

ROUTLEDGE FRONTIERS OF POLITICAL ECONOMY

The Economics of Voting

Studies of self-interest, bargaining,
duty and rights

Dan Usher



The Economics of Voting

The economics of voting is about when, and subject to what qualifications, electoral markets are like ideal commercial markets where universally self-interested behaviour yields outcomes that are in some sense best for society as a whole. Self-interest can be relied upon in voting about the redistribution of income, narrowing the gap between rich and poor, without removing the gap completely, altering people's ordering on the scale of rich and poor or destroying incentives to work and save. Elsewhere, self-interested voting can lead to inconsistent collective behaviour, and must be supported by bargaining, duty and rights.

Bargaining is indispensable in the formation of platforms of political parties, passage of laws in the legislature and other situations where two or more magnitudes must be voted upon simultaneously. Bargaining is ubiquitous but mysterious, with no plausible equilibrium comparable to the equilibrium in competitive markets. A duty to vote arises because the chance of any person's vote influencing the outcome of an election is too small to justify the time and trouble of voting. Widespread abstention is corrosive, but the purely self-interested person abstains. A duty to vote need not require a person to vote for the party seen as best for society as a whole. It may be sufficient to vote for the party seen as best for oneself alone.

Rights are the citizen's defence against exploitation. Unconstrained, majority rule voting allows any majority of the electorate that can vote as a block – a majority identified by race, religion or social class – to expropriate the corresponding minority completely. No government in office, and its supporters, would risk losing office in an election if loss of office meant destitution at the hands of its successors. Constraints include property rights that may be modified by systematic redistribution but not discarded or altered indiscriminately if democratic government is to be preserved.

This book will be of interest to political scientists, economists and philosophers, and would serve as a text for senior undergraduate or graduate courses.

Dan Usher is Professor Emeritus at Queen's University, Kingston, Ontario, Canada.

Routledge Frontiers of Political Economy

*For a complete list of titles in this series, please visit
www.routledge.com/series/SE0345*

- 160 Organizations, Individualism and Economic Theory**
Maria Brouwer
- 161 Economic Models for Policy Making**
Principles and designs revisited
S.I. Cohen
- 162 Reconstructing Keynesian Macroeconomics, Volume 2**
Integrated approaches
Carl Chiarella, Peter Flaschel and Willi Semmler
- 163 Architectures of Economic Subjectivity**
The philosophical foundations of the subject in the history of economic thought
Sonya Marie Scott
- 164 Support-Bargaining, Economics and Society**
A social species
Patrick Spread
- 165 Inherited Wealth, Justice and Equality**
Edited by Guido Erreygers and John Cunliffe
- 166 The Charismatic Principle in Social Life**
Edited by Luigino Bruni and Barbara Sena
- 167 Ownership Economics**
On the foundations of interest, money, markets, business cycles and economic development
Gunnar Heinsohn and Otto Steiger; translated and edited with comments and additions by Frank Decker
- 168 Urban and Regional Development Trajectories in Contemporary Capitalism**
Edited by Flavia Martinelli, Frank Moulaert and Andreas Novy
- 169 Social Fairness and Economics**
Economic essays in the spirit of Duncan Foley
Edited by Lance Taylor, Armon Rezai and Thomas Michl
- 170 Financial Crisis, Labour Markets and Institutions**
Edited by Sebastiano Fadda and Pasquale Tridico

