

Contents

Preface	xi
Acknowledgments	xv
1 Introduction: Matching Models in Economics	1
1.1 Motivation: Two Puzzles	1
1.1.1 Inequality	1
1.1.2 Demand for Higher Education	2
1.2 Matching Models: Main Features	4
1.2.1 Absence of Frictions	4
1.2.2 Are Transfers Relevant?	5
1.3 Matching and the Household	9
1.3.1 Household Behavior: Existing Models	9
1.3.2 Bargaining Models of the Household	12
1.4 Content	17
2 Matching with Transfers: Basic Notions	19
2.1 Bilateral, One-to-One Matching: Common Framework	19
2.2 The Three Types of Models	20
2.2.1 Defining the Problem	20
2.2.2 Defining the Solution	23
3 Matching under Transferable Utility: Theory	27
3.1 Definition and First Properties	27
3.1.1 Formal Definition	27
3.1.2 TU as an Ordinal Property	27
3.1.3 Specific Assumptions on Preferences	29
3.1.4 The Sources of Heterogeneity	33
3.1.5 A TU Model Is Unitary	34

3.1.6	An Example	35
3.1.7	Extensions	38
3.1.8	Testable Implications	39
3.1.9	A Bridge between NTU and TU: From Gale-Shapley to Kelso-Crawford-Knoer and Beyond	40
3.2	Optimal Transportation	43
3.2.1	Basic Duality Result	43
3.2.2	An Intuitive Illustration	46
3.2.3	Implications of the Basic Result	47
3.3	Supermodularity and Assortativeness	49
3.3.1	Supermodularity	49
3.3.2	Assortativeness	50
3.3.3	Two Simple Examples	53
3.3.4	Who Are the Singles?	55
3.3.5	The Twist Condition	58
3.4	Individual Utilities and Intrahousehold Allocation	60
3.4.1	Recovering Individual Utilities	60
3.4.2	Particular Case: Matching on Income	63
3.4.3	Exogenous versus Endogenous Sharing Rules: A Simple Example	69
3.5	Link with Hedonic Models	73
3.5.1	Hedonic Models	73
3.5.2	Hedonic Equilibrium and Stable Matching	75
3.5.3	Example 1: A Competitive IO Model	77
3.5.4	Example 2: Randomized Matching	81
4	Matching by Categories	87
4.1	Accounting for Unobservable Heterogeneity	87
4.1.1	The Separability Assumption	88
4.1.2	How Can Separability Be Justified?	89
4.1.3	Dual Structure under Separability	91
4.1.4	A Comparative Static Result	93
4.2	The Choo-Siow Model	96
4.2.1	The Basic Structure	96
4.2.2	The Matching Function	98
4.2.3	Heteroskedasticity: A Short Discussion	99
4.2.4	Covariates	103
4.2.5	Comparative Statics in the Choo-Siow Model	104
4.2.6	Testability and Identifiability of the Choo-Siow Model	108
4.2.7	Extension: Galichon and Salanié's Cupid Framework	112

5 Matching under Transferable Utility: Some Extensions	115
5.1 Preinvestment	115
5.1.1 The Issue	115
5.1.2 A Simple Example	116
5.1.3 What Was Wrong with the Previous Arguments?	117
5.1.4 The Main Result	119
5.1.5 Coordination Failures and Inefficient Equilibria	120
5.2 Risk Sharing	121
5.2.1 When Is TU Relevant? A Simple Example	121
5.2.2 When Is TU Relevant? A General Result	123
5.2.3 An Integrated Example	125
5.3 Multidimensional Matching	129
5.3.1 Index Models	130
5.3.2 The General Case: Equal Dimensions	133
5.3.3 The General Case: Many-to-One Matching	138
5.4 Roommate Matching	140
5.4.1 Existence of a Stable Matching: A Counterexample	140
5.4.2 The Cloned Bipartite Problem	141
5.5 Divorce and Remarriage	143
5.5.1 The Basic Model	143
5.5.2 Extensions	150
6 Matching under Transferable Utility: Applications	154
6.1 <i>Roe v. Wade</i> and Female Empowerment	154
6.1.1 The Model	156
6.1.2 Stable Matching on the Marriage Market	157
6.1.3 Changes in Birth Control Technology	167
6.1.4 Extensions	172
6.2 Gender and the Demand for Higher Education	177
6.2.1 The CIW Model	179
6.2.2 Equilibrium	184
6.2.3 Preferences for Singlehood	189
6.2.4 Comparative Statics	189
6.2.5 Empirical Implementation: What Do Data Say?	192
6.2.6 The Low Model	197
7 Matching under Imperfectly Transferable Utility	199
7.1 Basic Notions	199
7.1.1 Theoretical Framework	199
7.1.2 Recovering Individual Utilities	200
7.1.3 Positive Assortative Matching	202
7.1.4 Econometrics	204

7.2 Examples	205
7.2.1 Matching on Wages	206
7.2.2 Endogenous Pareto Weights	210
8 Conclusion	219
References	227
Index	235