

TRADING IN OPTIONS

Trading in Options

An investor's guide to making high profits
in the traded options market

GEOFFREY CHAMBERLAIN

SECOND EDITION

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Preface

The prime objective of this book is to introduce the new, exciting world of traded options to the multitude of investors in Europe who have yet to discover one of the fastest-growing and most flexible investment media available. The book has been written for any and every serious investor or manager of money, whether private or institutional, male or female, young or old, conservative or bold in outlook, disillusioned or starry-eyed with the performance of his (or her) equity portfolio over the years. Indeed, traded options have something positive to offer anyone, at any level of expertise, who feels the need for an investment medium which purports to be of real assistance in modifying the risks inherent in equity investment and who is prepared to research and investigate the subject properly and *without prejudice*. That is all I ask. Those who are prepared to do this have a real treat in store – they will never regret the experience – while those who master it and use it intelligently to augment a declared investment strategy will be rewarded handsomely. What is more, they will enjoy it: for the vast majority of private investors, enjoyment and investment in equities have not often walked hand in hand for many years.

Of course, successful investment in equities is not, never has been and never will be a wholly rational activity; nor is it easy, no matter what the so-called experts imply! Growing pressures on fund managers to perform creditably have tended to intensify the already extreme volatility of price movement over historically short time scales. Thus, the ‘natural’ inclination among investors to seek the comparative comfort of the herd as it chases ever-shortening trends more often than not these days results in exaggerated swings out of all proportion to the volume of business transacted, and produces a widening disparity of ‘sector performance’ as the race to find the new growth areas accelerates. More

than at any time since I entered the Exchange in the early 1960s, we now have a 'market in stocks' as distinct from a 'stock market'.

The sheer speed and magnitude of today's price volatility renders the task of reading violent short-term trends a most difficult and potentially hazardous occupation, particularly for the private investor. Against a background of the *staccato stop/go* economic policies (for want of a better phrase) of successive governments, the decade of the 1970s witnessed a steady exodus of private investor interest in equities as a formidable combination of high inflation, high dealing costs, poor profitability and inadequate return on capital employed took its toll. The gradual withdrawal of the disillusioned private investor and the increasing dominance of the institutional funds is a sad development which has been one-way for far too long.

It is not difficult to see why. It is not easy to be a 'winner' in a market environment that is essentially bullish in make-up but hosts a list of 30 leading shares in the Financial Times Index that have broken through the 500 level no less than 33 times since 1970, not only failing to sustain the level on each occasion but dropping as low as 146 in the process. On each occasion above this level, equity volume swelled as the ever-hopeful private investor returned to the fray, only to be disappointed yet again. High and continuing inflation severely dented capital committed heavily to equities over the decade, while the incidence of a penal, inequitable tax burden on dividend income (for much of this period) left the return on capital employed inadequate and somewhat pitiful.

However, it would be unrealistic to imagine that a traded options market will necessarily arrest this trend or solve but a small proportion of the problems. For one thing, the market will always be limited (relative to the whole) to a small number of underlying shares. This should not be dismissed out of hand though: while only 18 shares list options in London at the time of writing, they nevertheless account for a significant percentage of its total market capitalisation. This is not too bad for 'starters' since the numbers will undoubtedly grow as the medium gains acceptance and use.

Traded options do not offer any magical solutions but they do have an important role to play in modern portfolio management. It is my hope that, as the chapters of the book unfold, it will become increasingly clear that traded options have a great deal to offer virtually every investor involved in equities. Indeed, anyone who is convinced that he (or she) can disregard the immense flexibility of action that the medium permits or the investment 'insurance' policies it offers is most fortunate. I need all the help I can get and welcome it gratefully!

For the beginner (as indeed the vast majority of investors in Europe must be), the early chapters trace the history of options, introducing the concept and the structure, and include some of the basic terms and definitions. The progression from this point should be rapid. The budding option trader should find enough substance and strategic guidance in the chapter devoted to purchasing options to accommodate most of his aspirations in this sphere. The writer (seller) of options, whether covered (by a position in the underlying security) or uncovered, will find much to digest in this section of the text. If the book enables but a small number of writers to augment the return on their equity portfolio or improve the performance through greater flexibility (as should be possible through use of the medium), then much will have been achieved.

In between the straightforward buying and selling of traded options there lies a vast area of more sophisticated option strategies, tailor-made to accommodate the multitude of investment views likely to materialise at any time. The permutations and combinations available are virtually unlimited; the investor with an agile, flexible mind will have a field-day. However, as I advise later, the advanced strategies should be treated with caution until some general expertise has been acquired.