- 171 Marx and Living Labour**
Laurent Baronian
- 172 A Political Economy of Contemporary Capitalism and its Crisis**
Demystifying finance
*Dimitris P. Sotiropoulos,
John G. Milios and
Spyros Lapatsioras*
- 173 Against Utility-Based Economics**
On a life-based approach
Anastasios Korkotsides
- 174 Economic Indeterminacy**
The dance of the meta-axioms
Yanis Varoufakis
- 175 Freedom, Responsibility and Economics of the Person**
*Jérôme Ballet, Damien Bazin,
Jean-Luc Dubois and
François-Régis Mahieu*
- 176 Reality and Accounting**
Ontological explorations
in the economic and social
sciences
Richard Mattessich
- 177 Profitability and the Great Recession**
The role of accumulation trends
in the financial crisis
*Ascension Mejorado and
Manuel Roman*
- 178 Institutions and Development After the Financial Crisis**
*Edited by Sebastiano Fadda
and Pasquale Tridico*
- 179 The Political Economy of Gunnar Myrdal**
A reassessment in the
post-2008 world
Örjan Appelqvist
- 180 Gender Perspectives and Gender Impacts of the Global Economic Crisis**
Edited by Rania Antonopoulos
- 181 Hegel, Institutions, and Economics**
Performing the social
*Carsten Herrmann-Pillath
and Ivan A. Boldyrev*
- 182 Producer Cooperatives as a New Mode of Production**
Bruno Jossa
- 183 Economic Policy and the Financial Crisis**
*Edited by Łukasz Mamica
and Pasquale Tridico*
- 184 Information Technology and Socialist Construction**
The end of capital and the
transition to socialism
Daniel E. Saros
- 185 Beyond Mainstream Explanations of the Financial Crisis**
Parasitic finance
capital
Ismael Hossein-zadeh
- 186 Greek Capitalism in Crisis**
Marxist analyses
Stavros Mavroudeas

- 187 Of Synthetic Finance**
Three essays of speculative materialism
Benjamin Lozano
- 188 The Political Economy and Media Coverage of the European Economic Crisis**
The case of Ireland
Julien Mercille
- 189 Financial Cultures and Crisis Dynamics**
Edited by Bon Jessop, Brigitte Young and Christoph Scherrer
- 190 Capitalism and the Political Economy of Work Time**
Christoph Hermann
- 191 The Responsible Economy**
Jefferson Frank
- 192 Globalization and the Critique of Political Economy**
New insights from Marx's writings
Lucia Pradella
- 193 Exit from Globalization**
Richard Westra
- 194 Reconstructing Keynesian Macroeconomics, Volume III**
Financial markets and banking
Carl Chiarella, Peter Flaschel and Willi Semmler
- 195 The European Union and Supranational Political Economy**
Edited by Riccardo Fiorentini and Guido Montani
- 196 The Future of Capitalism After the Financial Crisis**
The varieties of Capitalism debate in the age of austerity
Edited by Richard Westra, Dennis Badeen and Robert Albritton
- 197 Liberal Learning and the Art of Self-Governance**
Edited by Emily Chamlee-Wright
- 198 The Systemic Nature of the Economic Crisis**
The perspectives of heterodox economics and psychoanalysis
Arturo Hermann
- 199 Economies of Death**
Economic logics of killable life and grievable death
Edited by Patricia J. Lopez and Kathryn A. Gillespie
- 200 Civil Society, the Third Sector and Social Enterprise**
Governance and democracy
Edited by Jean-Louis Laville, Dennis Young and Philippe Eynaud
- 201 Economics, Culture and Development**
Eiman O. Zein-Elabdin
- 202 Paradigms in Political Economy**
Kavous Ardalan
- 203 The Economics of Voting**
Studies of self-interest, bargaining, duty and rights
Dan Usher
- 204 The Political Economy of Food and Finance**
Ted P. Schmidt

The Economics of Voting

Studies of self-interest, bargaining,
duty and rights

Dan Usher

First published 2016
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2016 Dan Usher

The right of Dan Usher to be identified as author of this work has been asserted by him in accordance with the Copyright, Designs and Patent Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data

Usher, Dan, 1934-

The economics of voting : studies of equilibrium, bargaining, duty and rights / Dan Usher.

1. Voting—Economic aspects. 2. Voting research.
3. Self-interest—Political aspects. 4. Political participation—Social aspects.
5. Citizenship. I. Title.

JF1001.U79 2015

324.9—dc23

2015023548

Even where gender-neutral formulations are not explicitly used in the text, all gender-specific terms are to be considered to refer to both the feminine and the masculine form.

