The Philosophy of Investment: A Post Keynesian Perspective

The role of uncertainty in investment decisions is a cornerstone of Post Keynesian economics, e.g., Lawson (1988), Davidson (1991), Rosser (2001). Uncertainty plays a key role both in the critical analysis of prevailing theories of macroeconomics, such as the 'New Classical', 'New Keynesian' and Rational Expectations paradigms, e.g., Davidson (1994), Rotheim (1998), and in the formulation of Post Keynesian economic policy prescriptions, e.g., Davidson (1997, 1998). Despite the central position given to the role of investment decisions, the implications drawn about financial theories of investment strategy have been largely critical, primarily aimed at the failures of the efficient markets hypothesis, e.g., Findlay and Williams (1985, 2001) and related concepts, e.g., Thompson and Williams (2000). Attempts to identify a security investment strategy that Post Keynesians would recommend, e.g., Bernstein (1993, 1998, 1999) have met considerable resistance (Glickman 1998). Presumably, if the Post Keynesian interpretation of the impact that uncertainty has on investment decisions is sound, then an investment strategy based on this approach will be successful, e.g., Davidson (1993). This observation leads to the central question of this paper: is there an implementable security investment strategy which is consistent with the Post Keynesian approach? As it turns out, the process of providing an answer to this question leads to a discussion about the philosophical implications of incorporating uncertainty into the formulation of investment strategies.

From the perspective of security investment strategy, the Post Keynesian emphasis on the validity of the efficient markets hypothesis is well placed. This hypothesis is a cornerstone of the ideology which is propagated by the bulk of contemporary academic financial economists and financial market practitioners. In turn, this ideology is predicated on a philosophical system which is

profoundly at variance with the Post Keynesian perspective. As is conventional with doctrinal comparisons, the validity of one view or the other is largely a matter of belief and conviction. Ultimately, it is the differences in the underlying beliefs and convictions which provides the basis for identifying the investment strategies associated with the various viewpoints. To bring this issue into perspective, this paper begins with section 1 which provides a description of the prevailing orthodoxies on investment strategy. The degree of belief in the efficient markets hypothesis is used to order the strategies associated with the available approaches. Though the material is likely to be familiar to Post Keynesians, Section 2 discusses the impact of uncertainty on security valuation, as proposed by Keynes in chapter 12 of the General Theory. This material provides the foundation for an analysis of the philosophy underlying the Post Keynesian view on uncertainty in the investment process. Based on this background, Section 3 draws on arguments developed in the General Theory to develop coherent security investment strategies which are consistent with the Post Keynesian approach. Finally, Section 4 summarizes the main conclusions developed in the paper.

1. The Prevailing Orthodoxy

The efficient markets hypothesis (EMH) is a defining element of modern financial theory, grist for the numerous textbooks which populate the subject, e.g., Bodie, Kane and Marcus (1993), Elton and Gruber (1995). The introduction of the hypothesis is often credited to Fama (1970), but the essence of the concept was developed much earlier. Despite being such an important notion, statements of the hypothesis are often incomplete. For example, Findlay and Williams (2001, p.182) maintain: "The efficient markets hypothesis postulates that market prices fully reflect all available information (i.e., that the market processes information efficiently). An implication of the theory is that new information (i.e., 'news') is impounded into price rapidly and without bias. This means

that markets should neither overshoot nor undershoot the 'correct' market price." This statement, and many others like it, disguises the essential point that the EMH is a joint hypothesis. In addition to the postulate that market prices fully reflect information, the EMH also requires a specification of the model generating the 'correct' market price. The testable implication of EMH is that it is not possible to generate 'abnormal' returns by trading on a specific type of information. To measure whether a return is abnormal, some model for determining security prices is required. For example, if trading on the information of interest resulted in the selection of securities which were 'riskier', as measured in the conventional sense, then a higher return would be 'expected'. How much higher would depend on the specifics of the security pricing model being assumed.

The relevance to the Post Keynesian approach of the joint hypothesis involved in the EMH is captured by Davidson (1998, p.5): "For those who proclaim the efficiency of financial markets, logical consistency requires them to claim that the 'observed' secular trend of financial market prices ... are determined by immutable (ergodic) real sector fundamentals". This comment is aimed more at the properties of the pricing models underlying EMH, rather than at the activity of information processing *per se*. Yet, the rationale for unbundling the information processing component of the EMH joint hypothesis from the pricing model component is quite innocuous. There are substantial pedagogical difficulties in treating the EMH as a joint hypothesis. Having to refer to both information sets and the associated pricing model at the same time can be convoluted, even mind boggling. Despite being formally imprecise, there are conceptual advantages to identifying the EMH only with the processing of information and dealing with the pricing model separately. As a consequence, this convention will be adopted in what follows. Instead, of having a range of EMH joint hypotheses, the various joint hypotheses will be distinguished according to the pricing model

which is being combined with the EMH.