The important subject of the taxation treatment of traded options has been covered in detail. It has taken almost three years to achieve the fiscal amendments now relevant; I wish no one to be under any misapprehension concerning the former problems or the present position.

Put options on just three classes were introduced on the London Traded Options Market in May 1981: by the end of the year the number had increased to ten. At the time of writing, put options are traded on eleven classes, and a listing for the outstanding seven classes remains a high priority. Logically, whenever new classes are introduced, puts and calls should be listed simultaneously. The subject of put options is an extremely important one, not only to provide both buyer and writer with the same gearing and flexibility available to their call option counterparts, but also to extend considerably the scope for combining the two and thus effecting some of the more varied and sophisticated strategies.

The book is designed to provide a practical manual for option traders. A mastery of the concept and techniques described, and adherence to the 'rules' advocated will leave the reader eager to start and well equipped to do so. However, before acting too precipitously, it would be advisable to seek expert assistance from one of the few specialist brokers in London.

G.H.C.

Contents

	<i>Page</i>
Preface	iii
1 History and introduction	1
2 Basic terms and definitions	12
3 Purchasing traded call options	20
4 Spreads and hedges, part I	52
5 Expenses, dividends and capital changes	66
6 Selling (writing) call options	77
7 Spreads and hedges, part II	114
8 The dealing system	119
9 Taxation treatment of traded options	126
10 Trading put options	134
11 Combining puts and calls	143
Glossary	147
Index	151

History and introduction

New options are always suspected and usually opposed, without any other reason but because they are not already common. *Anon.*

BACKGROUND

The earliest use of the concept of an option contract can be traced to the Middle Ages, when it was used simply and constructively to augment the normal flow of trade and commerce. As the centuries rolled on, the basic concept was occasionally extended, manipulated, and packaged with the requisite ingredients of financial sophistication and speculative 'mystique' tailored to appeal greatly to the natural avarice of mere mortals. While this appeal was strong, the underlying structure lacked foresight, adequate controls and the liquidity necessary to provide the solid foundations upon which to build. As a result, many ill-conceived, manipulative ploys masking behind the concept of an option led to much abuse and financial misdemeanour. As early as the seventeenth century the speculative use of options in the tulip bulb débâcle in Holland (which subsequently led to a collapse in the entire Dutch economy) did little to enhance the reputation of or confidence in the medium. The multitude of manipulative option schemes which mushroomed in the 1920s, particularly in America, continued to leave a bitter taste in the mouths of those who, by either their association with or participation in such schemes, suffered loss of capital, personal pride or both. Whether strictly accurate or not was hardly the point; options were held to be the villain of the piece!

As a result, although puts and calls have been traded on securities in

London since the end of the seventeenth century, they have been treated very much as a peripheral activity by the financial community, and tarnished with the speculative image that is normally the running-mate of a somewhat unpleasant background. The history of the Inland Revenue's mistrust of options (which has caused some of us a great deal of aggravation over the past four years) dates from the early 1960s, when a number of ingenious tax-avoidance schemes were set up involving the creation of purely fictitious options. And so it goes on!

It is perhaps not unreasonable to suggest that more might have and should have been done by the advocates of and participants in the traditional option market, mainly to counter some of the unfair, unreasonable and, above all, inaccurate charges that were levelled at the subject matter *ad nauseam* over the years. No serious, sustained attempt was made to educate the financial community with first class literature or stylish presentations highlighting the advantages that options offered in money management. As a result, it would have been foolhardy to expect anything other than apathy from the passive majority and a mountain of criticism bordering on sheer hostility from a vociferous minority towards the foetal traded options market: many hoped it would abort or at best be still-born. Indeed, for a 'peripheral' financial activity I was amazed at the weight and intensity of the opposition to it which grew to a crescendo early in 1978 in London, when the concept threatened to become an actuality despite the extraordinary volume growth in activity achieved by the Chicago Board Options Exchange (CBOE) since 1973 in America.

As I have already said, much of the early criticism was negative and ill-informed, but not all. Despite the fact that many people laboured (and still do) under a number of general misconceptions, three basic questions were consistently raised in considering the establishment of a market in traded options. These questions, namely what is such a market about, who is it for and how relevant is it, had validity and deserved an answer. In a speech early in 1979 J. P. Clay, one of the 'early' Stock Exchange advocates of the establishment of a traded options market in Europe, answered these three questions as follows.