ISBN: 978-1-138-93255-5 (hbk)

ISBN: 978-1-315-67919-8 (ebk)

Typeset in Times New Roman
by Sunrise Setting Ltd, Paignton, UK

Dedicated to

Samphan

Ann and David

Luna, Sasha, Coco and Océane

This page intentionally left blank

Contents

<i>List of figures</i>	x
<i>List of tables</i>	xii
<i>Acknowledgements</i>	xiii
1 Introduction	1
2 Voting patterns	10
3 Voting about the redistribution of income	58
4 How high might the revenue-maximizing tax rate be?	107
5 Bargaining and voting	136
6 Bargaining unexplained	154
7 What exactly is a duty to vote?	177
8 An alternative explanation of the chance of casting a pivotal vote	208
9 The problem of equity	237
10 Voting rights, property rights and civil rights	263
11 Assessing the citizen-candidate model	297
12 The significance of the probabilistic voting theorem	316
<i>Index</i>	329

Figures

2.1	Preferences of the five members of the tribe	12
2.2	People's preferences represented by the crossing of demand and supply curves	15
2.3	A directed graph for voting among three options	22
2.4	Outcomes of all votes between combinations of options when reformers are moderates	26
2.5	Outcomes of all votes between combinations of options when reformers are extremists	26
2.6	A person's indifference curves for expenditures on defence and redistribution	29
2.7	Three persons' indifference curves for public expenditures on defence and redistribution	30
2.8	Demonstration that defence expenditure is a single-peaked issue	31
2.9	A left-right continuum	31
2.10	Another equilibrium among two-dimensional platforms	33
3.1	The tax payer's decision about how much tax to evade by concealing income from the tax collector	61
3.2	How the location of the Laffer curve depends upon the efficiency of tax collection	63
3.3	Propensity to vote	80
3.4	Proportions of voters, v , and people eligible to vote, n	81
3.5	From distribution to redistribution	86
3B.1	Pareto distribution of income with $\alpha = 2$ and $Y^{min} = 1$	96
3C.1	The marginal cost of public funds as a function of the tax rate	99
3C.2	The electoral equilibrium marginal cost of public funds	100
3C.3	Public projects and public goods ordered by their benefit-cost ratios	101
4.1	Two possible shapes of the Laffer curve	108
4.2	Two other shapes for the Laffer curve	108
4.3	The supply curve of taxable income	109

4.4	Two possible Laffer curves with the same elasticity of taxable income	112
4.5	Upward-sloping and backward-bending supply curves of labour	119
4.6	Indifference curves with no substitution between goods and leisure	122
4.7	A person's response to taxation	123
4.8	Taxation and redistribution leave labour supply unchanged	125
4.9	Progressive taxation with a top marginal tax rate of 100 per cent	126
4.10	Redistribution and labour supply	131
5.1	Preferences of three voters about a two-dimensional platform	138
5.2	Contests between combinations of outcomes	142
5.3	Bargaining between legislatures	144
6.1	The paradigmatic bargain	156
6.2	Discordant optimism	169
7.1	Why abstention might be socially desirable	181
7.2	The more popular party loses the election	185
8.1	The probability distribution of the number of votes	216
8.2	The probability distribution of the number of votes, 49 per cent	217
8.3	The distribution of voters' valuations of a win for the left party	218
8.4	Highest and lowest voters' valuations schedules	220
8.5	Uncertainty about others' preferences, the cost of voting and the chance of casting a pivotal vote	223
8.6	Votes and abstentions when voting is costly	225
8.7	Valuation schedules with common maximal and minimal values	228
8.8	A majority of the population prefers the left party	229
10.1	How an increase in the benefit of revolution leads to an extension of franchise	285
12.1	Group A's response of votes to offers of income from Party <i>R</i>	322
12.2	Percentage of votes won by Party <i>R</i> as dependent on the degree of exploitation of Group <i>A</i>	324

Tables

2.1	Each person's preferred number of guns	12
2.2	Voters' preferences for soup, sandwiches and pie	19
2.3	Benefits of each road to each person	20
2.4	None of the three options beats both of the others in a pairwise vote	21
2.5	Orders of preference when reformers are moderates	25
2.6	Orders of preference when reformers are extremists	25
2.7	A sequence of allocations, each defeating the preceding allocation in a pairwise vote	35
2.8	How the agenda setters grab most of the pie for themselves	36
2.9	The community's preferences for sandwiches	43
2.10	How the Condorcet winner fails to be elected	47
3.1	The median voter's preferred tax rate	66
4.1	Estimates of the revenue-maximizing tax rate	113
4.2	Alternative estimates of the effect upon the tax base of group J	115
4.3	Tax revenue as a function of the elasticity of substitution and the tax rate	128
7.1	A two-class society	188
7.2	Benefits of each project to each person	196
8.1	Numbers of votes and abstentions	224
10.1	Incomes per person of masters and servants under limited franchise, universal franchise and revolution	284
12.1	A group's percentage of votes for Party R when the offer of Party D is 1,000	320

Acknowledgements

Many thanks for help in preparing this book to Mark Babcock, Jill Hodgson, Elvira Posthumus and Changuk Sohn. I am grateful for comments and suggestions by my colleagues at the Queen's Economics Department, especially, John Hartwick, Steve Kaliski and Scott Gordon.