Because the EMH is not a directly verifiable proposition, the validity of this hypothesis depends on belief. As such, the degree of belief in EMH can be used to define the various possible investment philosophies which are available. Figure 1 illustrates such an ordering of investment philosophies. At one extreme are the modern portfolio theorists. This group are the 'true believers' in EMH. Financial markets are so efficient that any attempt to achieve abnormal returns through security selection and the like is futile. The rational response is an investment strategy which seeks to optimally diversify. Modern portfolio theory involves a joint hypothesis that combines the EMH and the capital asset pricing model (CAPM) leading to the investment strategy associated with the two fund separation theorem: rational investors will hold combinations of the riskless asset and the market portfolio, with the weights on these two components depending on the risk aversion properties of the individual investor. A further element of belief is required to specify both the riskless asset and the market portfolio which are essential elements of the CAPM component of the joint hypothesis. The ideology underlying this investment philosophy has been propagated to a bewildering extent, to the point of being a dogma that graduate and undergraduate business students are required to mimic in order to achieve matriculation. The ideology has been validated by awarding of the Nobel memorial prize in Economics to two of those responsible for developing the analysis underlying the pricing model which, combined with the EMH, forms the joint hypothesis for modern portfolio theory.²

Confronted with empirical evidence which, seemingly, contradicts this extreme view, some modern portfolio theorists adapt this investment strategy to admit the possibility of market anomalies, such as the January effect, the price-to-book effect and the size effect, e.g., Fama and

French (1996). Others question the belief in the market portfolio or the riskless asset, and introduce elements such as sector rotation strategies to replace the market portfolio or a range of fixed income management strategies to replace the riskless asset. In these strategies, individual stock selection is still futile and belief in EMH is still strong. However, the belief, either in the EMH or the CAPM underlying the two fund separation theorem, has been shaken by empirical evidence which brings doubt to some part of the modern portfolio theory. For some proponents, the belief is shaken so much that the possibility of timing market moves becomes attractive. Instead of an investment strategy which passively buys combinations of the riskless asset and the market portfolio, the upshot of this type of investment philosophy is more active portfolio management strategies, albeit within the context of introducing sub-indexes or changing weights in the market portfolio and the like. This group of investment philosophies is comforting to the financial services industry, providing a range of rationales for extracting fee-for-services from security investors.

A decided paradigm shift occurs as the degree of belief in the EMH erodes. As reflected in Figure 1, modern portfolio theorists are overcome by the fundamental analysts. The investment philosophy of the fundamental analysts believes that, at any point in time, there will be a significant number of securities with prices which deviate from the 'fundamental value', as determined by some pricing model which accurately values the 'fundamentals'. Conventionally, the applicable pricing models are based on discounted cash flow procedures, meaning that the requisite fundamentals are those factors which impact the future net cash flows or the discount rate.³ Despite the belief that there will be mis-pricing at a given point in time, fundamental analysts still believe in EMH to the extent that security prices will be accurately priced at some future point in time, i.e., "the 'observed' secular trend of financial market prices" is still "determined by immutable (ergodic) real sector

fundamentals". In effect, security prices are believed to fluctuate around a 'true' fundamental value. Armed with the correct pricing model, it is possible to use available fundamental information about discount rates and cash flows, e.g., as reflected in the accounting statements of the firm, to identify securities which are currently underpriced. These securities are then purchased and held until the pricing model indicates the securities are correctly priced (over-priced). The investment strategy associated with fundamental analysis indicates that rational portfolios will contain a small number of selectively identified securities which are actively managed. The extent of active management will depend on the degree of belief about the length of time it takes the market to accurately price the security. Because the discounted cash flow valuation models typically involve summing over a number of years in the future, the implication is that it may take considerable time for the fundamental information to be accurately reflected in security prices.

