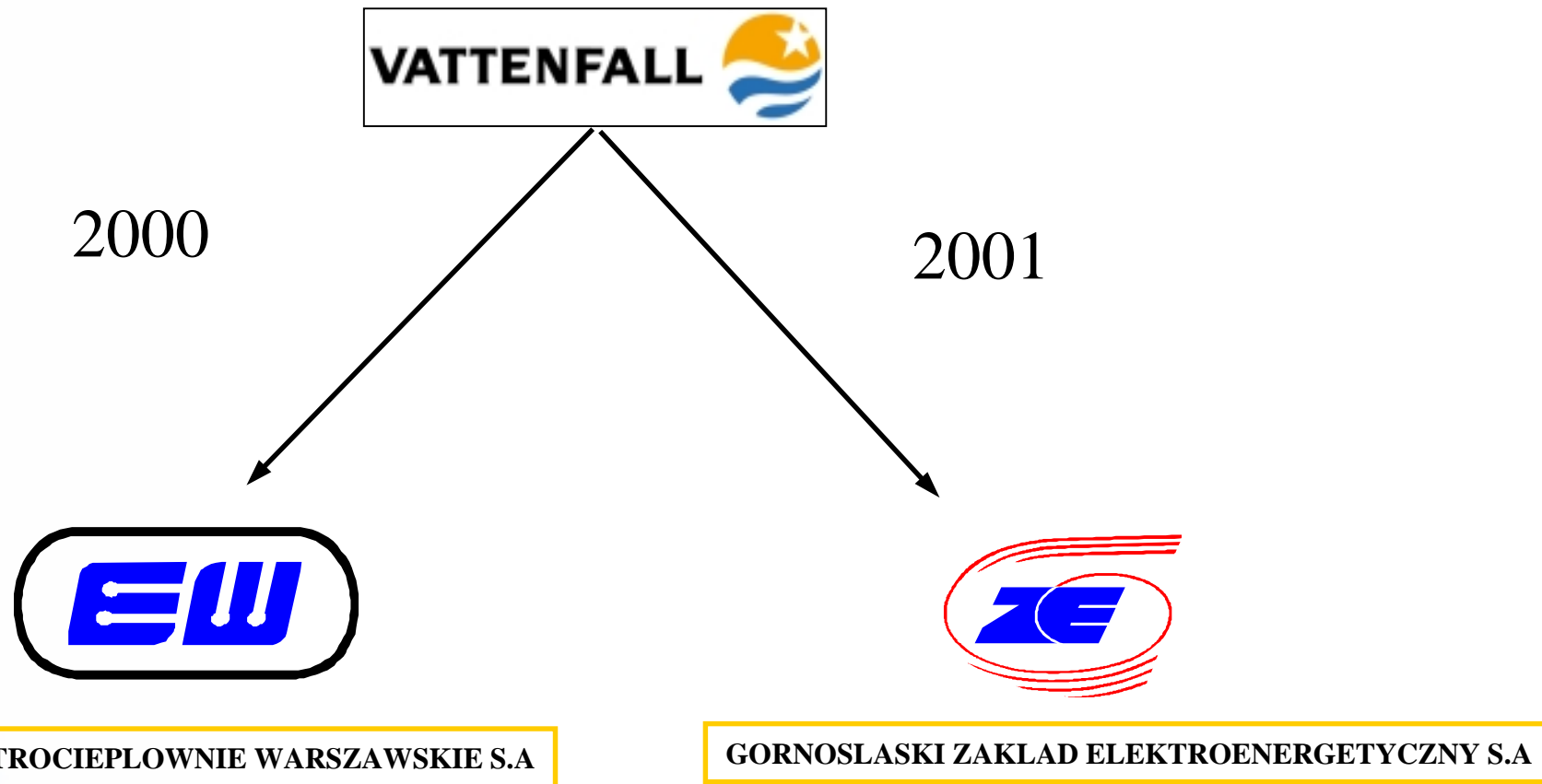
Energy Sector Regulatory Framework

- Role of the regulator (“URE” – Energy Regulatory Authority)
 - Regulate the current behaviour of the market players
 - Develop the rules for the future framework
 - Protection of customers – approval of tariffs
- At present strong focus on price, the setting of tariffs based on cost-plus; cost of capital accepted as a “justified cost” by URE
- Formally fully independent, but in practise the Government has some influence
- Areas of regulation:
 - CHPs
 - Transmission
 - Distribution and supply

Impact of EU Accession

- PSE, the transmission system operator will have to un-bundle its trading activities
- Distribution and supply businesses will have to be unbundled by 1 July 2007
- Cross border trade will be deregulated
- Introduction of new EU Emissions requirements between 2005 and 2017.
- Privatisation of the sector is expected to accelerate
- The electricity prices are likely to increase due to:
 - Capital expenditure to ensure environmental compliance
 - Increase in renewable energy sources
 - Relatively low level of reserve margin

Vattenfall in Poland



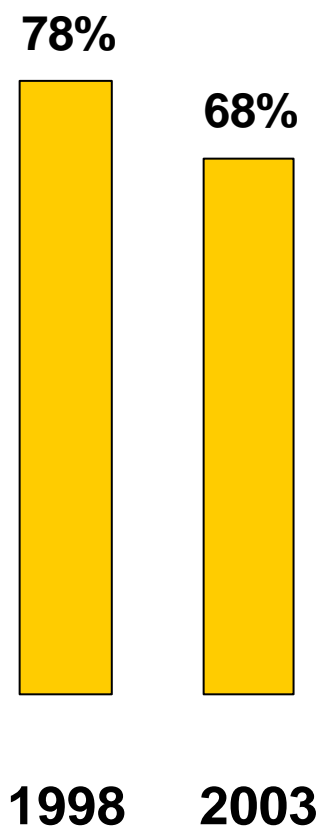
Vattenfall in Poland – EW

- Vattenfall AB acquired 55% stake in EW in 2000 and 14% from employees in 2002 for the total of 1.2 billion PLN
- EW is the largest heat producer in Poland with 27% cogeneration market share and heat sales of 11,2 TWh in 2002. In 2002 EW also sold 3,2 TWh of electricity.
- Capital expenditure in EW exceeded 500 million PLN in 2000-2002