The answer to the first question is really quite simple: the market is concerned with risk management. It is a common experience of investors, both private and institutional, that it is difficult for them to adjust the overall exposure to risk of their portfolios (what the theoreticians call risk variability, or beta) in order to take account of short- and medium-term expectations of market movement without undertaking large programmes of

either borrowing for the purpose of purchase or realisation into cash. A programme of this kind disturbs the long-term balance of the portfolio, may well disrupt materially the pattern of income flow and certainly involves large transaction costs. Where a market in traded options exists, those who are managing portfolios can choose either to increase or to reduce their exposure to risk with minimal disturbance to the basic portfolio and at modest cost.

It follows from this that the market is designed for both private and institutional investors. Many commentators have assumed that the former will be buyers and the latter sellers, but this is an unduly simplistic view of the way the market actually works. In practice it is probably more accurate to assume that among private investors the younger ones will be buyers and the older will be sellers, because the former are more able to accept risk and the latter are happy to increase their income and simultaneously reduce the degree of fluctuation in their portfolio, but even this simplification is not necessarily true. Retired investors, for example, may find in certain circumstances that their preferences are best expressed by a combination of fixed-interest securities and long positions in options. The fact of the matter is that the increased flexibility represented by the existence of traded options can be of benefit in one way or another to every investor, and generalisations about the way in which any type of investor will best be able to get the benefit should be treated with caution.

The third question, that is the importance of the market, follows on naturally from the above. It has, however, been confused by exaggerations propounded both by supporters and by opponents of traded options. The former have put forward unrealistically optimistic assessments of the benefits that could realistically be expected, while the latter have almost suggested that the whole idea was the invention of the devil. I think that it is more reasonable to say that, in our belief, a market in traded options is a modest but useful addition to the range of choice available to investors, and that this is quite sufficient to justify its creation.

Not only has the discussion about the creation of the market been accompanied by exaggerated claims on both sides, but also a remarkable number of misconceptions have been propagated. I do not have time here to discuss all of the extraordinary arguments that have been put forward, but I think that there are three which have come up with such frequency that they must at least be looked at.

(a) '*A traded options market is just a casino*'

This statement implies a complete misunderstanding of the nature of risk which is, as I pointed out earlier, central to the whole idea. A casino, or for that matter a race track, is in economic terms a machine for creating risk in order that people may gamble on the risk which has been so invented. By contrast any market exists to provide machinery for absorption of *inherent* risk, that is the risk which arises naturally and unavoidably from any in-

dustrial or commercial activity. From the economic point of view, if there were no machines for inventing risk, such as casinos, the overall effect would be virtually nil. On the other hand, if there were no machinery for absorbing risk, virtually all economic activity would come to an end.

The creation of a market in traded options does not increase in the slightest the total amount of risk in existence, because for every investor who increases his risk exposure there has necessarily been another investor who has reduced his. The 'risk supply' has therefore not been inflated and all that has happened is that the capacity of the system as a whole to absorb risk has been increased. Nothing could be further from a casino than this.

(b) *'In Chicago only 4% of options are exercised, and therefore 96% of buyers lose money'*

If this deduction were true then it might not in fact be so terrible. On the simplistic assumption which most people make about the identity of the buyers and the sellers in the traded options market (assumptions which, as I have pointed out earlier, are far from necessarily true) then the overall effect of 96% of the buyers losing money would be to transfer resources from gamblers to pensioners, and this would surely be, at least in part, defensible.

In fact, however, the deduction is false and arises from a misunderstanding of how the market actually functions. Because of the existence of a cheap and efficient method for trading in options it is almost invariably true that it is better for somebody who has bought an option to sell that option back into the market (whether at a profit or at a loss) rather than to exercise it. Similarly, a seller will usually prefer to extinguish his liability by purchasing an option to close his position rather than to incur the cost of having the option exercised against him. It could therefore be seen that the high rate of extinction of traded option positions (by transactions in the opposite direction) and the low rate of exercise says a great deal about the cheapness and efficiency of the market, but nothing about the relative profitability of buying and selling.