Despite being referred to as long-run value investors, fundamental analysts will not necessarily pursue a long-term buy-and-hold strategy for individual securities. Confusion on this point is reflected in various sources. For example, Bernstein (1998, p.183) argues: "Faith in the long run is the most powerful force that drives investment decisions. Investors would be lost if they had no sense of the long run. The long run is a benchmark that helps us to understand the short run, where nothing ever stands still. The long run defines the high versus the low. The long runs establishes our normal portfolios and the choices we make about deviations from the normal." If this position is accepted at face value, it is relatively straight forward to make arguments like "most of us simply do not have the time on earth required for economic and financial variables to regress to their long-run means" (Bernstein 1988, p.183). Such statements make severe assumptions about the type of pricing models that fundamental analysts are using. Perhaps the discounting of cash flows is being

done over long periods, perhaps not. The key point is that investment decisions are based on perceived mis-pricing that will, in the course of time, be corrected. Whether the course of time required for the fundamentally correct price to emerge takes the investor into the 'long run' depends on the specifics of the security involved, the pricing model being used and the degree of belief in the EMH.

At the opposite pole from the modern portfolio theorists is a collection of theories and approaches that believe the EMH to be incorrect or irrelevant. The one unifying factor connecting the views which populate this pole is a rejection of investment strategies derived from joint hypotheses involving the EMH, especially the modern portfolio theory. Beyond this there is only hodgepodge. There are approaches which forecast future security prices without direct reference to a pricing model based on expected utility maximization. These approaches use various techniques from linear and non-linear trend lines to tea leaves and astrology. Included in this group are those attempting to apply sophisticated statistical techniques such as neural networks or chaos theory. Other approaches interpret investor behavior by employing techniques from psychology or sociology, attempting to capture a predictable component from seemingly irrational activities, such as herding behavior or hysteria. These approaches typically seek to build a pricing model, but not based on rational expected utility maximizing investors, e.g., Nofsinger (2002). Many of the theories from the burgeoning area of behavioral finance fall into this grouping.

It is generally perceived that the Post Keynesian approach fits into this grouping of dis-believers in the EMH. This follows from the Post Keynesian rejection of the assumption of ergodicity which is used to provide estimates of the conventional inputs to pricing models, i.e., the expected values, variances and covariances. However, as illustrated in sections 2 and 3, this presumption is not

accurate. This mis-perception is partly caused by the motivations of Post Keynesian analysis. While others in the grouping of dis-believers are generally motivated by a desire to forecast security prices as part of a security investment strategy aimed at achieving abnormal returns, Post Keynesians are concerned with the broader economic implications that uncertainty has on investment decisions. In effect, Post Keynesians are concerned with broader macroeconomic issues, such as the impact of monetary policy on economic activity. Despite the important role given to the impact of uncertainty on investment decisions, Post Keynesians have not been directly concerned with specifying the security investment strategies which would, somehow, be optimal in an uncertain world. This incongruence begs the question: what security investment strategy is consistent with the Post Keynesian approach?

Section 2. Keynes on Uncertainty and Security Valuation

Absent an available statement detailing a Post Keynesian security investment strategy, it is necessary to return to the writings of Keynes to make inferences about the elements which such a strategy would contain. Chapter12 (and to a lesser extend chapters 13 and 15) of the General Theory provides many clues, though the story is far from complete. "For convenience of exposition" (p.149) chapter 12 abstracts from interest rate changes. While this abstraction does have pedagogical benefits, permitting Keynes to examine the process of changes in long term expectations of "prospective yield" on "the values of investments", it does suppress the portfolio management problem of determining the division of investments between fixed income and equity securities. Though these issues are incrementally developed in chapters 13 and 15, integration of the concepts is not presented in the form of a security investment strategy. Given the key role attributed to the "speculative motive" in liquidity preference, e.g., p.196, this is a significant limitation. In addition,

there is limited discussion regarding both the maturity composition of the fixed income component of the investment portfolio and the riskiness of the bonds to be selected, e.g., corporate bonds vs. government bonds.

Given this, early in chapter 12 (p.149) Keynes hints at a fundamental pricing model which can be used to value securities: "The outstanding fact is the extreme precariousness of the basis of knowledge on which our estimates of prospective yield have to be made. Our knowledge of factors which will govern the yield of an investment some years hence is usually very slight and often negligible ... those who seriously attempt to make any such estimate are often so much in the minority that their behaviour does not govern the market." In this context, the market is "the Stock Exchange" which "revalues many investments every day" (p.151). After observing that, due to the separation of ownership from management, the price of shares on the Stock Exchange will be determined by stock traders rather than by the "professional entrepreneur" who has direct knowledge of the underlying business, Keynes asks a key question (p151): "How then are these highly significant daily, even hourly, revaluations of existing investments carried out in practice?" The answer provided to this question encompasses the philosophical foundations of the Post Keynesian position on the impact of uncertainty on the human condition.

