

# **INFORMATION IN CONTESTS: A SURVEY OF THEORY AND EVIDENCE**

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# **INFORMATION IN CONTESTS: A SURVEY OF THEORY AND EVIDENCE**

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### **About the Author**

Mustafa Yıldırım is an associate professor of economics at İzmir Kâtip Çelebi University. His academic path began with a B.S. in Electrical and Electronics Engineering from Middle East Technical University, after which he transitioned to economics, earning an M.A. from Sabancı University and a Ph.D. from the Stockholm School of Economics. He studies contests and tournaments—competitive environments in which economic agents expend resources to win a prize. His work highlights how outcomes hinge not only on incentives and strategy but also on the political, institutional, and cultural landscape that shapes behavior. His research has appeared in journals including *Economics Letters*, *Journal of Policy Modeling*, and *Review of Economic Design*, informing both theory and the practice of contest design.

# **INFORMATION IN CONTESTS: A SURVEY OF THEORY AND EVIDENCE**

## **PREFACE**

This book is written for researchers and graduate students in economics who want a systematic account of how information shapes competitive environments. Contests are pervasive (from R&D races and political campaigns to internal labor markets and sports), and the informational conditions under which they are run matter for behavior and design. The intended audience includes scholars in microeconomic theory, game theory, and mechanism design.

The premise is simple. Much foundational work in contest theory developed powerful tools under the assumption of complete information. However, in most real-world applications, contestants rarely know their rivals' costs, abilities, valuations, or budgets; what they observe is partial, noisy, and often strategically mediated. In this book, an information structure signifies the allocation of what is known, unknown, and learnable (who observes what, when, and with what credibility) and the rules by which such information is generated or disclosed. This is not a secondary detail; it is a first-order determinant of effort choices, participation and dropout decisions, and the levers available to a contest designer.

The organization follows a logical progression across five chapters. Chapter 1 lays the foundations, defining the scope, core concepts, design primitives (credibility, commitment, observability, verification), and the outcome taxonomy used throughout. Chapter 2 turns to static environments, analyzing the foundational challenge of asymmetric private information about contestant types, the designer's crucial disclosure problem, and the strategic effects of one-shot observability or sequential play. Chapter 3 moves to dynamic environments and repeated interaction,

focusing on interim feedback, observability, and the critical timing–precision trade-offs that underlie the discouragement and coasting effects. Chapter 4 extends this analysis to more complex environments, examining team contests, common-value uncertainty, endogenous information acquisition and sharing, signaling through actions, and the strategic manipulation of information channels. Chapter 5 concludes by synthesizing these findings, charting the core Motivation–Selection Frontier, consolidating the evidence by environment, and identifying open research questions.

The aim is accessibility without loss of rigor. Readers with a background in game theory will find self-contained statements of the central mechanisms, with proofs and technicalities deferred to the cited papers. For active researchers, the book’s main contribution lies in its concept-driven organization. Rather than cataloging the literature by model (e.g., Tullock contests, all-pay auctions), this book is organized by the core strategic problems that information creates (e.g., Private Information, Feedback and Its Effects, Manipulation of Information Channels) and the design levers used to solve them. This approach provides a systematic map of the field’s primary levers and effects, identifying which informational tools predictably change effort, dispersion, participation, and welfare, and when trade-offs are structural rather than incidental.

By charting what is known, and making assumptions and timing transparent, I hope to provide a systematic entry point into this literature and to clarify where new work is needed, especially on credibility in information policies, richer team environments, and learning under common values.

On a personal note, I am deeply grateful to my wife, Ayşen Türedi Yıldırım. This work would not have been possible without her constant encouragement and support, which afforded me the time and focus required for this project.

## CONTENTS

<b>Chapter 1</b>	<b>1</b>
1.1 Contests And Their Ubiquity In Economics	1
1.2 Prominent Contest Models	4
1.3 The Designer's Problem: Primitives And Objectives	7
1.4 The Complete Information Benchmark	10
1.5 Why Information Matters: A Primer	14
1.6 Defining The Information Structure In Contests	17
1.7 Scope, Objectives, And Outline Of The Book	20
<b>Chapter 2</b>	<b>25</b>
2.1 Introduction: Information Levers In Static Contests	25
2.2 Private Information: Types, Values, And Participation	26
1.3 Strategic Information Disclosure By The Designer	41
1.4 Static Observability And One-Shot Order Of Play	51
1.5 Key Takeaways	56
<b>Chapter 3</b>	<b>59</b>
3.1 Moving From Static To Dynamic/Multi-Stage Contests	59
3.2 The Core Dynamic Problem: Feedback And Its Effects	61
3.3 The Designer's Levers: Optimal Feedback Policies	66
3.4 Repeated Interaction And Collusion	69
3.5 Key Takeaways	71
<b>Chapter 4</b>	<b>75</b>
4.1 Information In Group And Team Contests	76
4.2 Common-Value And Interdependent Environments	81
4.3 Endogenous Information Acquisition And Sharing	87

4.4	Signaling, Signal-Jamming, And Sandbagging .....	92
4.5	Communication, Cheap Talk, And Persuasion .....	94
4.6	Manipulation, Sabotage, And Credibility .....	96
4.7	Key Takeaways.....	99
<b>Chapter 5</b>	.....	<b>105</b>
5.1	Contests As Information-Revelation Mechanisms.....	109
5.2	The Motivation–Selection Frontier.....	116
5.3	Evidence By Environment, Side-by-Side.....	121
5.4	Implementation And Credibility.....	125
5.5	Synthesis: Designer Playbooks And Future Research...	128