(c) *'About half of all sellers of traded options are naked, and this is obviously immoral'*

The description of a seller who chooses to cover his liability with cash rather than a specific security as a 'naked writer' is engagingly picturesque, but seems to have produced some fundamental misapprehensions. To assume that it is in some way immoral or even unusual to be prepared to settle a liability with money rather than an identical object is to reduce economic analysis to the level of a barter economy. The insurance company who insures motor cars or super-tankers does not keep a stock of cars or super-tankers in order to be able to replace one which is destroyed in an accident, and there is no more reason why the seller of a traded option should necessarily feel obliged to maintain identical shares to cover his

liability. The important thing in the traded options market, as in the insurance market, is to make sure that the participants really have set aside enough money to make ample provision for the liabilities which have been assumed, and money is neither better nor worse than stock to perform this function.

To sum up, I believe strongly that a market in traded options can be useful, both for investors and for the economy as a whole. Investors have the opportunity, if they wish, to modify the risk characteristics of their portfolio so that they correspond more closely to their requirements and to their judgement of future developments. On the other hand, the capacity of the market as a whole to absorb risk is increased, and this can only have beneficial effects on the level of industrial and commercial activity.

TRADED VERSUS TRADITIONAL OPTIONS

In order to appreciate fully the innovatory changes in option trading which were introduced by the CBOE in the early 1970s it is necessary to take a closer look at the structural flaws prevalent in the constitution of the traditional option. Inflexibility is the common theme of most of the criticisms.

- (1) Restricted time scale of only three months.
- (2) Limited gearing. The buyer of a call option (a 'giver' in the terminology of the traditional option) would be asked to pay a premium to reserve the right to purchase the underlying shares at any time up to expiry of the option three months hence at an agreed price (i.e. the exercise or strike price). This strike price is invariably the offer price of the shares at that time in the Stock Exchange. The premium paid as a percentage of the price of the share will vary depending upon the 'grade' and volatility of the underlying security. The three-month call rate on leading shares may average around 7–8% and, while this provides an obvious measure of gearing, it lacks in degree imaginative variety which could be achieved only by standardisation of the exercise price and expiry date. If the underlying share price at expiry remained exactly where it was three months earlier when the call option was purchased, the option could not be exercised profitably and would have to be abandoned for the loss of the premium plus expenses. If the underlying share price had not moved within a week or a month after the option had been purchased, it could not be exercised and sold without incurring a loss despite the fact that the giver had changed his view totally.

- (3) The 'taker' of option money in the traditional option market (i.e. the writer of a traded option) found himself in a restricted, inflexible environment. Firstly, he had to wait for a buyer of the option to appear before he could be offered any call money from the option jobber who matched buyer and seller for a fee. Assuming that a buyer materialised and the taker was fortunate enough to be offered the call money, once he had taken it he had to wait until the corresponding buyer made a move (either to exercise or subsequently to abandon the option) before he (the taker) could react. He was able, of course, to job in the underlying shares against the 'cover' of his option position, but this was both cumbersome and expensive and really defeated the *modus operandi* of option trading. Thus, the level of the premiums offered to the 'taker', irregular in their availability, have been largely insufficiently attractive, particularly in highly volatile markets, to counter the lack of flexibility inherent in a concept that 'locks in' the seller and reduces him largely to passive inaction for the outstanding term of the option. The structure of the traditional option market binds together the buyer and the seller directly even though they are unlikely ever to meet.

The basic innovatory principles governing the CBOE which were to revolutionise option trading were:

- (a) standardisation of the exercise price and the expiry date of the option contract, and
- (b) fungibility or interchangeability of option contracts which severed the link binding the buyer and seller in the traditional put and call market restoring total flexibility to both parties to the transaction.

In achieving these important changes the CBOE created a primary and an active secondary market in options, enabling the investor both to buy and exercise an option and to buy and sell existing options as well. The importance of standardising the option terms and fungibility as characteristics of listed options necessary for the development of the secondary market cannot be overemphasised. The latter enables each listed option with a common expiry date and strike price to be interchangeable with any similar listed option. This was achieved in London by the introduction of the London Option Clearing House Limited (LOCH) under the jurisdiction of the Stock Exchange Council. The

buyer and the writer of a traded option bargain have a contract only with LOCH which is the issuing house of listed options in London. The buyer relies directly on the clearing house to make good the contract, while the writer's obligation is also to the clearing house and not another broker. Either party to the transaction can terminate his commitment by effecting the appropriate sale or purchase, i.e. reversing the original transaction. Another feature of the innovations pioneered by the CBOE is *certificateless trading*.

No certificates of ownership are issued to holders of traded option contracts. In London, LOCH maintains a daily record of contracts held and written, and every member firm of the Stock Exchange is required to keep a continuous record of the option contracts held or written by its clients. Ownership or the writing of option contracts is evidenced by contract notes and statements issued by brokers to their clients. A broker's contract note will look something like the one in Figure 1.1 and should contain the type of information shown.