McKenna and Zannoni (1993, p.400-1) capture the basic issue: "A central tenet of modern Post Keynesian economics is the view that situations may arise (particularly where investment decisions are concerned) in which individuals may not have any knowledge at all concerning the probability distribution function of future outcomes." Yet, decisions have to be made and "economic agents must create alternative mechanisms that enable decisions to be made in the face of uncertainty." Confronted with uncertainty, the crux of the decision making process relies on *convention*. In a

remarkable precursor to the modern EMH, Keynes observes that in the face of uncertainty the investor accepts the prevailing evaluation of market prices (p.152): "... the existing market valuation, however arrived at is uniquely *correct* in relation to our existing knowledge of the facts which will influence the yield of the investment, and that it will change in proportion to changes in this knowledge". In following this convention, "the only risk (an investor) runs is that of a genuine change in the news *over the near future*, as to the likelihood of which he can attempt to form his own judgment" (p.153).

For Keynes, the EMH is a convention. This is an important observation because in the Keynesian model, "conventions are essentially shared rules of behavior that enable individuals to take actions in situations where the future results of these actions are unknowable ... though the future may be unknowable the existence of conventions and the belief that they will be maintained provide a basis for decision making under uncertainty" (McKenna and Zannoni 1993, p. 402-3). The weakness of the EMH as a convention is that the actual security prices are not being determined with reference to the long-term prospective yield. Rather prices are being determined "as the outcome of a large number of ignorant individuals" and misguided professional investors and speculators. This produces a stock market that, when confidence in the convention is "less plausible than usual", is "subject to waves of optimistic and pessimistic sentiment, which are unreasoning and yet in a sense legitimate, where no solid basis exists for a reasonable calculation" (p.154). Such fluctuations are so pervasive that "the energies and skill of the professional investor and speculator are mainly occupied ... not with making superior long-term forecasts of the probable yield of an investment over its whole life, but with foreseeing changes in the conventional basis of valuation a short time ahead of the general public" (p.154).

This reference to convention has deep philosophical implications that cannot be ignored. Conventions are the result of social interaction, what McKenna and Zannoni (1993) pedantically refer to as the social matrix (the cultural context within which individuals exercise their freedom). As a consequence of the EMH being a convention, the extent of the violent fluctuations in the market depend on the temporal state of the social matrix. In other words, the institutional, social and historical context will impact the security pricing process. The same event occurring at different times may produce a violent fluctuation in pricing in one period and have no impact at another time. Uncertainty is created by the infinite number of future outcomes which are possible at a given point in time. The specific outcome which occurs "is the result of individual choice in the context of social interaction ... It is not the case that the far distant future is sometimes more knowable than at other times. It is always simply unknowable. What does change ... is the meaning people choose to attach to this fact, and hence the manner in which people's behavior responds to this uncertainty." McKenna and Zannoni (1993, p.403).

3. A Post Keynesian Investment Strategy

The discussion is section 2 can now be used to motivate the connection to the theories outlined in section 1. More precisely, it is evident that Keynes was not a full fledged dis-believer in the EMH and, as a result, does not belong on the far right with the technical analysts. Yet, there is substantive misgivings about the success of fundamental analysis: "Investment based on genuine long-term expectation is so difficult to-day as to be scarcely practicable. (An investor) who attempts it must surely lead much more laborious days and run greater risks than (an investor) who tries to guess better than the crowd how the crowd will behave; and given equal intelligence, he may make more disastrous mistakes ... It needs *more* intelligence to defeat the forces of time and our ignorance of

the future than to beat the gun" (p.157). Besides, there is more excitement in the chase after speculative profit: "... life is not long enough; – human nature desires quick results, there is a peculiar zest in making money quickly, and remoter gains are discounted by the average man at a very high rate" (p.157).

The reliance on the social matrix is one element of Post Keynesian philosophy which is worrisome to neo-classical economists and, in the present context, presumably also to modern portfolio theorists. Though the Post Keynesian approach has adopted much of what Keynes proposed, the Post Keynesian framework dictates that this material has to be reworked to fit the contemporary social matrix. Conventions, which are so important for decision making under uncertainty, depend fundamentally on the social matrix. In this vein, Keynes was writing at a time which was different in many ways from the world of today. There has certainly been substantive changes in financial markets since the time of the General Theory. Perhaps the world has changed enough that the investor motivated by long-term expectations has come to predominate, inducing an EMH convention which is more stable and less susceptible to violent fluctuation? Putting aside for the moment the empirical evidence to the contrary provided by the high tech/dot com/NASDAQ 5000 stock bubble of the recent past, what suggestions would Keynes have for those seeking to employ a security investment strategy based on fundamental analysis?

