

Connections

An Introduction to the Economics of Networks

¥

Sanjeev Goyal

Princeton University Press Princeton and Oxford

Contents

		·				
Acknowledgements ix						
1	Intro	oduction	1			
	1.1	Themes	1			
	1.2	Networks in Economics	4			
	1.3	The Economic Approach and Other Subjects	7			
	1.4	A Note on Style	8			
2	Netv	vorks: Concepts and Empirics	9			
	2.1	Introduction	9			
	2.2	Concepts	9			
	2.3	Properties of Empirical Networks	20			
3	Gan	ies on Networks	25			
	3.1	Introduction	25			
	3.2	General Model	27			
	3.3	Applications	34			
	3.4	Discussion of Two Assumptions	49			
	3.5	Concluding Remarks	53			
	3.6	Appendix	55			
4	Coo	rdination and Cooperation	63			
	4.1	Introduction	63			
	4.2	Coordination Games	66			
• •	4.3	Games of Conflict	75			
	4.4	Concluding Remarks	80			
	4.5	Appendix	81			
5	Social Learning					
	5.1	Introduction	87			
	5.2	Theoretical Framework	89			
	5.3	Learning from Neighbors	94			
	5.4	Related Themes	102			
	5.5	Concluding Remarks	104			
	5.6	Appendix	105			

<u></u>		
Cor	пe	n_{LS}

6	Socia	l Networks in Labor Markets	113	
	6.1	Introduction	113	
	6.2	The Social Transmission of Job Information	116	
	6.3	Adverse Selection and Referrals	120	
	6.4	The Use of Social Networks: Empirical Evidence	124	
	6.5	Concluding Remarks	128	
	6.6	Appendix	128	
7	Strategic Network Formation: Concepts		143	
	7.1	Introduction	143	
	7.2	One-Sided Links	147	
	7.3	Two-Sided Links	150	
	7.4	Efficiency and Equity	158	
	7.5	Concluding Remarks	158	
	7.6	Appendix	159	
8	One-	Sided Link Formation	163	
~	× 8.1	Introduction	163	
	8.2	A Simple Model of Link Formation	165	
	8.3	Extensions	171	
	8.4	Experiments and Empirical Regularities	182	
	8.5	Research in Other Subjects	185	
	8.6	Concluding Remarks	188	
	8.7	Appendix	188	
9	Two-Sided Link Formation		199	
	9.1	Introduction	199	
	9.2	Network Formation: Four Applications	200	
	9.3	Stability and Efficiency	215	
	9.4	Unequal Degrees and Payoffs	221	
	9.5	Concluding Remarks	227	
	9.6	Appendix	229	
10	Resea	arch Collaboration among Firms	245	
	10.1	Introduction	245	
	10.2	Why Extensive and Nonexclusive Links?	247	
	10.3	Collaboration among Competing Firms	249	
	10.4	Related Themes	259	
	10.5	Empirical Patterns	262	
		Concluding Remarks	265	
	10.7		266	
References				
Index			285	

*'

viii