

Report on Bachelor/Master Thesis

Institute of Economic Studies, Faculty of Social Sciences, Charles University in Prague

Student:	Tomas Vylezik
Advisor:	Karel Janda
Title of the thesis:	Weather Risk in the Natural Gas Market

OVERALL ASSESSMENT (provided in English, Czech, or Slovak):

Preliminary – not yet submitted to IES

The thesis is concerned with the topic of characterising weather risk and dealing with uncertainty and risk imposed by weather. The weather risk is investigated in the framework of Czech natural gas market. This choice of the topic very much capitalizes on the insider experience of the writer who works in the major Czech natural gas company RWE Transgas.

The first chapter dealing with theory of weather risk provides a very nice summary of existing academic research and the business oriented research too. Second chapter deals with the description of the natural gas market and it is primarily oriented on the Czech market. This chapter strongly benefited with the author's intimate knowledge of the field and his access to data.

The third chapter Weather in the Czech Gas Market forms an empirical core of the thesis. Author investigates on Czech data the connection between temperature and gas consumption. His main finding is that the relationship between natural gas consumption and temperature is approximately linear. The data on gas consumption (daily data for many years) and on temperature are probably as good as anybody can get. (Maybe some regional data and regional temperatures could be obtained and used too?) A small deficiency of this section are missing references to relevant academic literature. The literature review on pages 50-52 does not contain any reference to any journal article. Therefore it is difficult to judge which journals would be appropriate outlets for this type of research. The chapter 4 Hedging with Weather Derivatives looks somehow sketchy so far.

The possibilities of using truncation or censoring techniques (see major textbook of Green, 5th edition, chapter 22) in econometric model dealing with the topic of the Chapter 3 (relation between temperature and gas consumption) could be discussed during the thesis defense. Another possible question for the thesis defense is practical relevance of chapters 3 and 4 for the Czech natural gas market.

I recommend the thesis to be admitted to the thesis defense. My grading of the thesis is a very weak B grade (grade 2 on number scale).

SUMMARY OF POINTS AWARDED (for details, see below):

CATEGORY	POINTS
Literature (max. 20 points)	10
Methods (max. 30 points)	20
Contribution (max. 30 points)	15
Manuscript Form (max. 20 points)	16
TOTAL POINTS (max. 100 points)	61
GRADE (1 – 2 – 3 – 4)	2

NAME OF THE REFEREE: Karel Janda

DATE OF EVALUATION: