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A Comparison of Financial Instruments Utilized for Investing in Individual Retirement Accounts

Steven G. Zenishek

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A COMPARISON OF FINANCIAL INSTRUMENTS UTILIZED FOR INVESTING IN
INDIVIDUAL RETIREMENT ACCOUNTS

BY

Steven G. Zenishek

B.S. in Engineering Operations, Iowa State University, 1978

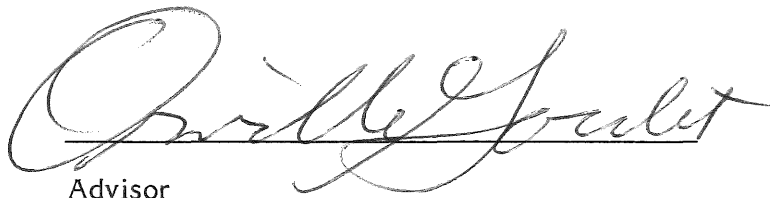
An Independent Study
submitted to the Faculty of the
University of North Dakota
in partial fulfillment of
the requirements for the
Degree of Master of Business Administration

Minot Air Force Base

December

1982

This independent study submitted by Steven G. Zenishek in partial fulfillment of the requirements for the Degree of Master of Business Administration from the University of North Dakota is hereby approved by the Faculty Advisor under whom the work has been done.

A handwritten signature in cursive script, reading "Phillip J. Soudet". The signature is written in black ink and is positioned above the word "Advisor".

Advisor

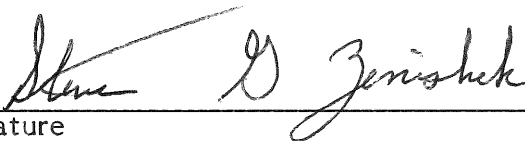
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Individual Retirement Accounts

Department: School of Business and Public Administration

Degree: Master of Business Administration

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TABLE OF CONTENTS

	PAGE
CHAPTERS	
I. INTRODUCTION	1
The Problem	
Objective of the Study	
Methodology	
Plan of the Paper	
II. THE INDIVIDUAL RETIREMENT ACCOUNT	3
Types of IRAs	
Prohibited Transactions	
Strategy	
III. THE FINANCIAL INSTRUMENTS	9
Instruments to Avoid	
Available Instruments	
Government Retirement Bonds	
Certificates of Deposit	
Annuities	
Self Directed IRA Account	
Mutual Funds	
Zero Coupon Bonds	
Options	
Limited Partnerships	
Summary	
IV. CONCLUSION	29
Risk	
Portfolio Theory	
Utility and Current Market Line Theory	
BIBLIOGRAPHY	34

LIST OF FIGURES

<u>Figures</u>	<u>Page</u>
1. Utility Curves	30
2. Utility and CML Curves Used to Determine Optimal Portfolios	32

CHAPTER I

INTRODUCTION

A stagnating economy, social security facing bankruptcy, double digit inflation, and declining savings by Americans prompted the Reagan Administration to introduce the Economic Recovery Tax Act (ERTA) of 1981. One important facet of this bill was allowing employees who participated in either employer or government pension plans to start Individual Retirement Accounts for the first time during the 1982 tax year. The Reagan Administration hoped that the tax shelter features of an Individual Retirement Account (IRA) would encourage greater savings. The resulting investments would promote economic recovery it was reasoned.

The Problem

As the ramifications of ERTA became known, financial institutions ranging from brokerage houses to the government began advertising IRA plans. The result has been a confusing array of investment plans from which the investor must choose to start an IRA. The IRA plans vary according to the financial instrument utilized and the instrument's performance and risk.

Objective of the Study

The objective of this study is to determine the types of securities and assets utilized for Individual Retirement Accounts and how they compare and differ in performance by reviewing the current literature. Finally, portfolio and current market line theory will be discussed as a method to evaluate investment opportunities.

Methodology

A description of each financial instrument including advantages, disadvantages, rates of return, and risk provides the basis for the comparison. Relevant information was obtained from newspapers, business periodicals, government agency publications, and investment text books.

Plan of the Paper

Chapter II presents a background description of Individual Retirement Accounts to provide a foundation for the analysis performed in Chapter III.

A description of each financial instrument is made in Chapter III with a discussion of the instruments' costs, advantages, disadvantages, estimated rate of return, and relative risk. Chapter IV contains the conclusion and recommendations.

CHAPTER II

THE INDIVIDUAL RETIREMENT ACCOUNT

An Individual Retirement Account is a trustee or custodial account setup in the United States for an investor's exclusive use or the exclusive use of the investor's beneficiaries.¹

Types of IRAs

There are three distinct types of Individual Retirement Accounts (IRA). The most popular is the Individual Retirement Account which is a custodial account or domestic trust. A secondary type of IRA is the Individual Retirement Annuity which is an annuity or endowment contract with an insurance company to provide the investor with a lifetime annuity after retirement. The third type of IRA is the Retirement Bond which is a government bond sold by the Treasury Department specifically for IRAs.²

An IRA is created by a document that must meet six requirements. The document must name a bank, federally insured credit union, savings and loan association, or eligible person to act as the account's trustee or custodian. The trustee can not accept payments greater than \$2,000 and they must be in cash. The account must be fully vested at all times. No part of the account can be used to buy a life insurance policy. The investor must receive distributions before age 70 as an annuity or equal time payments. If the

¹U.S. Internal Revenue Service, Tax Information on Individual Retirement Arrangements, Department of Treasury IRS Publication 590 (Rev Nov 81), Washington, Government Printing Office, 1981, p. 2

²Kulsrud, William N. "Individual Retirement Accounts: A Close Examination of the Opportunities," Taxes, February 1982, pp. 83-91

investor dies before the entire amount of the account is paid out, the balance must be paid to the beneficiaries within five years of death.³ The most important feature of an IRA is that contributions and earnings are tax deferred until distributed.

Individual Retirement Accounts originated in 1962 when Congress passed the Self Employed Pension Plan Act. In 1975, IRAs were made available to workers not participating in employer sponsored retirement plans. The contributions were limited to \$1,500 or 15 percent of earned income whichever was less.⁴

The Economic Recovery Tax Act made two important changes. Participants in any employer or government plan became eligible to participate in an IRA. In addition, an individual could contribute one hundred percent of their income up to a \$2,000 limit.⁵ George Maudell of Siedman and Siedman explained the importance of this change as follows:

"If a man earns \$30,000 and the wife earns \$500 part time, \$2,250 can be put into two IRA accounts and split anyway the two want, not equal amounts as required now (1981)."⁶

A wife can work part time and put all her income up to \$2,000 into an IRA account.

Another advantage of an IRA is the ability to switch between funds as often as you like, but if you withdraw your cash and reinvest it in another

³U.S. IRS, op. cit., p. 2

⁴Eisenberg, Richard. "Where to Start Your IRA", Money, December 1981, pp. 70-74

⁵Kulsrud, W. N., op. cit., p. 83

⁶Pacey, Margaret D. "Up the IRA: Millions More Are Now Eligible to Build A Tax-Free Nest Egg", Barrons, September 14, 1981, p. 11

rollover IRA within sixty days, you are limited to one rollover a year.⁷ Transfers between trustees are not rollovers and are not limited to a one year waiting period.

A rollover can be defined as a tax free transfer of cash or assets from one retirement program to another. There are two types of rollovers. One type is a transfer of cash or assets from a pension plan to an IRA.⁸ This tax free transfer of funds allows the investor to invest in financial instruments having the greatest rate of return as economic conditions change.

An IRA is not tax free, but is a tax deferred tax shelter. The cash and assets in the account are taxed upon distribution. Upon distribution, the IRA assets are taxed as ordinary income and are not eligible for special treatment. However, when the investor begins to receive his distributions he will probably be in a lower tax bracket. As a result the IRA funds are taxed at a lower rate than if they were taxed when contributed.⁹

There are penalties assessed against an IRA if contributions and distributions are not made in accordance with the law. There are basically three types of penalties. The first is a penalty for excess contribution. If an investor contributes more than \$2,000 to an account, the IRS will assess a 6% excise tax each year the excess remains in the account. The second type of penalty is applied if the assets in an IRA are distributed before age 59 , except for the death or disability of the investor. The penalty for premature

⁷Dowd, Merle E. "Retirement Income Eligible for IRA", The Air Force Times, July 12, 1982, p. R9