This page intentionally left blank

1 Introduction

A decentralized economy motivated by self-interest and guided by price signals would be compatible with a coherent disposition of economic resources . . . It is important to understand how surprising this claim must be to anyone not exposed to this tradition. The immediate ‘common sense’ answer to the question ‘What will an economy motivated by a very large number of different agents look like?’ is probably: There will be chaos . . . quite a different answer has long been claimed true and has indeed permeated the economic thinking of a large number of people who are in no way economists.

Arrow and Hahn (1971: vi–vii)

Why the *economics* of voting? The central proposition in economics is that the world’s work gets done satisfactorily when each person does what is best for himself alone. The common sense view of the matter is that the outcome when each person does what is best for himself alone would be chaos. By contrast, the great lesson of economics is that, subject to strong qualifications which it is the business of economists to study, the outcome is order rather than chaos and that the resulting order is in some sense desirable. Self-interest generates a satisfactory outcome in markets for ordinary goods and services within an appropriate framework that only government can provide, including the protection of life and property, resolution of disputes, provision of roads, bridges and schools, dealings with other countries and the mitigation of inequality of income when deemed in the interest of the community as a whole. The economics of voting is the study of whether – subject to what qualifications and to what extent – an equally satisfactory outcome is attained in government, too, when laws and leaders are chosen by majority rule voting and when each person votes for whatever seems best for himself alone. The economics of voting is about when self-interest may be relied upon in voting as well as in markets, and, if not, what other considerations must be introduced.

The principal themes of this book are suggested by the terms in the subtitle. Under the heading of ‘Self-interest’ is an examination of voting about the redistribution of income: whether an equilibrium emerges when everybody votes selfishly, whether that equilibrium is desirable, whether there would be full or partial redistribution, how outcomes might be affected by campaign advertising and

2 Introduction

whether redistribution is seriously constrained by inefficiencies in taxation. Under the heading of ‘Bargaining’ is an analysis of how voting and bargaining are inextricably intertwined, where bargaining is seen as fundamentally different from ordinary self-interested behaviour, so that the one cannot be subsumed in the other. Under the heading of ‘Duty’ is the argument that citizens must recognize a duty to vote because the expected gain to the voter is never sufficient to cover the full cost of voting. There is some discussion of the chance of one’s vote being influential and of what exactly the duty to vote requires. Under the heading of ‘Rights’ is an exposition of the different roles of property rights in politics and in markets. The virtues of the competitive economy are only realized when there is a prior allocation among citizens of property rights with a sufficiently well-specified rule of law that people know exactly what their property entitles them to do. Property rights include ownership of money, land, capital goods, patents and shares of corporations. Ownership in this idealized description of the competitive economy is given, as it were, by the hand of God with no explanation of why different people’s allocations are what they turn out to be. Political markets are different. Majority rule voting would be a sham if people were somehow stopped from voting about the content and allocation of property rights; the defence of property rights under majority rule voting must rest upon voters’ unwillingness to vote away property rights for fear of what might happen not just to the economy, but to the institution of majority rule voting itself. Formal constitutional constraints surely help, but would be a poor defence of property rights if not bolstered by the long-term interest of the great majority of voters.

This book is a cross between a collection of essays and a systematic treatise. It is a collection of essays in that half of the chapters have appeared as academic articles. It is a systematic treatise in that a good deal of material has been added and the chapters are ordered to tell a coherent story about behavioural and institutional requirements for government by majority rule voting. Following this introduction and a chapter on voting patterns, the book consists of five pairs of chapters, a pair on each of the four themes and a final pair on attempts in the literature to explain politics on the strength of self-interest alone. Chapter by chapter, the content of the book is as follows.