123456

WE HAVE BOUGHT
 SUBJECT TO THE RULES & REGULATIONS OF THE STOCK EXCHANGE
BY ORDER & FOR ACCOUNT OF

BARGAIN DATE & TAX POINT
 14 OCTOBER 1980

A. Client
Traded Option Account

SECURITY
 OPTIONS FOR THE CALL OF 1000 GENERAL ELECTRIC AT 550P EXPIRING 21ST JANUARY 1981 (8408480)

QUANTITY	PRICE	CONSIDERATION	TOT CONS	CURRENCY &	NOTES
10	37P	3700.00(IN)	COMMISS	3700.00DR	LONDON COMMISSION RATE
			VAT	107.50DR (V)	10 OPTIONS AT £1.50 = 15.00DR (V)
			CONTR. STMP	16.13DR	3700.00 AT 2.5% = 92.50DR (V)
				0.30DR (IN)	VAT AT 15% V = 107.50
					N = 3700.30
<p>GEC JAN 1981 550 EXPIRES AT 5.00 PM. TRADING CEASES AT 3.30 PM</p>					
				TOTAL	
				£3823.93DR	

N = NOT WITHIN SCOPE OF VAT E = EXEMPT FROM VAT V = SUBJECT TO VAT

SETTLEMENT CASH

Figure 1.1. Sample contract note showing the purchase of ten GEC Jan. 550 at 37p (to open). Total cost £3,823.93 ($10 \times 1,000 \times 37 = \text{£}3,700$ plus expenses as detailed above) for expiry on 21 January 1981. Settlement is for cash, i.e. the following business day (15.10.80). When the position is sold the contract note will record that it is a closing transaction. Each account is allocated a number (shown as no. 123456 in the top left-hand corner) recognised by LOCH for clearing purposes.

It follows that, since the option contracts held or written by clients and the day-to-day margin arrangements are in the books of the brokers through whom the original transactions were made, it is important that closing transactions should be made through the broker

who executed the opening purchase or sale. A client may transfer option positions open in his name from one broker to another only by making a written request to his former broker to transfer his account to another broker who has agreed to accept it. The concept of certificateless trading is an eminently practical and sensible administrative step forward: by reducing considerably the physical volume of paper (giving title of ownership) in existence, it both speeds up the process of settlement and, in the medium term, renders it cheaper to effect. It has been an unqualified success in America where the volume of contracts traded has grown astronomically. The concept of certificateless trading, however, is founded on the basic premise that the holder of a traded option contract must be able to assume total confidence in the ability of the clearing house to ensure, at any time, the fulfilment of the terms of the contract which he or she has bought. The system of guarantees supporting London traded options has four component parts, designed in total to create or substantiate the confidence both required and expected by potential investors.

- (1) Every traded option contract is secured by the deposit with LOCH of the appropriate cover or margin. In the event of a writer's default this cover or margin could be used by LOCH to implement the terms of the contract, any excess being returned to the writer.
- (2) If margin deposited with LOCH should prove inadequate to fulfil the contracts to which it relates, the entire resources of the member firm which had acted as broker to the defaulting writer, together with the entire resources of its clearing agent, will be available.
- (3) Standing behind the resources of each clearing member firm will be the total sum of the guarantees of £125,000 given by each of the other clearing members.
- (4) Finally, should these substantial resources be exhausted, investors would be able to make a claim on the Stock Exchange Compensation Fund.

It is to be assumed that 'guarantees' of this substance and magnitude will satisfy even the most hostile, hard-line traditionalist who feels vulnerable and somewhat uncomfortable without physical possession of the more customary documentary evidence of good title.

Most of the innovations that were introduced by the CBOE in America were simple in concept and straightforward in implementation. These

changes, coupled with a planned educational programme started two years before the market opened and backed up and substantiated by first class literature and heavy use of media advertising, left the American public well schooled and eager to start. As an exercise in intelligent forward planning and intensive marketing it cannot be faulted and has reaped the rewards it justly deserved. The quite astounding success that the CBOE achieved right from the outset (1973) was even more remarkable bearing in mind that the American stock market (in line with most of the remaining major stock markets of the world) was about to witness one of the steepest and most prolonged falls on record.