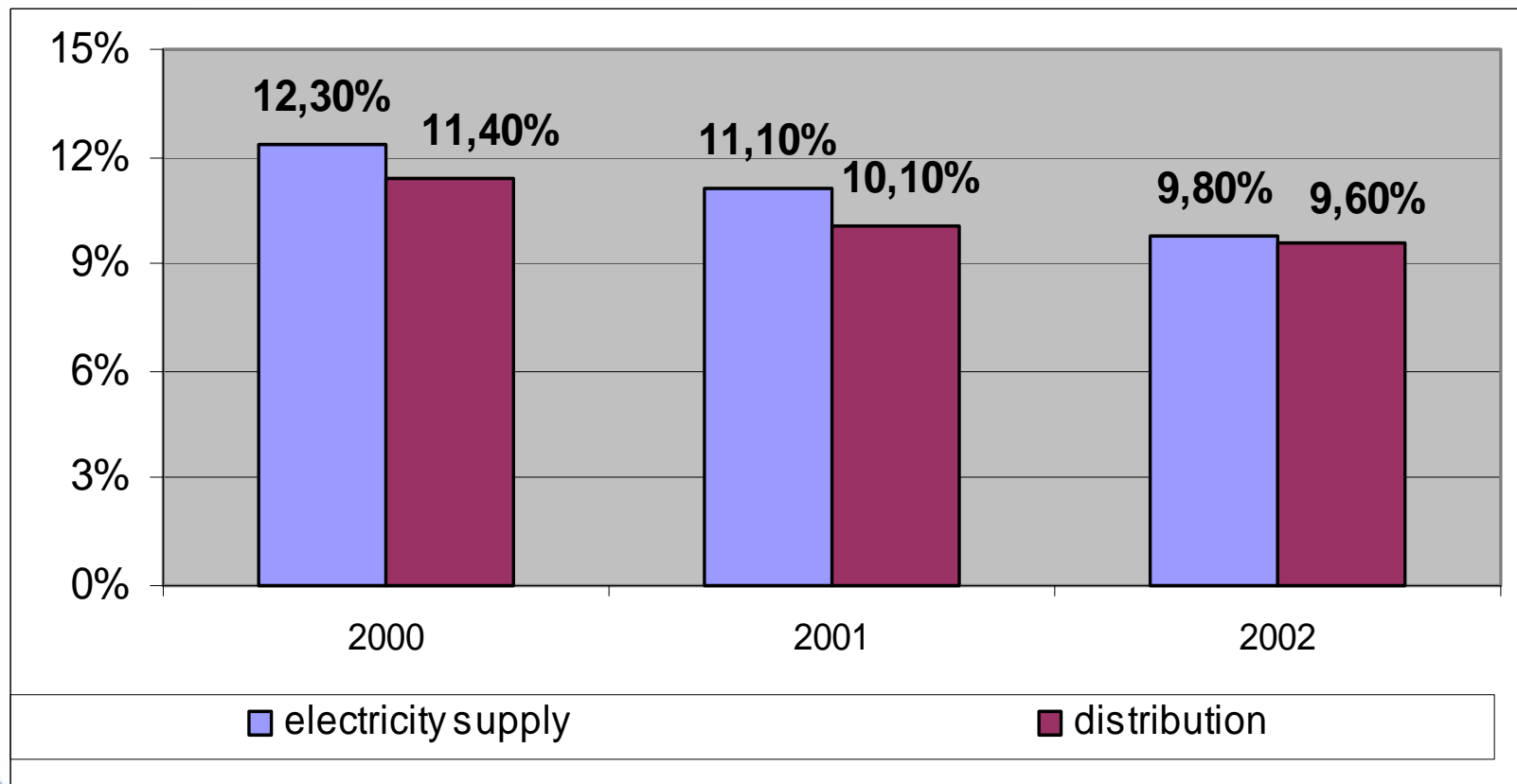
Vattenfall in Poland - GZE

- Vattenfall acquired 34 % stake in GZE for PLN 943 million from State Treasury in 2000-2002 and subsequently increased its stake to 54% through a capital increase in May 2003 and purchase of employees' shares
- GZE is the largest distribution company with an almost 10% market share and electricity sales of 10 TWh
- Capital expenditure in GZE amounted to PLN 320 million in 2001-2002