Chapter 2, called ‘Voting patterns’, is a collection of well-known paradigms, beginning with circumstances where voting works well, and proceeding to other circumstances where voting is inefficient and intransitive. There is a unique electoral equilibrium, comparable to the equilibrium in a competitive market, in the world of the *median voter theorem* where all options can be represented as points on a line, each voter has a preferred option and, between any two options both to the right or both to the left of one’s preferred option, one always votes for the option closest to one’s first best. The theorem itself is that the preference of the median voter, the person in the middle of the line, beats any other option in a pair-wise vote and can be expected to emerge as the winner in the election. Subject to several qualifications, the median voter theorem holds for the acquisition of public goods and for the redistribution when voted upon separately, but not for both together. A second favourable circumstance is the

world of the *Condorcet jury theorem* where one among many available options is best for everybody but voters may be mistaken about which option that is. The theorem is that the best option is likely to be selected when each voter's probability of choosing the better of two options is over fifty percent.

Otherwise majority rule voting is less satisfactory. Outcomes may be inefficient because no account is taken of voters' *intensity of preference*. Voting takes account of how many people favour each option in an election, but not by how much. It may be that everybody – supporters of the winning option and supporters of the losing option – could be made better off by a reversal of the outcome of an election together with an appropriate compensation from all supporters of the losing option to all supporters of the winning option. This peculiar feature of majority rule voting is part of the rationale for vote trading and cost–benefit analysis.

Majority rule voting may be intransitive, giving rise to a *paradox of voting* where no option in an election can beat every other option in a pair-wise vote. Option A beats option B, option B beats option C, but option C beats option A. Majority rule voting may well be intransitive even if each voter's preferences are transitive. Transitivity being an essential ingredient of what we see as rationality, public decision-making by majority rule voting displays characteristics which if observed in a person's decision-making would lead one to suppose that the person is insane. Voting about platforms of issues is especially likely to be intransitive, giving rise to strategic voting, to bargains among voters and to the empowerment of the agenda setter to lead the legislature by the nose to whatever outcome the agenda setter prefers.

Another disturbing feature of majority rule voting is the *exploitation problem*. Voting about the allocation of the entire national income creates an almost irresistible temptation for a majority of voters to grab the entire national income for itself, with nothing left for the excluded minority. Such a majority would normally conform to pre-existing cleavages among citizens on religious, ethnic, social, economic or geographical lines, but may be composed of any group that can coordinate its votes. Recognition of the exploitation problem is the core of a political argument for strong property rights that can be moderated by systematic redistribution but cannot be voted away altogether if government by majority rule voting is to be preserved. Recognition of the exploitation problem is part of the case for the bicameral legislature and for the division of power among legislature, executive and judiciary.

Voting is by citizens for legislators and executives, and by legislators for laws. Three troubling aspects of voting by citizens are the *paradox of not voting*, *voting externalities* and the *spoiler problem*. The paradox of not voting is that a rational, self-interested person would never bother to vote because one's expected benefit from voting – the dollar value of a win by the party one prefers weighted by the minute probability of one's vote determining the outcome of the election – falls well short of any reasonable estimate of the cost of the time required in going to the polling station and casting one's vote. A rational self-interested person would prefer to abstain. A person's vote can have no effect on the welfare of that person or anybody else unless it is pivotal, swinging the outcome of the election from the

4 Introduction

party or candidate one votes against to the party or candidate one votes for. The chance of one's vote being pivotal is too small to justify voting from self-interest alone. On the other hand, a vote that is pivotal creates two massive externalities: a positive externality of benefits to thousands and thousands of other supporters of the party one votes for and a negative externality of costs to thousands and thousands of supporters of the party one votes against. The spoiler problem is that, though candidate A beats candidate B when these are the only candidates running, the addition of candidate C causes candidate B to win instead. There are very brief discussions of alternative voting schemes, plurality voting as in the United Kingdom, the United States and Canada and proportional representation as in France and Israel. Voting by legislators for laws requires an ordering of votes for amendments and amendments to amendments on any given bill, and processes, since time is limited, for choosing which bills to bring to a vote and for examining bills in detail. These voting patterns are discussed briefly as preface to the more limited and focussed discussions to follow.

