Problem 2.
Suppose a firm’s tax rate is 35%.

a) What effect would a $10 million operating expenses have on this year’s earnings? What effect would it have on next year’s earnings?

We assume that earnings = NetIncome. We also know that NetIncome = (1 – t) * EBT. So, if operating expenses had increased by $10 million then EBT would have decreased by the same amount and Net Income would have decreased by (1 – 0.35) * 10 or $6.5 million.

There would have been no effect on the next year’s earnings.

b) What effect would a $10 million capital expense have on this year’s earnings, if the capital is depreciated at a rate of $2 million per year for 5 years? What effect would it have on next year’s earnings?

In this case capital expenses would have affected depreciation for 5 years ahead so this year’s and next year’s EBT would have decreased by $2 million and this year’s Net Income would have decreased by $2 · 0.65 = 1.3 million as well as next year’s one.

Problem 3.
Consider the balance sheet and the income statements of a Russian company (below). The analysis should be based on dollar amounts.

a) Compute Profitability, Activity, Liquidity, Financial Leverage and Market Value ratios that are possible to derive from the data for years 2005 and 2004. Use also the following additional information: the total number of shares is 850 mln; the stock market price was about $65 at the end of 2005 and about $30 at the end of 2004. Interpret the ratios and analyze the changes.

b) Assume that back in January 2006 you forecasted that starting from the beginning of 2006 the net income would grow by certain percentage per year (take any value from 0% to 10%). You also expected that the company would pay out 15% of the net income as dividends each year and there will be neither repurchases nor new issues of equity. Based on your forecast, compute the value of shareholder’s equity as of the beginning of 2006, assuming that the relevant discount rate is 15%. Compare it with the market capitalization of the company as of the beginning of 2006 (approx. the same as at the end of 2005). What did the market think about the firm’s prospects? (find the corresponding net income growth rate). Did it over- or underestimate the company with respect to your forecast?

c) Guess what this company is (answer to this question gives no additional points — it’s just to spur your curiosity).