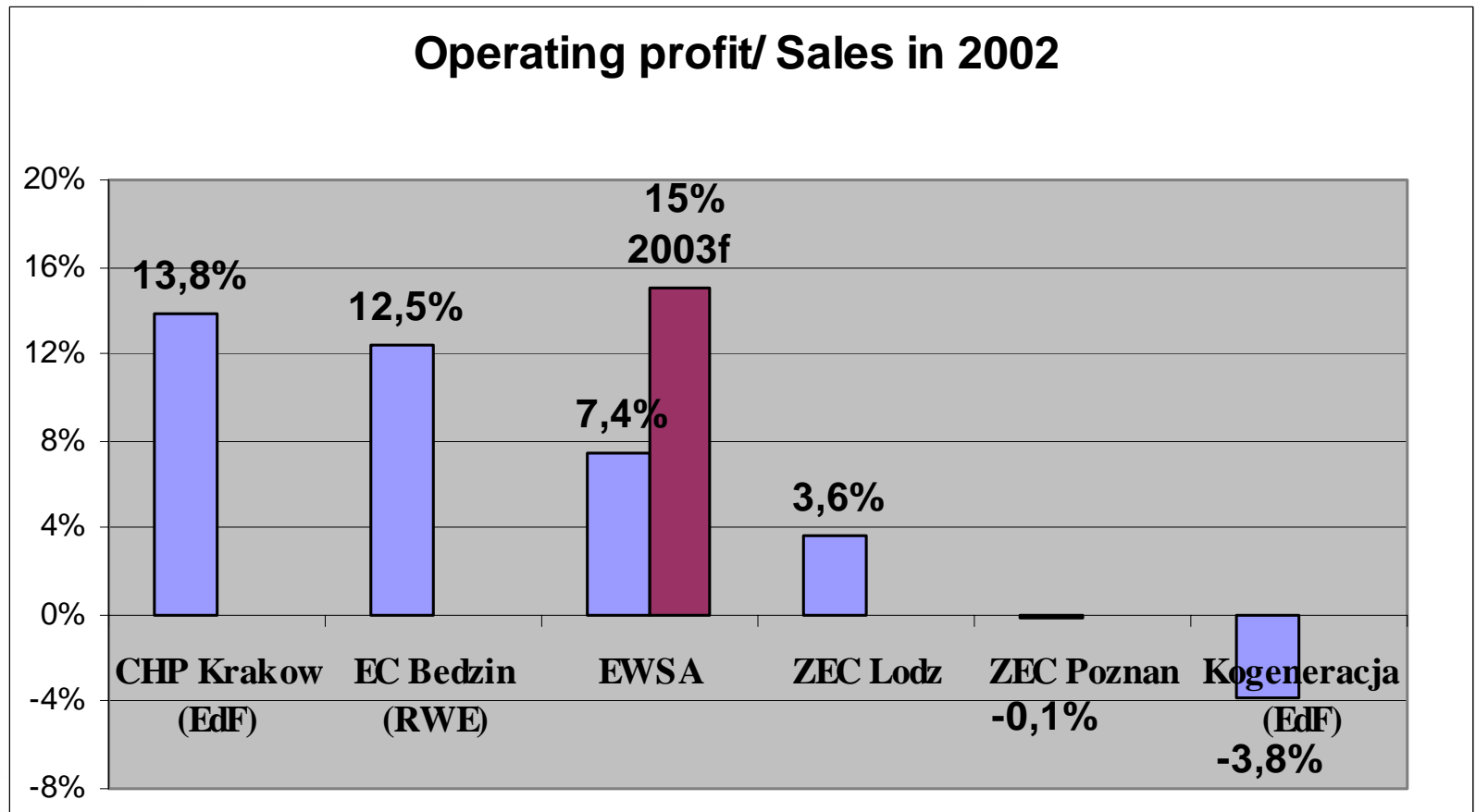
EW Heat Market Share in Warsaw



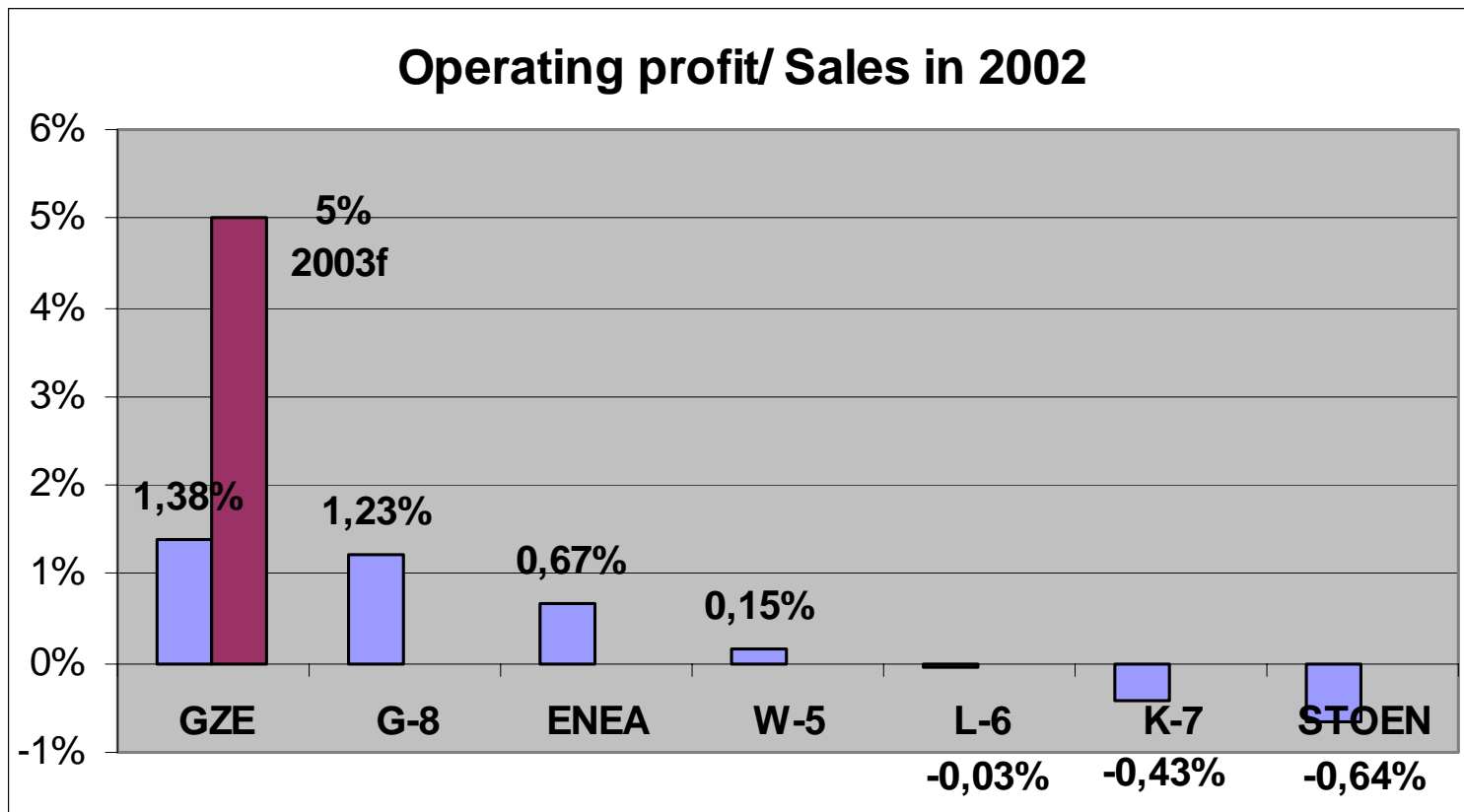
GZE market share in Poland, 2000 - 2002



Performance vs Competitors - EW



Performance vs Competitors - GZE

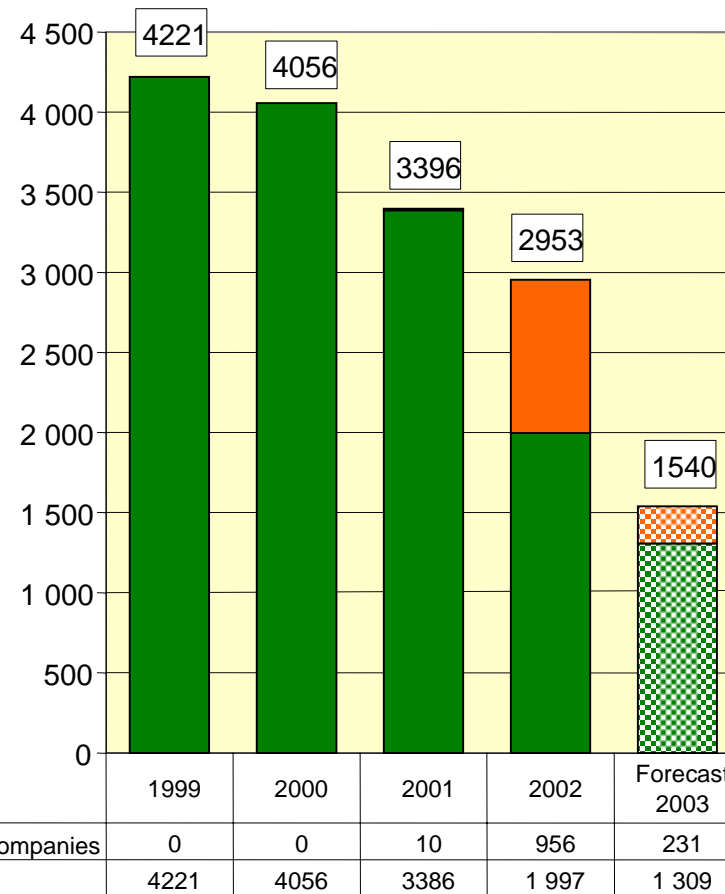


Business Unit Poland

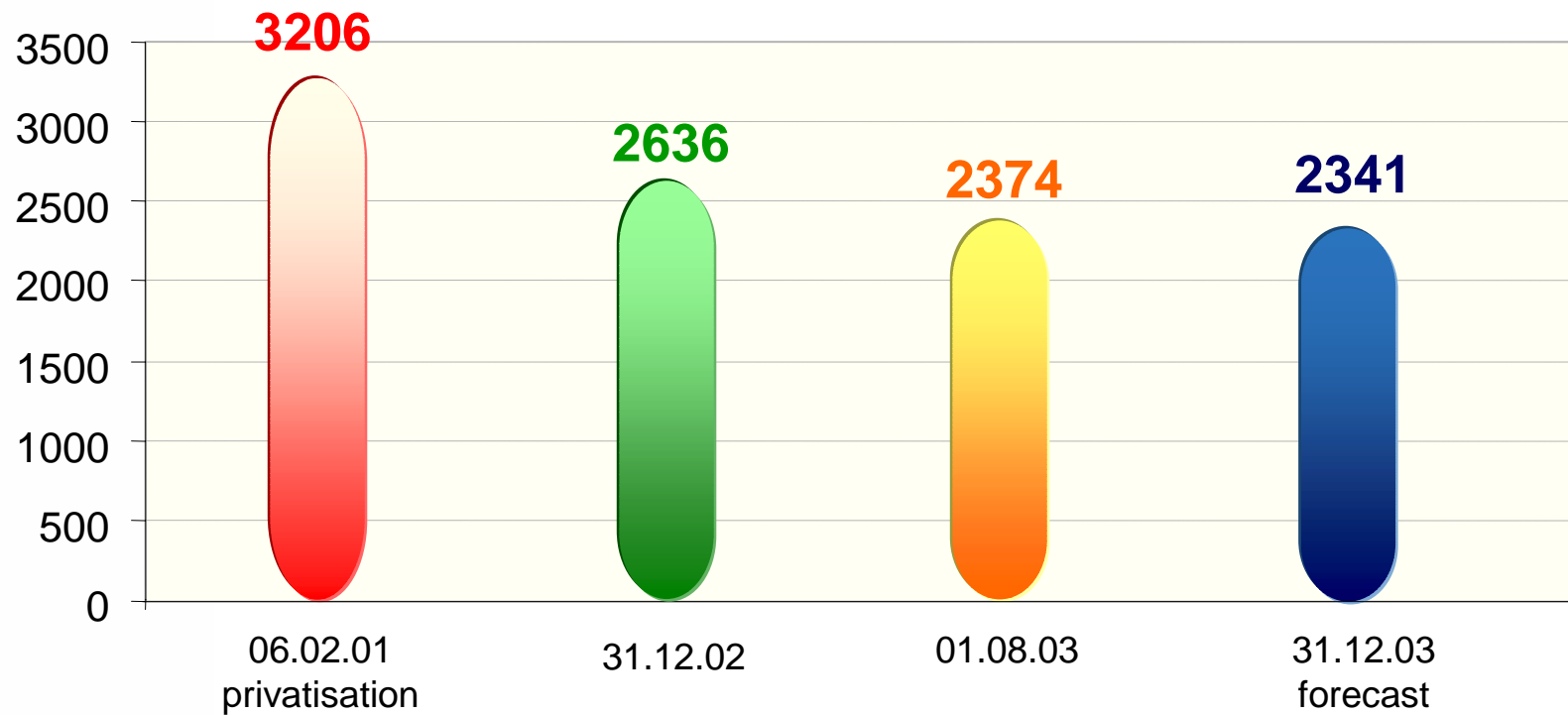
Business Plan 2003-2005 Objectives

- Completion of operational restructuring
- Strengthening of financial controls (reporting, capital budgeting and divestments)
- Achievement of a “benchmark”-level of efficiency
- Management and organizational development
- Integration of overlapping functions including IT and PR/ communication
- Implementation of a branding strategy and an efficient customer service function
- Environmental compliance