⁸U.S. Internal Revenue Service, Tax Information On Individual Retirement Arrangements, Department of Treasury, IRS Publication 590 (Rev Nov 81) Washington; Government Printing Office, 1981, p.5

⁹"USAA Mutual Fund, Inc Prospectus", USAA Mutual Fund, Inc., San Antonio, Texas, 29 January, 1982, p.17

distribution is that the account is taxed at the gross income rate and assessed an additional 10% penalty tax. The third type penalty is assessed when insufficient distributions are made after age 70 . Insufficient distributions are treated as excess contributions and are assessed a 50% excise tax.¹⁰

An IRA must be distributed at the close of the year an investor reaches age 70 or begin payments to avoid a 50% excise tax. The account can be paid out by any of the following periods: (1) the life of the individual, (2) the joint life and last survivor expectancy of the individual and his spouse, or (3) a period certain not extending beyond the life expectancy of the individual (or the joint life and last survivor expectancy of the individual and his spouse).¹¹

Prohibited Transactions

In addition to penalties, there are four types of transactions that are prohibited by law. An investor can not borrow money from an IRA, sell property to the account, receive unreasonable compensation for managing the account, or use the account as security for a loan. Engaging in a prohibited transaction terminates the account and its tax exemption on the first day of the taxable year in which the transaction takes place and all assets are deemed distributed on that date.¹² The account will be taxed as gross income and assessed an additional 10% excise tax if it occurs before age 59 .

An IRA provides two major benefits for individuals. It permits the taxpayer to deduct contributions made to an IRA and results in a tax savings

¹⁰USAA Mutual Fund, op. cit., p. 17

¹¹Kulsrud, William N. "Individual Retirement Accounts: A Close Examination of the Opportunities", Taxes, February 1982, p. 85

¹²Kulsrud, W. N., op. cit., p. 86

to the individual. The second benefit is that the tax exclusion granted on earnings permits greater sums of assets to accumulate than comparable taxable investments. In effect, the IRA is a free government loan allowing the investor to keep the earnings from contributions and accumulated earnings under the investor's control until withdrawal.¹³

An IRA does have disadvantages. Severe penalties are assessed for excess and premature distributions. The investor's assets are "untouchable" until age 59 . One argument against an IRA is that an individual does not have an adequate cash flow for an IRA. William Kulsrud, Assistant Professor of Accounting and Finance at Indiana University has stated that an individual can borrow to finance an IRA to save that period's opportunity.¹⁴ The basic theme of literature on IRAs is that the advantages of an IRA outweigh the disadvantages. The investor should not question if he should start an IRA, but should consider how to start an IRA.

Strategy

There are two schools of thought concerning which type of financial instruments should be utilized for IRAs. One school of thought claims that an IRA should be invested into income producing assets rather than assets that yield long term capital appreciation. The reason is interest from income producing assets is compounded tax free until withdrawal. While the favorable tax treatment available for capital gains is lost when assets that produce capital appreciation are utilized for an IRA. Assets in an IRA are taxed as

¹³ Shoemaker, Randal. "IRA Claims: Debankers Versus Exagerators", The Air Force Times, February 1982, p. R9

¹⁴ Kulsrud, W. N., op. cit., p. 89

regular income at distribution at a higher rate than taxes assessed on capital gains.¹⁵

The second school of thought is represented by Mark Skousen, editor of Forecasts and Strategies. Mr. Skousen argues that "over the long term, income is an inadequate hedge against inflation." This school of thought believes that the capital appreciation afforded by mutual funds and the stocks of young companies can hedge the effect of inflation in a growing stock market.¹⁶

In reality, the strategy one should take concerning income or growth producing assets for an IRA is dependent on the economic forecast. An IRA should utilize income producing instruments when interest rates are high and switch to growth instruments when the economy is expanding.¹⁷

¹⁵ Ibid., p. 90

¹⁶ Greenebaum, Mary. "IRA Alternatives for the Venturesome", Fortune, February 22, 1982, p. 49

¹⁷ Ibid., p. 49

CHAPTER III
THE FINANCIAL INSTRUMENTS

Certain financial instruments are outright prohibited by law. Tangible assets such as gold, real estate, art work, and collectables are prohibited by ERTA. Buying life insurance with an IRA is another example. Margin trading and commodities are prohibited for two reasons. One reason is that debt is used to finance the IRA and would invoke the debt finance rule. Another reason is that margin calls could invoke the excess contribution rule (see prohibited transactions).¹⁸