Opening on 26 April 1973, the average daily volume for May (in contracts) was 1,600 and the total for the month 34,500. By October the figure had swelled to 115,000 daily and 266,000 over the month. One year later (October 1974) these two figures had expanded to 39,000 and 899,000 respectively. The month of March 1975 witnessed over one million contracts traded, and ten months later (January 1976) recorded a total of 2.6 million contracts with an average daily volume of 123,000 traded. A quite staggering growth rate! The Amex and Philadelphia option exchanges opened in 1975, followed by the Pacific exchange in 1976. Put options were introduced by the CBOE in 1977. At the time of writing, the Amex exchange lists call options on 77 stocks, Philadelphia on 51, Pacific on 35 and the CBOE on 120. Over the four exchanges 131 puts are traded.

On 13 November 1980 new records were set as Amex traded 226,100 contracts, Philadelphia 60,026 and the Pacific Exchange 48,752, all surpassing previous highs. Only the CBOE at 401,222 was shy of its best day on record (17 April 1978) when 402,440 calls were traded, helping to create a total for the month of over 3.3 million contracts. What a marvellous success story it has been! Against such a background it is difficult sometimes to appreciate just why it has been so arduous to get the European Option Exchange and the London Traded Options Market off the ground even within the stockbroking fraternity. Nevertheless, tortoise-like (in comparison with the American hares) we may be in Europe, but we will get there in the end, almost despite ourselves. The volume figures transposed on to Figure 1.2 show the development of volume in the London Traded Options Market to date. We have a long way to go!

For the majority of investors in Europe traded options should be considered and utilised as a new, key tool in the achievement of investment objectives: their unique advantages are numerous and they offer

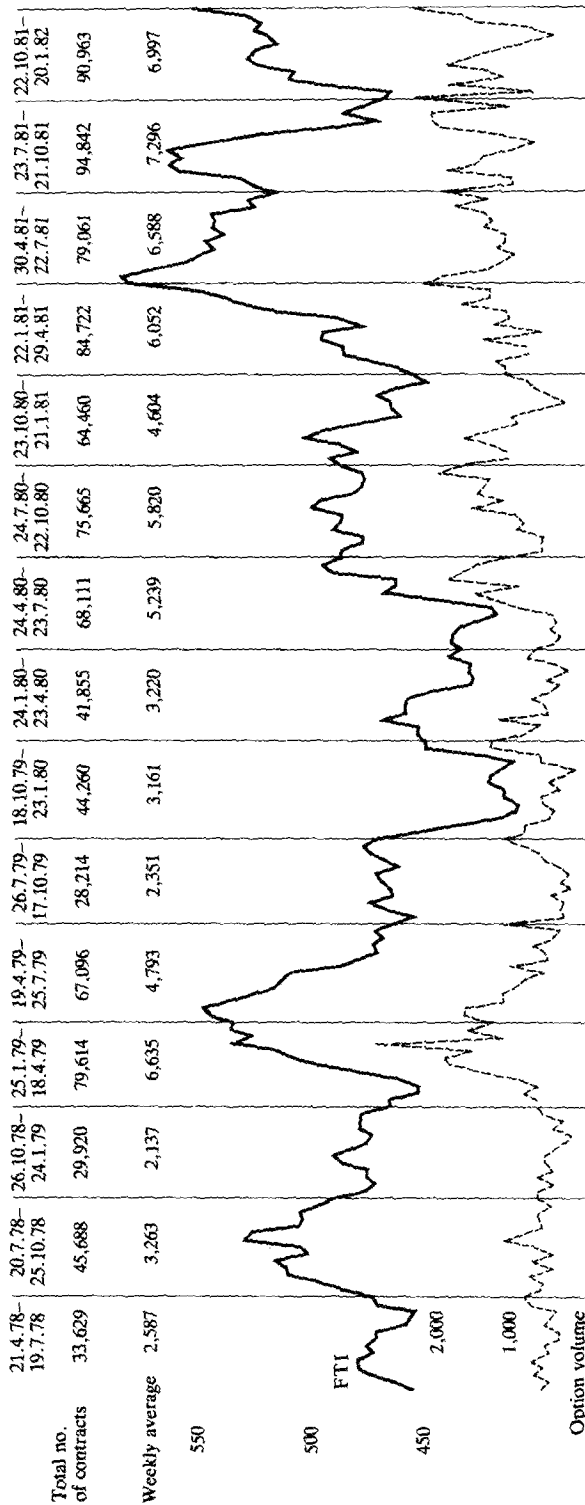


Figure 1.2. FTI 30 shares/option volume, March 1978-January 1982.