Employment Restructuring Process in EW

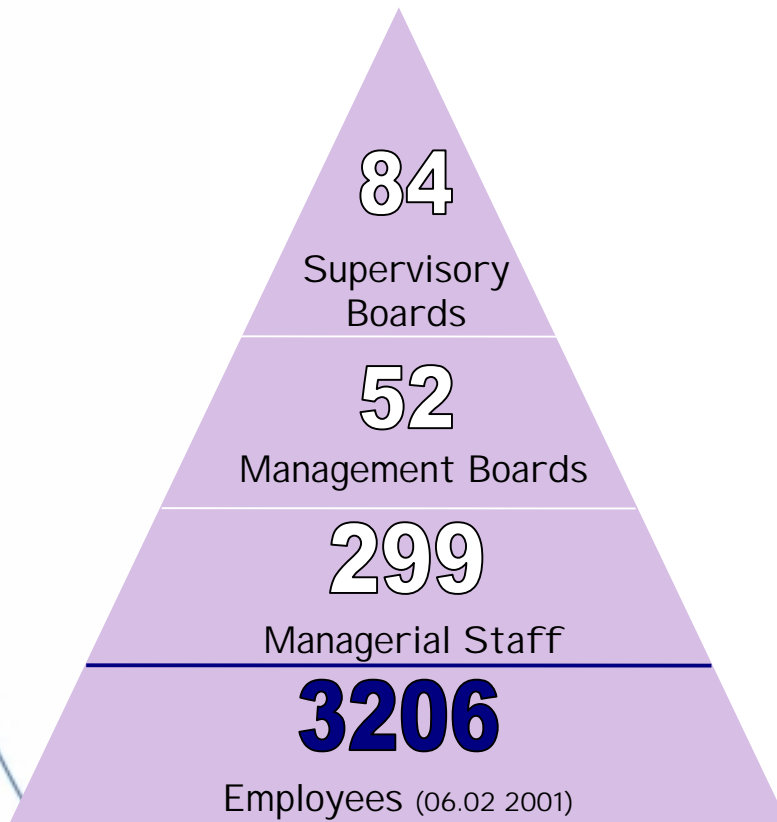


GZE – Level of Employment, 2001 - 2003

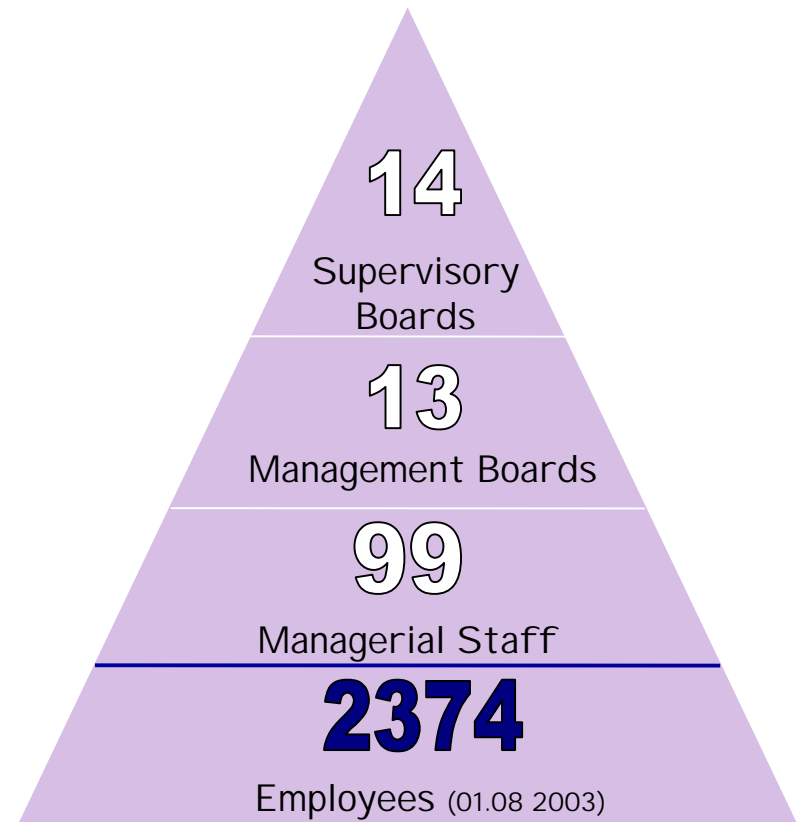


Employment Level Pre and Post Restructuring at GZE

Before



After