It is difficult to deny that the "zest" for quick profit is any less vigorous today than in times gone by. It is also still the case that (p.157): "The game of professional investment is intolerably boring and overexacting to anyone who is entirely exempt from the gambling instinct". The investor who would seek to engage in fundamental analysis, i.e., "an investor who proposes to ignore near-term market fluctuations" and purchase a security on the basis of long-term prospective yield, is advised

of the need for "greater resources for safety" and not to "operate on so large a scale, if at all, with borrowed money". All these potential difficulties are compounded by the following prediction (p.158): "If I may be allowed to appropriate the term *speculation* for the activity of forecasting the psychology of the market, and the term *enterprise* for the activity of forecasting the prospective yield on assets over their whole life, it is by no means always the case that speculation predominates over enterprise." Unfortunately, this hopeful statement is followed by: "As the organization of investment markets improves, the risk of predominance of speculation does, however, increase." If this prediction is correct, fundamental analysis is likely to be even more difficult today than at the time of the <u>General Theory</u>.

Based on these observations, it seems that the conclusions about fundamental analysis will extend into the Post Keynesian world. For both Keynes and Post Keynesians, uncertainty plays a fundamental role in the investment process. It is in the process of dealing with uncertainty that security markets produce violent and not so violent fluctuations in prices, causing unpredictable and potentially persistent deviations of prices from the values indicated by pricing models which accurately reflect the fundamentals of the security ("the long-term prospective yield"). This makes fundamental analysis a decidedly difficult, if not 'risky', activity. For example, casual inspection of the current (post-tech-bubble) prices for stocks in sectors such as bio-technology and internet retailing are still confounding to explain using the techniques of fundamental analysis. The observation that stock prices move substantially more than is indicated by changes in underlying fundamentals has much the same truth today as at the time of the General Theory. This, again, creates real complications for fundamental analysts.

Recognizing the difficulties associated with fundamental analysis, the security investment strategy

that Keynes apparently felt would produce the highest profit was to exploit predictions aimed at market instability. To leverage up (increase invested capital with borrowing) and ride the waves of exuberance and "spontaneous optimism" in the stock market until "animal spirits are dimmed" and pessimism besets the market: "... if the animal spirits are dimmed and the spontaneous optimism falters, leaving us to depend on nothing but a mathematical expectation, enterprise will fade and die; --- though fears of loss may have a basis no more reasonable than hopes of profit had been before" (p.162). As outlined in chapters 13 and 15 of the General Theory, when the dark clouds are gathering, the investor liquidates stock and moves funds to short-term liquid assets, soldiering resources until the next wave of spontaneous optimism grips the market and the cycle is repeated. To account for the significant increase in the number of fixed income assets since the time of the General Theory, one potential adjustment a Post Keynesian might make to this scenario is to qualify the move to short-term liquid assets, substituting instead an actively managed fixed-income portfolio strategy.

Having developed this elaborate model, Keynes concludes chapter 12 with a number of qualifications that, while relatively innocuous in terms of the macroeconomic theory being presented, are confounding from a security investment strategy viewpoint. For example, there is the statement: "We should not conclude from this that everything depends on waves of irrational psychology. On the contrary, the state of long-term expectation is often steady, and, even when it is not, the other factors exert their compensating effects" (p.162). Is this arguing for a less than complete liquidation of the stock position? Perhaps a reduction in leveraged purchasing of stocks is indicated? Even more confounding is the following statement (p.163): "There are, moreover, certain important factors which somewhat mitigate in practice the effects of our ignorance of the future. Owing to the

operation of compound interest combined with the likelihood of obsolescence with the passage of time, there are many individual investments of which the prospective yield is legitimately dominated by the returns of the comparatively near future." Investments in buildings and utilities are identified as belonging to this class. These types of assets have predictable and relatively stable cash flow patterns extending out long enough that "compound interest" would produce cash flows in distant periods which have a present value approaching zero.⁸

Having developed an elaborate theory of the impact of uncertainty on stock prices, Keynes explicitly recognizes that there may be types of investments which are not subjected to these forces. Keynes (p.149) identifies a long list of investments which are subject to uncertainty: railways, mines, textiles, drug companies, shipping transport, and certain types of real estate ("a building in the City of London"). Yet, there are other types of companies which do have stable and relatively predictable cash flows. Hence, there appears to be a distinction being made between issues which are 'speculative' and subject to the waves of optimism and pessimism and those which are 'non-speculative' and relatively immune to the mis-pricing arising from uncertainty. If this is correct, then Keynes is moving some way towards the fundamental analysts where a similar distinction is made. However, unlike the fundamental analysts, the set of securities which Keynes would classify as non-speculative is significantly smaller than that claimed by the fundamental analysts. Upon closer examination, the number potentially qualifying securities appears to be a set that is so small as to not be a practical basis for a widely acceptable security investment strategy.

