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## CORPORATE EQUITY WARRANTS

ARBITRAGE-FREE PRICING AND IMPLICATIONS FOR CORPORATE FINANCE

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# Abstract

## Corporate Equity Warrants

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Usually attached as “sweeteners” to other securities, especially as a part of a common stock initial public offering, corporate equity warrants are a fascinating capital-raising tool available to corporate finance officers. At a first approximation, equity warrants are option-like securities. In fact, like ordinary call options, they are transferable certificates which entitle the holder to buy a specific number of shares in the issuing company, at a given price, at an agreed time in the future. According to this similarity, the pricing of warrants is usually performed by application of the standard option pricing theory. Nonetheless, the theoretical and empirical analysis of warrants still remains an open field within the financial literature. The reason is principally that valuing warrants is more complicated than valuing options. The presence of some warrant specific features prevents from using simple plain-vanilla formulas and adds a certain degree of complexity to the analysis.

The purpose of this thesis is to analyse corporate equity warrants, trying to address some of the main open questions about their value. The first chapter describes the fundamentals on equity warrant investment and the economic rationale of issuing these instruments is examined from a corporate finance point of view. The second chapter is devoted to reviewing the financial literature about warrant pricing and presenting some commonly accepted formulas. Afterwards, the relationship between warrants and the volatility of the underlying stock return is examined in chapter three. Contrarily to the classical stock options, in fact, warrants affect the capital structure of the issuing firm and produce an interesting risk-shifting effect among equity claimants. Chapter four derives an alternative approach to pricing equity warrant, embedding this risk-shifting feature, and proposes a theoretical simulation proving its accuracy. Finally, chapter five empirically tests the proposed warrant pricing model employing a sample of Italian listed warrants and concludes the study.

# Contents

<b>List of Symbols</b>	<b>vii</b>
<b>1 General Background</b>	<b>1</b>
1.1 Fundamentals on Equity Warrants . . . . .	1
1.2 Warrant Price and Its Components . . . . .	7
1.3 Adjustment of Subscription Rights . . . . .	10
1.4 Economic Rationale for Issuing Warrants . . . . .	16
1.5 The Italian Background . . . . .	23
<b>2 The Valuation of Warrants</b>	<b>31</b>
2.1 Theoretical Pricing Models . . . . .	31
2.2 Empirical Tests of the Pricing Models . . . . .	43
<b>3 Warrants and Stock Volatility</b>	<b>51</b>
3.1 The Risk-Shifting Effect . . . . .	51
3.2 Risk-Shifting Vs. Leverage Effect . . . . .	64
<b>4 An Alternative Pricing Approach</b>	<b>73</b>
4.1 Approximating the Stock Volatility . . . . .	73
4.2 Simulation Tests and Sensitive Analysis . . . . .	79
4.3 Empirical Test . . . . .	83
<b>5 The Empirical Pricing Test</b>	<b>91</b>
5.1 Analysis of a Leveraged Firm . . . . .	91
5.2 Data Description and Methodology . . . . .	92
5.3 Conclusion . . . . .	105
<b>A Results from Stochastic Calculus</b>	<b>111</b>
A.1 Itô's lemma . . . . .	111
A.2 CEV Diffusions . . . . .	112

A.3 Correlation Between Stock and Warrant . . . . .	114
<b>B Derivation of the CEV <math>\hat{\gamma}</math> Parameter</b>	<b>115</b>
B.1 Unleveraged Firm . . . . .	115
B.2 Leveraged Firm . . . . .	116
<b>Bibliography</b>	<b>117</b>