Branding Strategy in Poland

Previous



October 2003

Introduction of Vattenfall endorsement

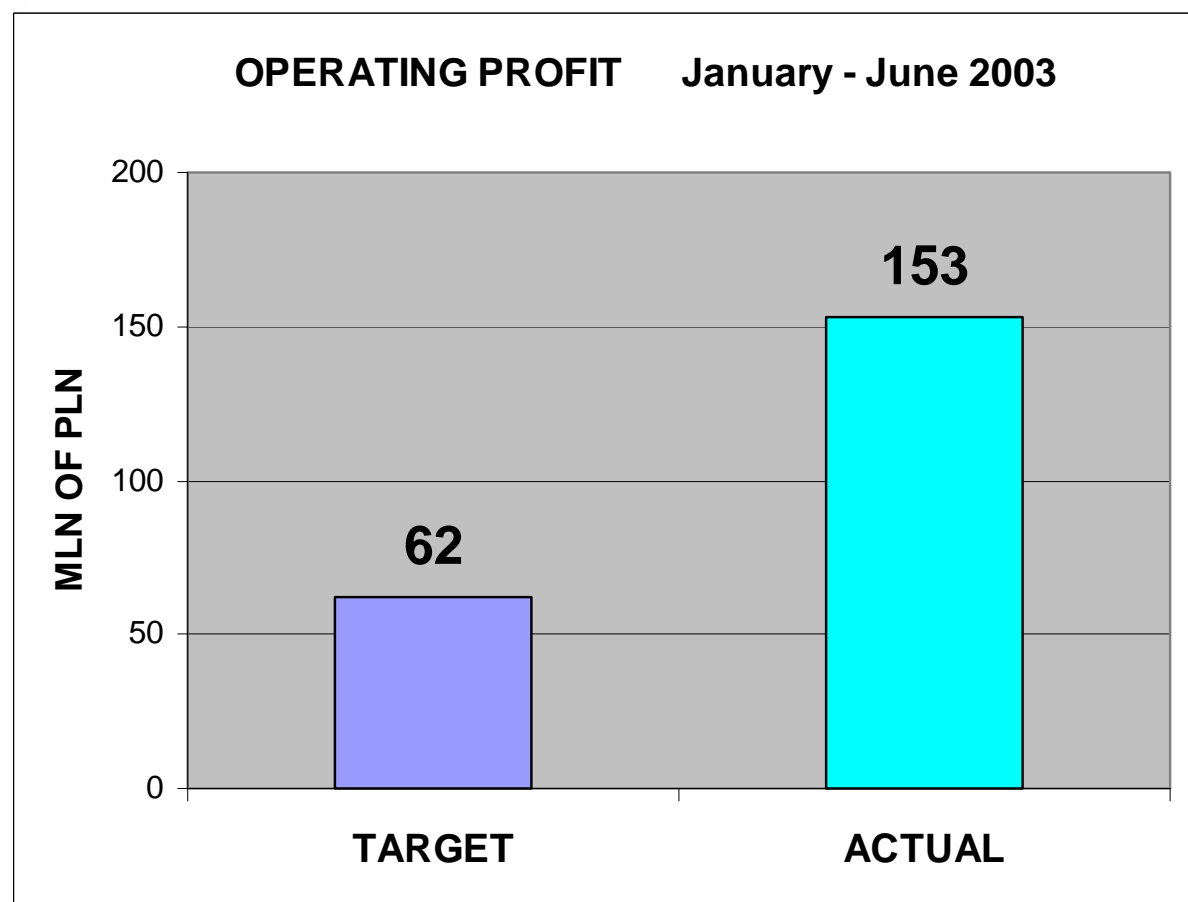


2005 - 2006

Transition into Vattenfall brand

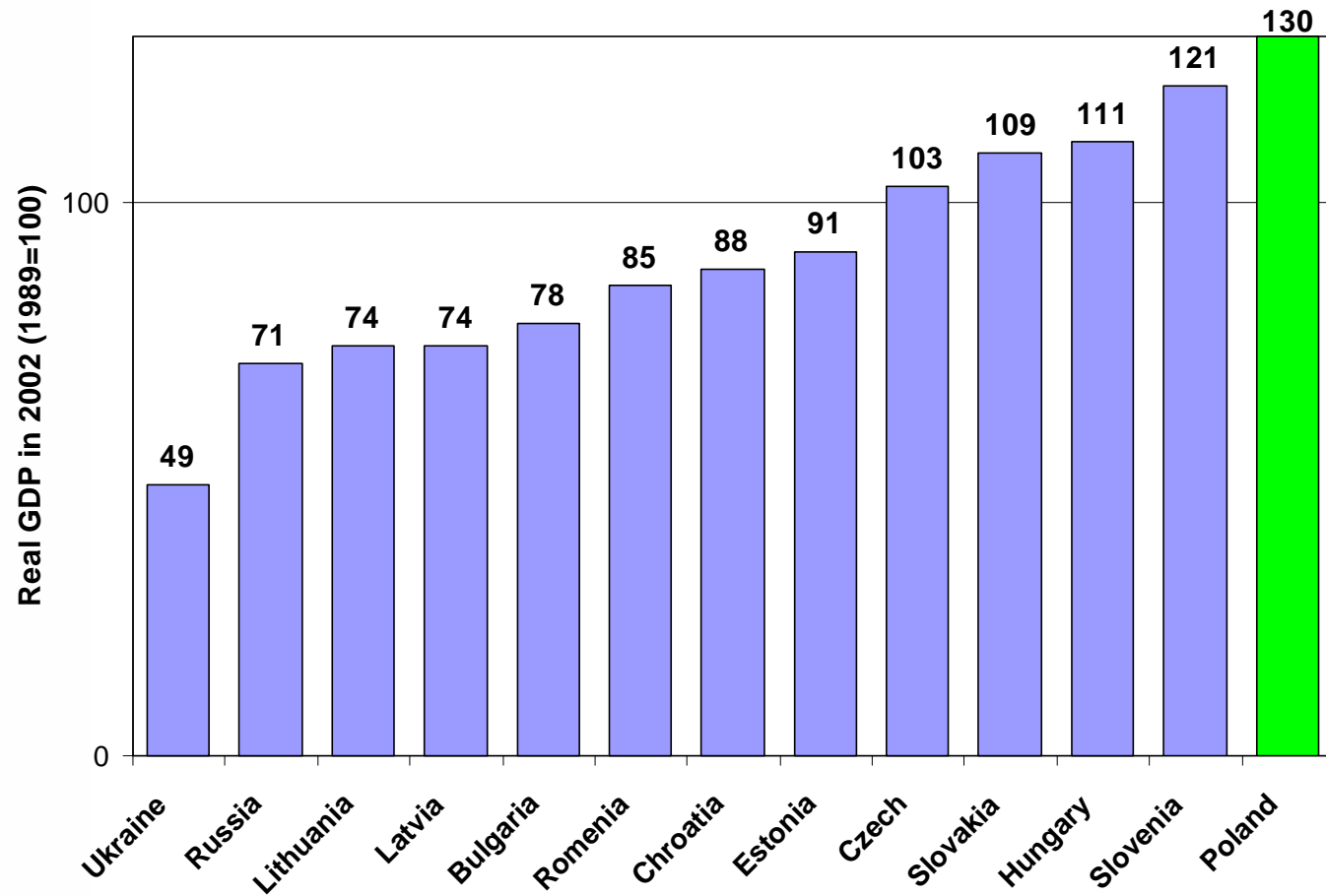