In selecting an appropriate security investment strategy, Post Keynesians are confronted with an ethical dilemma. Keynes (p.157) captures the essence of the problem: "There is no clear evidence from experience that the investment policy which is socially advantageous coincides with that which

is most profitable." As Post Keynesian philosophy is perceived by its adherents to be socially responsible, the road to follow is unclear. An investment strategy which follows the socially responsible road is fraught with difficulty (p.157-8): "... it is the long-term investor, he who most promotes the public interest, who will in practice come in for most criticism ... if he is unsuccessful, which is very likely, he will not receive much mercy." Yet, Keynes still exhorts that "the social objective of skilled investment should be to defeat the dark forces of time and ignorance which envelop our future" (p.155). What is a Post Keynesian to do?

In the end, the answer lies beyond the Post Keynesian doctrine and speaks to the philosophical inclinations of the individual investor. There is not enough structure in the Post Keynesian viewpoint to resolve the issue. Some investors may be compelled to lead by example, attempting to conquer the dark forces of time and ignorance by selecting investments on the basis of the longterm prospective yields. If a sufficient number of investors adopt this approach then, if Keynes is correct, there will be less instability in financial markets, the "game of Snap, of Old Maid, of Musical Chairs" (p.156) will be replaced by more "socially advantageous" investment activities which contribute to stabilizing security prices at levels that reflect "long-term prospective yields". Others may take a more fatalistic view of the social matrix. The "zest" for the game may be viewed as too compelling to resist, both for themselves and for others. Uncertainty is too daunting an adversary. They will be drawn into "estimating the prospects of investment ... (by considering) ... the nerves and hysteria and even the digestions and reactions to the weather of those upon whose spontaneous activity it largely depends" (p.162). For the socially conscious, the larger potential gains from pursuing these activities can be passed on in other more direct ways, such as donation of a portion of the abnormal investment returns to the care of the sick and disabled.

The realm of possible investment strategies extends well beyond these two general alternatives. Some Post Keynesians may take solace in the possibility of investing in securities which are not as subject to the waves of pessimism and optimism, taking refuge in securities such as utility stocks and long-term high grade corporate securities leaving the game of Old Maid to be played by more intrepid investors with the zest for these activities. Still others may avoid financial assets altogether, preferring investments in real property which generates a predictable return, e.g., residential buildings as opposed to commercial properties. Finally, some may seek innovative investment solutions, believing that socially responsible investments, such as ethical funds, have potential long-term prospective yields which, though they cannot be measured *ex ante*, provide something intangibly more than an investment in a tobacco or chemical company. For these investors, uncertainty is a refuge that prevents an investor from accurately identifying the most profitable securities, *ex ante*. In such a climate, investment selection can be made without giving undue consideration to profitability, leaving room for other characteristics of the investment to be determining factors for inclusion in the portfolio.

4. Summary and Conclusions

The central theme of this paper is that the formulation and selection of a security investment strategy raises substantive philosophical questions. From a Post Keynesian perspective, these philosophical questions flow naturally from the role that uncertainty plays in the investment process. Faced with an infinite number of possible future outcomes, individuals are driven to use conventions to take actions. Where investment decisions are concerned, the efficient markets hypothesis is one such convention. This convention maintains that, at any point in time, security prices accurately reflect the "long term prospective yield" on that security. Yet, conventions depend on the

institutional, social and historical context and, at any given time, belief in the efficient markets convention can be weak, leading to violent fluctuations in security prices which are far greater than justified by the actual changes in the underlying fundamentals. While the Post Keynesian approach has accurately identified the macroeconomic problems this instability poses, substantially less attention has been given to the difficulties this instability creates for security investment strategies.

