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REPORT ON THE THESIS OF MICHAL MRAVEC

The first paper analyzes liberalization of the gas market in the Czech Republic in 2005. Gas prices increased as a consequence of liberalization. The explanation is related to the fact that 75% of the market is supplied by Russia and 25% by Norway. A monopoly model and a Cournot model are built to understand this phenomenon. The justification for the Cournot model is well done. The discussion of the cases is comprehensive though it should be shortened when considering for publication. The discussion of the regulated and liberalized monopoly take up most of the space. One would like to see more discussion of the precise condition under which oligopoly has an effect of reducing prices.

One problem I have with the paper is that it does not consider possible outside competitors who might compete to get into the market, more in the spirit of the Baumol contestable monopoly model. Maybe this is not a realistic assumption but then the price observed in the Czech Republic after liberalization should be the same as in other European countries. This discussion on what happens outside the Czech Republic seems to be missing. Moreover, contrary to the standard duopoly model, one could consider a situation where there is competitive bidding for contracts with auctioning of contracts. This might yield different results.

The second paper, also devoted to the natural gas market, looks at the issues of storage. The previous model is extended to incorporate storage, a feature that is very different from the electricity industry for example. This is done in a simple way with seasonal output variation and constant demand. The opposite would have been more realistic and I wonder why this was not done instead. The results of the model are different than the previous one but the comparison of the different cases is qualitatively very similar. An originality of the paper is that he further discusses two scenarios: one in which the storage is done by the incumbent trader and one where the storage operator is a separate monopoly. When storage is done by the incumbent, this leads to high storage pricing to keep other traders from entering the market. When it is done by a separate operator, the result is even worse as one gets a replication of the standard sequential monopoly problem (double marginalization). I found the case of regulated storage pricing interesting but the discussion was too quick. The most original results are the ones at the end and they take up less space in the paper.

The third paper investigates the effect of ownership unbundling in the case of the European electricity market. There exists a large theoretical literature on this (strangely enough, the author does not cite much of it, maybe because it was mostly in the 80s and 90s?) and the current paper is empirical, which is a good choice. The contribution of the paper is to take the SUR (seemingly unrelated regressions) framework) to explain variation in the price for industrial consumers, for households and for the ratio of these prices. He

understands that it is not wise to do all three together and so he does them in pairs (in level and in ratio). He uses country fixed effects and analyzes the effect on prices of two regulatory variables. He uses a dummy variable for the opening of the market for a particular customer group. He also looks at the effect of ownership unbundling but interacted with market opening. This is done with leads and lags in a rather mechanic way in my view. An interesting finding is that the price-decreasing effects of market opening are the strongest in countries that have the lowest corruption. The price effect decreases quite strongly as corruption scores increase. Interestingly, this result is the same for new member states as for old member states. Also, the price effects are stronger for industrial clients than for households. Ownership unbundling effects on the other hand are stronger in countries with high corruption scores. Overall, results are the same looking at price ratios. The author performs quite a number of robustness tests. The one I found the most interesting is the one where he looks at the countries that only had market opening and no unbundling.

I find he puts care into his empirical analysis even though he does not discuss much his research design in terms of exogeneity and endogeneity. Despite that, I think his results are interesting and even quite rich. However, I really had a hard time reading the results as they were presented and would have preferred to see results presented more in the form of tables. Moreover, the tables in the appendix are simply not readable. Also, he does not comment much the price increase effect the year after unbundling. The discussion on weighted variables is not very clear.

Overall, the thesis is well written and the three essays are original pieces of applied theory and empirical work. This thesis is better done than other theses I have seen here and thus the recommendation to pass is a straightforward one.

Sincerely yours,

A handwritten signature in black ink, appearing to be 'Gérard Roland', written over a horizontal line.

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