BU Poland Operating Profit January - June 2003

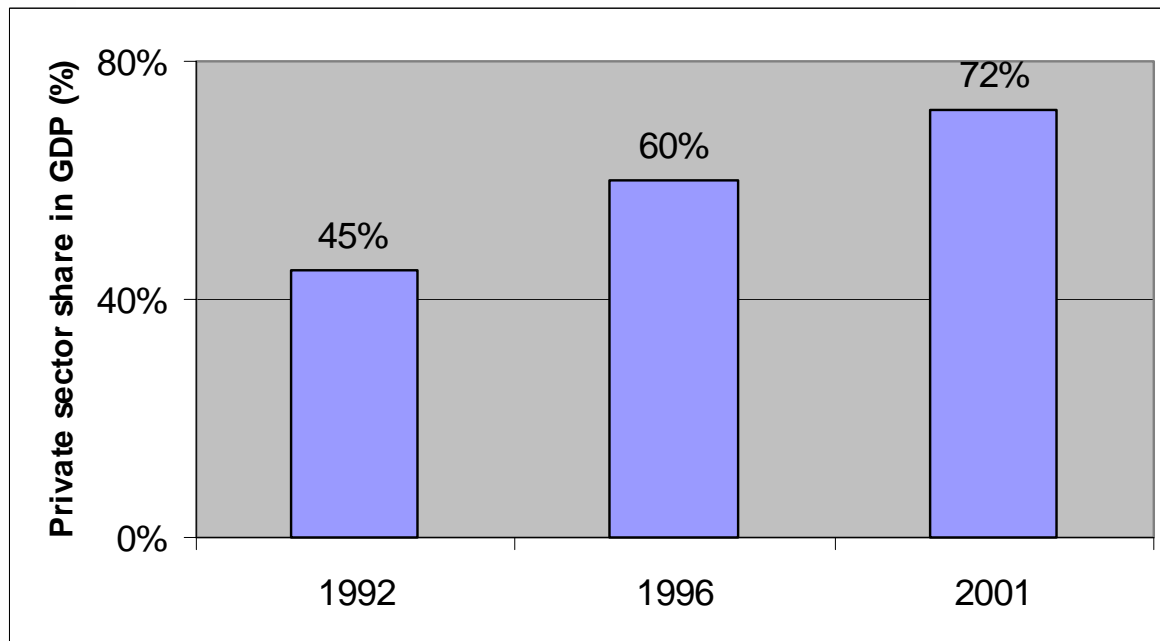


APPENDICES

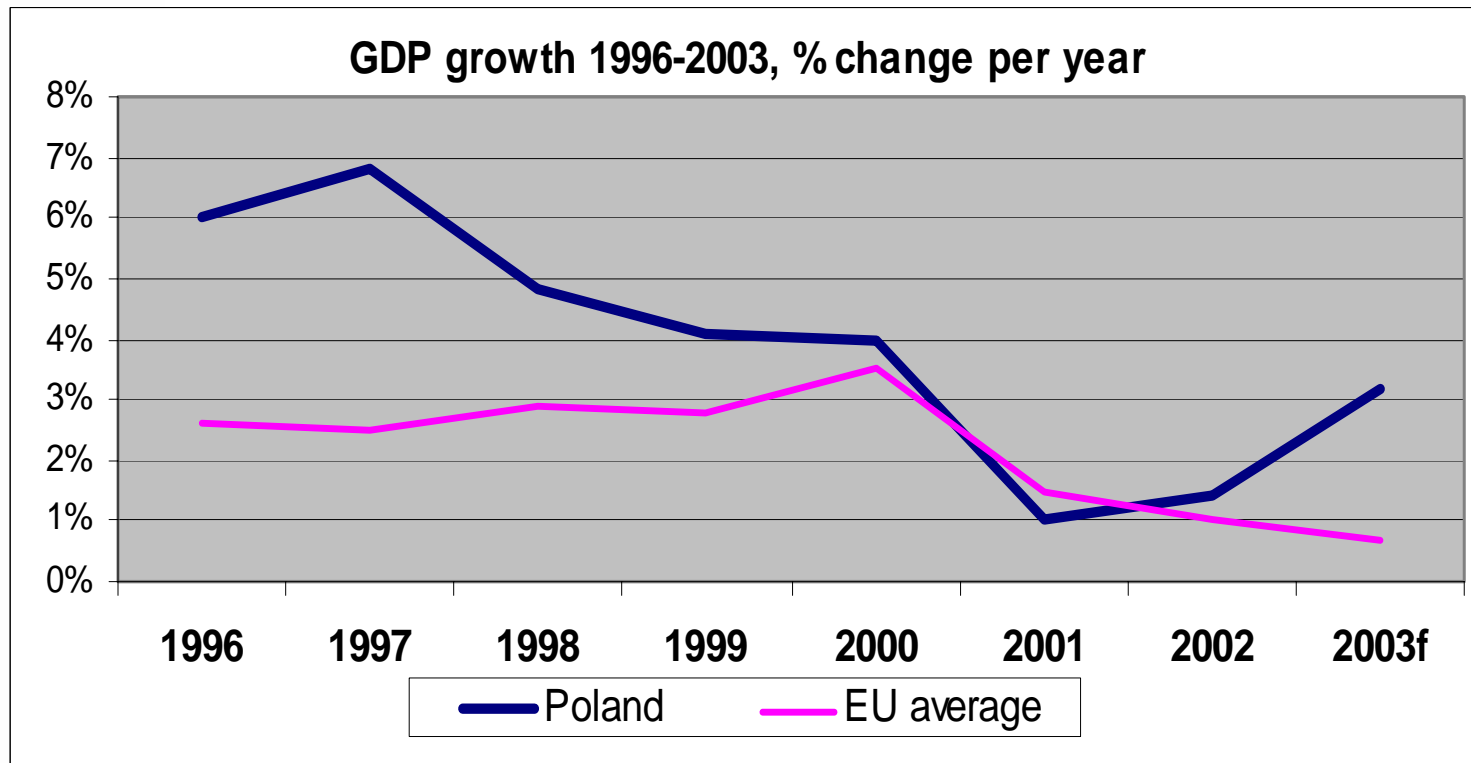
GDP Performance



Private Sector Share of GDP

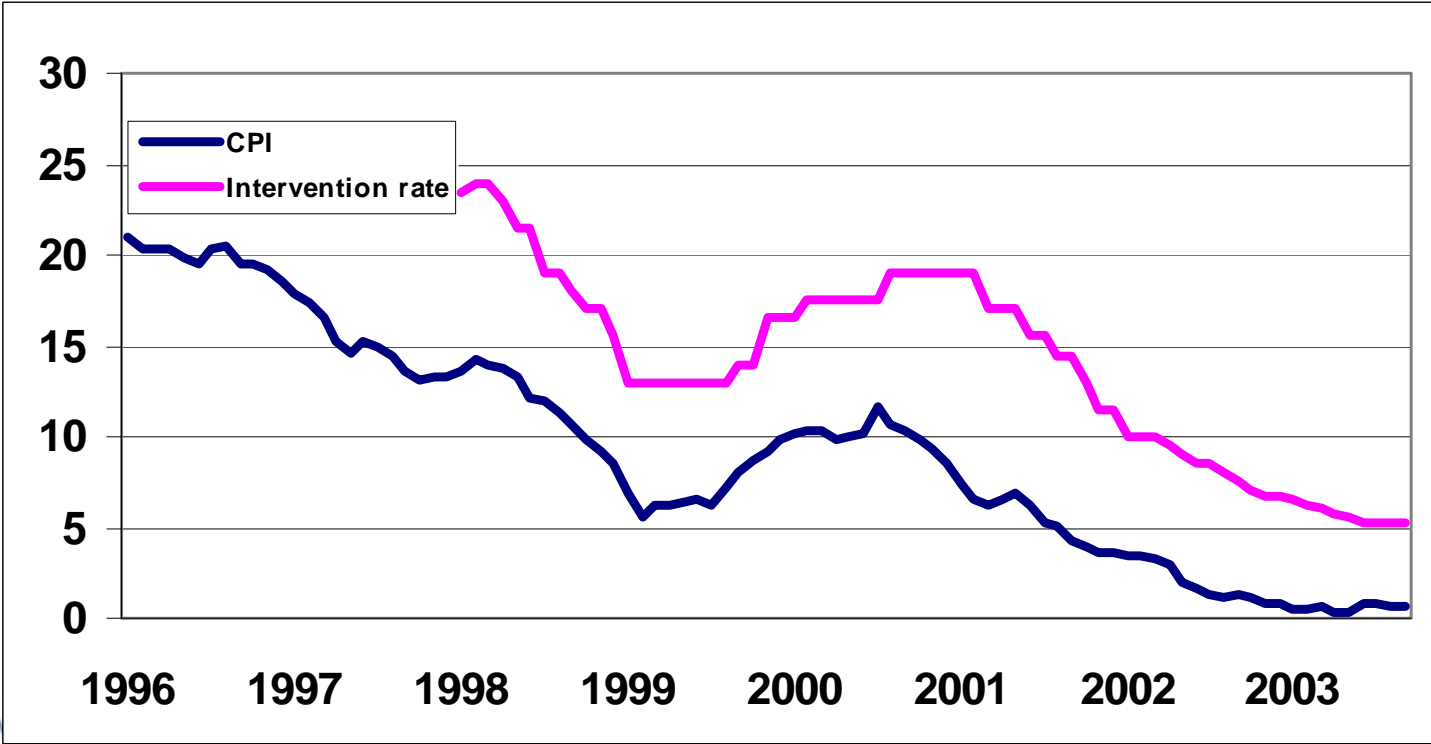