After careful inspection of the insights contained in the General Theory, especially chapter 12, it was concluded that it was not possible to identify a security investment strategy for Post Keynesians. The philosophical approach which underlies the analysis of uncertainty also admits a range of possible investment strategies. In effect, because the future is unknowable, it is not possible to know how to optimally select securities which have payoffs which depend on future outcomes. It is possible to dodge the uncertainty by selecting investments for which the payoff has a high degree of certainty. It is also possible to seek out the gains associated with the highly uncertain path which involves entering the 'game of Old Maid' and attempting to surf the waves of pessimism and optimism. Uncertainty can also be used as a blind to rationalize the selection of investments with socially desirable objectives. After some reflection, this lack of a coherent Post Keynesian security investment strategy is not too surprising. After all, Post Keynesian economics is predicated on the notion of "situated freedom" (McKenna and Zannoni 1993). To attempt to impose an investment ideology, similar to what is currently being done by the modern portfolio theorists, would be contrary to the philosophical essence of the Post Keynesian approach.

References

Bernstein, P. (1999), "Why the Efficient Market Offers Hope to Active Management", <u>Journal of Applied Corporate Finance</u> 12: 129-36.

Bernstein, P. (1998), "Stock Market Risk in a Post Keynesian World", <u>Journal of Post Keynesian</u> Economics 21: 15-24.

Bernstein, P. (1997), "How long can you run— and where are you running?", <u>Journal of Post-Keynesian Economics</u> 20: 183-89.

Bernstein, P. (1993), "Is investing for the long term theory or just mumbo-jumbo?", <u>Journal of Post Keynesian Economics</u> 15: 387-93.

Bodie, Z., A. Kane and A. Marcus, Investments (2nd ed.), Boston: Irwin, 1993.

Davidson, P. (1998), "Volatile Financial Markets and the Speculator", Paper presented as the Economic Issues Lecture to the Royal Economic Society, Warwick, England.

Davidson, P. (1997), "Are Grains of Sand in the Wheels of International Finance Sufficient to to the Job when Boulders are often required?", <u>Economic Journal</u> 107: 671-86.

Davidson, P. (1994), Post Keynesian Macroeconomic Theory, Cheltenham, UK: Edward Elgar.

Davidson, P. (ed.)(1993), <u>Can the free market pick winners? What determines investment</u>, London: Sharpe.

Davidson, P. (1991), "Is Probability Theory Relevant for Uncertainty: A Post Keynesian Perspective", <u>Journal of Economic Perspectives</u> 5: 29-43.

Elton, E. and M. Gruber (1995), <u>Modern Portfolio Theory and Investment Analysis</u> (5th ed.), New York: Wiley.

Eun, C. and B. Resnick (1994), "International Diversification of Investment Portfolios: U.S. and Japanese Perspectives", <u>Management Science</u> 40: 140-161.

Fama, E. (1970), "Efficient Capital Markets: A Review of Theory and Empirical Work", <u>Journal of Finance</u> (May): 383-423.

Fama, E. and K. French (1996), "Multifactor Explanations of Asset Pricing Anomalies", <u>Journal of Finance</u> (March): 55-58.

Findlay, M. and E. Williams (2001), "A fresh looks at the efficient market hypothesis: how the

intellectual history of finance encouraged a real 'fraud-on-the-market'", <u>Journal of Post Keynesian</u> Economics 23: 181-199.

Findlay, M. and E. Williams (1985), "A Post Keynesian View of Modern Financial Economics: In Search of Alternative Paradigms", Journal of Business, Finance and Accounting (Spring): 1-18.

Glickman, M. (1997), "A Post Keynesian Refutation of Modigliani-Miller on Capital Structure", Journal of Post Keynesian Economics 20: 251-74.

Graham, B., D. Dodd and S. Cottle (1962), <u>Security Analysis: Principles and Techniques</u>, New York: McGraw-Hill.

Jorion, P. (1985), "International Portfolio Diversification with Estimation Risk", <u>Journal of Business</u> 58: 259-78.

Keynes, J. (1936), <u>The General Theory of Employment, Interest and Money</u>, New York: Harcourt (Harbinger edition 1964).

Lawson, T. (1988), "Probability and Uncertainty in Economic Analysis", <u>Journal of Post Keynesian</u> <u>Economics</u> 11: 38-65.

McKenna, E. and D. Zannoni (1993), "Philosophical foundations of Post Keynesian economics", Journal of Post Keynesian Economics 15: 395-407

Nofsinger, J. (2002), The Psychology of Investing, Saddle River, NJ: Prentice-Hall.

Poitras, G. (2000), <u>The Early History of Financial Economics</u>, <u>1478-1776</u>, Cheltenham, UK: Edward Elgar.