Chapter 3, entitled 'Voting about the redistribution of income', is a theme and variations. A core model portrays redistribution as undertaken by a negative income tax, where tax evasion makes redistribution costly so that each voter, depending on his initial income, has a preferred tax rate and the preference of the median voter prevails. There is an unambiguous political equilibrium where income disparities are reduced without equalizing incomes altogether and without altering people's places on the scale of rich and poor. It is then shown how the implications of the model are modified or reversed altogether by changes in the assumptions: recognition of political parties, progressive taxation, abstention, campaign advertising and additional impediments to taxation including the switch from paid labour to leisure or do-it-yourself activities.

It is shown how campaign advertising can reverse the correlation between the initial inequality of income distribution and the amount of redistribution that majority rule voting prescribes. In the core model without campaign advertising, a widening of the distribution of income, increasing the gap between rich and poor, automatically increases the spread between average and median incomes, making redistribution more advantageous to the median voter. With campaign advertising, a greater disparity between the incomes of rich and poor is likely to be reflected in a greater disparity between campaign contributions to the party of the rich and the party of the poor, together with a greater disparity in the parties' campaign advertising, influencing perceptions of the efficiency of tax collection and persuading the median voter to favour less rather than more redistribution. It is shown how more inequality *may* lead to less, rather than, more redistribution. Whether this actually happens depends upon the magnitudes of the different effects, but the simple connection between distribution and redistribution is destroyed.

Chapter 4, called 'How high might the revenue-maximizing tax rate be?', examines the proposition that extensive redistribution is impossible because there is an upper limit to taxation beyond which a tax increase yields less rather than more tax revenue. There is a political edge to this proposition, conservatives tending to argue that the revenue-maximizing tax rate is low and liberals tending to argue that the

revenue-maximizing tax rate is high. The chapter contains a critical discussion of the ‘new tax responsive literature’ about how to measure the revenue-maximizing tax rate. The Laffer curve, showing how tax revenue varies with tax rate, is derived first from the assumption that a tax increase provokes increased tax evasion and then from the assumption that a tax increase provokes a switch in the usage of time from labour to leisure. It is commonly supposed that the Laffer curve is humped with a peak revenue at a tax rate well short of 100 per cent. That is not always so. It is shown that the peak of the Laffer curve may be close or even equal to 100 per cent. The crux of the argument in this chapter is that though redistribution may be expensive in the sense that there is a high marginal cost of public funds, it is rarely if ever impossible at rates the median voter would like to impose.

Chapter 5, entitled ‘Bargaining and voting’, shows how the two activities are intertwined. The chapter is essentially a list of circumstances where public decision-making requires that bargains be struck because there is no determinate equilibrium in purely self-interested voting by all parties concerned. Bargaining becomes indispensable for the formation of party platforms when stances on two or more issues must be combined and no platform beats every other platform in a pairwise vote. Members of every political party must bargain about what its platform should be. With proportional representation, parties in a majority coalition of the legislature must bargain about the allocation of places in the cabinet and about a common set of policies to follow. Only by bargaining among interested parties can a complete tax schedule be chosen. Bargaining is a major concern in the design of governments. A tyranny of the majority might be averted through a bicameral legislature with excesses of a majority in each house checked by a different majority in the other house where members are elected on somewhat different principles, but only at the cost of some risk of gridlock if majorities in the two houses cannot strike a deal. Democracy is a trade-off between efficiency in the design and execution of public policy and the risk of exploitation of minorities by majorities, with bargaining as an impediment to the one and a defence of the other. A willingness to compromise is required if democracy is to work at all. Two paradigms are somehow intertwined: the collective choice of a point on a line, and the division of a pie by unanimous consent of two or more parties. There is normally an equilibrium in majority rule voting for the one but not the other.

Chapter 6, called ‘Bargaining unexplained’, is a defence of the odd proposition that bargaining works in practice but not in theory. There is no denying that people bargain successfully – not always, for wars do begin from time to time – but over and over again in the ordinary business of life. This chapter is an examination of the principal bargaining models – based upon a sense of fairness, a hypothetical sequence of concessions or time-preference where each party accepts a deal today rather than waiting for a better deal tomorrow – arguing that, in each case, the assumptions of the model are too far from the circumstances of actual bargaining to warrant confidence that bargains will actually be struck. Models based upon a sense of fairness start with the premise that, wherever possible, bargainers agree upon a fifty-fifty split, generalizing to a Nash bargaining solution in more complex situations. Models based upon a postulated sequence of concessions are