Q1: Read "Analysis: Taxing the wealthy: Differences at the margins", FT, 24/10/2011, Monday (not in the CMR; the uni. does not subscribe to the paper in this year so that I cannot download it).

Q2: Find and read the latest 10-Q form of "Google", "Microsoft", and any other companies you think are very profitable. Find the leverage rate (namely the debt-to-equity ratio) of each of the them.

Q3: Show the irrelevance of the dividend policy (namely when to pay the dividend) to the value of the firm, when all the conditions of MM are satisfied.

Q4: In a two-period binominal economy, thre are two firms that have identical cash flow: $120 with probability one half and $80 with probability one half tomorrow. Today Firm One issues 80 units of risk free debts and 20 shares, so each unit of debt returns $1 tomorrow for certainty and each equity return $2 in the good state and nothing in the bad one. Firm Two issues 100 shares, each of which returns $1.2 in the good state and $0.8 in the bad one. There are two types of potential buyers of these securities. One kind is risk neutral, called deep pockets. The other type of investors, called households, is extremely risk averse, that is, they only care what they get at the worst case, for example, a firm 2's share is worth only $0.8 to them. Overall the deep pockets have $70 and households's capital is abundant. Assume the risk free rate, r_f, is 0.

(1): If deep pockets only invest with their own capital, that is, they have $70 in total to make investment, what is the price of Firm One's debt, its equity and Firm Two's equity?

(2): Are the values of the two firms equal? If they are not, how is MM's irrelevance theorem violated?

(3): Suggested by the proof of MM's theorem, what shall happen then? Shall deep pockets borrow from households? What is, then, is the price of Firm One's debt, its equity and Firm Two's equity?