Rosser, J. (2001), "Alternative Keynesian and Post Keynesian perspectives on uncertainty and expectations", <u>Journal of Post Keynesian Economics</u> 23: 545-87.

Rotheim, R. (1998), New Keynesian Economics/Post Keynesian Alternatives, London: Routledge.

Thompson, J. and E. Williams (2000), "A Post Keynesian analysis of the Black-Scholes option pricing model", <u>Journal of Post Keynesian Economics</u> 22: 247-63.

Figure 1. The Philosophy of Investing

View of the World: No Exploitable Inefficiencies value	Short run mis-pricing True value in the Long run	Persistent Deviation of Prices from true
Who They Are: Modern Portfolio Theorists	Fundamental	Technical
	Analysts	Analysts
What They Do: Two Fund Separators	Value	Dow
Mean Variance Optimizers	Investors	Theorists
Market Timers		Rukeyser's Flyes Herders
True believers	Partial Believers	Dis-believers

Strength of Belief in Efficient Markets

The Philosophy of Investment: A Post Keynesian Perspective

Geoffrey Poitras

Faculty of Business Administration Simon Fraser University Burnaby, B.C. CANADA V5A 1S6

> email: poitras@sfu.ca Phone: 604-291-4071

ABSTRACT

The role of uncertainty in investment decisions is a central concern of Post Keynesian economics. Despite substantive criticisms of security investment strategies which rely on notions from probability theory, Post Keynesians have not provided a detailed model of an investment strategy that would be consistent with the Post Keynesian approach. Working from the contributions of J.M. Keynes, this paper develops the philosophical basis for such an investment strategy.

^{*} The author is a Professor of Finance at Simon Fraser University. In addition to producing numerous articles in leading journals on various aspects of financial economics, the author is also responsible for two books, one on the early history of financial economics and another on risk management and speculation.

NOTES

- 1. This assumes that the pricing model was derived using an expected utility function which captures a tradeoff between risk and expected return, e.g., the mean-variance expected utility function.
- 2. These individuals are H. Markowitz, for the mean-variance optimization model, and W. Sharpe, for the market model representation of the capital asset pricing model. Both of these *ex ante* models rely on the use of *ex post* estimates of statistical parameters for the means, variances and covariances to be implementable. As such, both of these of these theories are subject to the 'ergodicity' criticism
- 3. A defining characteristic of fundamental analysis for equity securities is the lack of agreement about the pricing models to be used. While lip service is paid to discounted cash flow analysis, there is considerable disagreement about the variables to be used, e.g., free cash flow, and the weight given to various factors used in forecasting future values for the cash flows being discounted. Prevailing wisdom maintains that intuition, skill and training are factors that permit the financial analyst to identify underpriced securities. This perception is comforting to the financial services industry which markets these abilities in exchange for fee-for-service.
- 4. This approach can be extended to shorting securities which are over-priced. Such strategies are employed by a segment of the hedge fund industry. The bias of fundamental analysis to the buy side would be an interesting study in the sociology of financial markets.
- 5. The ergodicity argument is applicable to the modern portfolio theories, where *ex post* estimates of means and variances are used to determine *ex ante* expected returns and standard deviations. However, these investors are driven by two fund separation and don't actually use the estimates to make investment decisions. The same cannot be said about the direct mean-variance optimizers working within the Markowitz framework. Jorion (1985), Eun and Resnick (1994) and others provide considerable evidence on the difficulties that the assumption of ergodicity poses for this approach.
- 6. The reference to astrology is not facetious. Poitras (2000) contains an early example of an investment advisor using astrology to forecast prices in the Antwerp market for bills of exchange.
- 7. While it is tempting to extend the discussion to notions of individual liberty and freedom, this would take the discussion too far afield. However, it is worth observing at this point that this concept of uncertainty "requires a social matrix for its existence" (McKenna and Zannoni 1993, p.405). This is almost diametrically opposed to the neo-classical approach, of which the modern portfolio theory is an extension. In this approach, decisions are absolute and social conventions and institutions are not required to situate the optimal solution, which is conceived to be immutable.

- 8. If this interpretation is correct, then long-term high grade corporate bonds would also belong to this category.
- 9. For example, Graham, Dodd and Cottle (1962) explicitly state that fundamental analysis is only applicable to securities which are non-speculative. The determination of whether a security is speculative depends on the assets owned by the firm, the presence of tangible cash flows from those assets and the like. Railways, textile companies, shipping companies and the like would typically fall within the scope of fundamental analysis.