GDP Growth 1996-2003



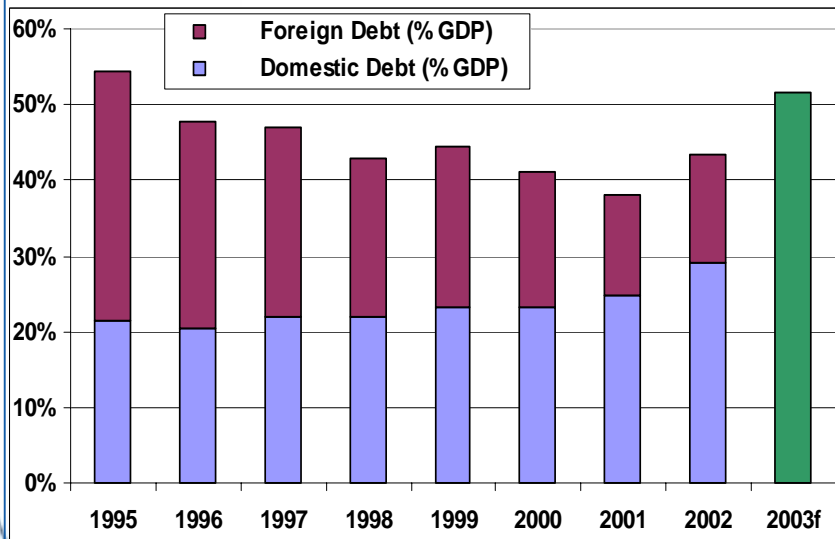
Inflation and Interest Rates

CPI Inflation (% YoY) and Intervention Rate



State Budget Deficit and Public Debt

Total Public Debt, % of GDP



State budget deficit, % of GDP

