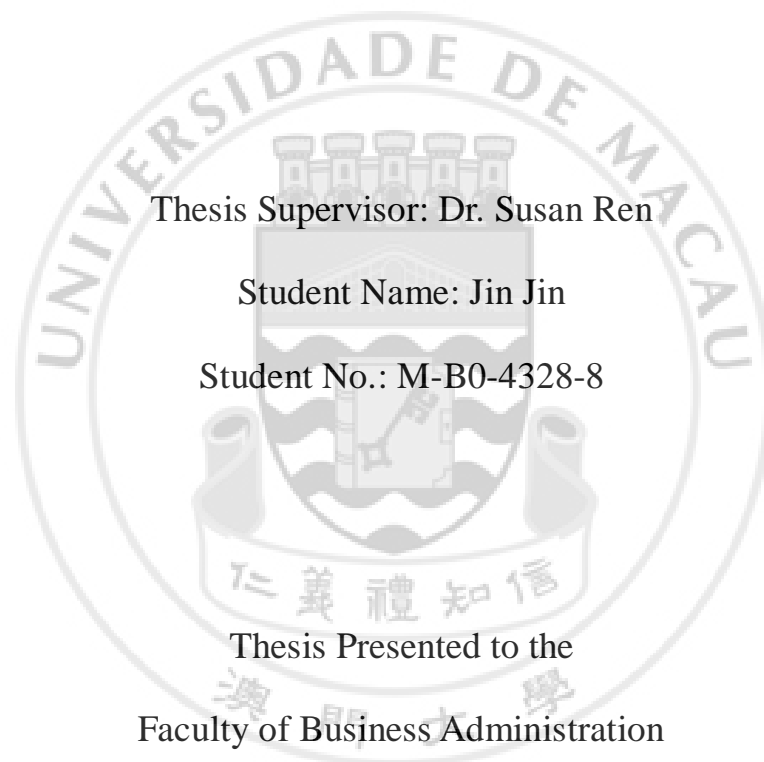


**University of Macau**  
**Faculty of Business Administration**  
**Master of Science in Finance (MSc in Finance)**

**Firm IPO and Air Quality: Evidence from China**



University of Macau

In partial fulfillment for granting the Msc in Finance Degree

2012

# Firm IPO and Air Quality: Evidence from China

Abstract .....	1
1. Introduction .....	2
2. Literature Review .....	4
2.1 Growth and Environmental Pollution .....	5
2.2 Corporate Governance and Environmental Pollution .....	5
2.3 Government Investment and Environmental Pollution.....	6
2.4 Other Variables and Environmental Pollution .....	7
3. Hypothesis Formulation.....	8
3.1 Corporate Investment.....	9
3.2 Corporate Governance .....	10
3.3 Government Investment .....	10
3.4 Competing Effects of Corporate Investment and Corporate Governance .....	11
3.5 Modifying effects of Government Investment .....	12
4. Air Pollution Index and Firm IPO .....	12
4.1 Air Pollution Index (API).....	12
4.2 API Changes after firm IPO .....	14
4.3 Aggregate-Level API Differences .....	15
5. Measures of Explanatory Variables and Regression Results .....	17
5.1 Measures of Corporate Investment, Corporate Governance and Government Investment.....	17
5.2 Descriptive statistical analysis of all variables .....	18
5.3 Air Pollution and Corporate Investment .....	19
5.4 Air Pollution and Corporate Governance.....	21
5.5 Air Pollution and Government Investment .....	29
5.6 Competing Effects of Corporate Investment and Corporate Governance .....	31
5.7 Modifying effects of Government Investment .....	32
6. Discussion and Conclusions .....	33
7. References .....	36
Figures and Tables.....	39

# Firm IPO and Air Quality: Evidence from China

## Abstract

Environmental pollution has attracted great attention as the environment deteriorates with rapid economic growth. As more and more companies begin to strive for Initial Public Offerings (IPOs), one question is that whether the process is good for the environment. Using panel data from 86 Chinese cities over the period of January 2001 to June 2011, I find that (1) air quality improves after firms IPO; (2) aggregate air quality improves more after IPO; (3) the air quality improvement in cities with IPOs firms is no better than the overall improvement throughout China; (4) expanded corporate investment after IPO produces more air pollution; (5) enhanced corporate governance after IPO helps to control air pollution; and (6) government environmentally friendly investment improves air quality and modifies corporate's impact on air quality.

**Key words:** air pollution, firm IPO, corporate investment, corporate governance, government investment, China