Instruments to Avoid

Other types of instruments are not prohibited, but should be avoided since they would be poor investment choices. Tax exempt funds and unit trusts are an example. Municipal bonds and tax free money funds are already tax sheltered. An IRA would make these instruments taxable upon withdrawal.¹⁹ Investments dependent on taxable gains are another example. Low coupon discount bonds are not a sensible investment. The investor surrenders yield for a large return in capital gains. However, capital gains are taxed at a lower rate. If the bonds are part of an IRA, they lose the advantage of an IRA which is the compounding of tax deferred dollars. In addition, they will be

¹⁸"What the New IRA Rules Do For You", Business Week, September 14, 1981, p. 123

¹⁹Ibid., p. 123

taxed as regular income at a greater rate than the capital gains tax.²⁰ Six month bank Money Market Certificates are also to be avoided. The minimum purchase price of \$10,000 is too large for a IRA qualification and would subject the account to excess contribution limits.²¹

Available Instruments

Even though IRAs are limited to certain instruments, there are still numerous types of financial instruments to invest in. An individual can buy retirement bonds directly from the government, or buy annuities, certificates of deposit, or mutual funds through a custodian. A self directed account allows an investor even greater flexibility by investing in annuities, mutual funds, stocks, bonds, zero coupon bonds, options, and limited partnerships.²²

Government Retirement Bonds

Government Retirement Bonds are bonds issued by the federal government for IRAs. They are the only IRA not requiring a custodian or trustee and have no fees. In 1962, Congress passed the Self Employment Individual Tax Retirement Act. The Fed responded in 1963 by issuing the first US Retirement Bonds in denominations of \$50 to \$1,000 earning 3.75% interest. The bonds were limited to individuals who were self employed and not covered by any other type of pension plan. The interest was in the form of redemption value over the par value of the bond.²³

²⁰"Everyone's Tax Shelter: IRA's Add A New Dimension to Investing", Business Week, Dec 28, 1981, p. 142

²¹"What the New IRA Rules Do For You", Business Week, September 14, 1981, p.123

²²Sloan, Allan. "Charting Your Own IRA Course", Money, May 1982, p. 106

²³Geisel, Jerry. "Check IRA Vendor's Record Before You Choose: Expert", Business Insurance, April 26, 1982, p. 10

Presently an investor can buy Government Retirement Bonds from any Federal Reserve Bank, branch, or Bureau of Public Debt by mail or in person. The bonds are sold in denominations of \$50, \$75, \$100, and \$500. The bonds are paying 9%, compounded semi-annually with an effective annual rate of 9.2%. The rate of return is guaranteed until age 70 .²⁴ You cannot sell, discount, or use the bonds as collateral or security.

Government Bonds offer several advantages. They are the lowest risk of all IRA securities. They have no load charges and do not require a custodian or trustee. The investor can withdraw from the bond within one year of purchase without penalty. But if the amount is not rolled over, the amount is taxed as part of gross income and forfeits interest.

Government Bonds have two disadvantages. The primary disadvantage is that government bonds offer the lowest rate of return of all the IRA instruments. In addition, the bonds cannot be transferred.

Certificates of Deposit

Certificates of Deposit are one of the most popular custodial instruments available. A certificate of deposit (CD) is a receipt from a bank for funds deposited at the bank for a specified period of time at a specified rate of return. The bank sets the rate in accordance to the maturity of the instrument, normally along an upward sloping yield curve.²⁵

The maximum yield a bank can pay is set by the Fed through Regulation Q to make it impossible for banks and S&Ls to compete for small deposits

²⁴"Where to Stash Your IRA Cash", Changing Times, Feb 1982, p. 38

²⁵Fabozzi, F. J. and Zarb, F. G. Handbook of Financial Markets, Securities, Options, and Futures, Dow Jones - Irwin, Homewood, Inc., 1981, p. 338

bearing high interest rates. Banks invented the CD in order to compete with credit unions which offer similar instruments but require smaller deposits and have shorter maturities.²⁶

CD Performance

CDs have low costs, but produce high yields. In fact, the yields on CDs exceed those paid by instruments of similar maturities. The institution offering the CD sets its own interest rate which is adjusted monthly or semiannually and is linked to the performance of three month and six month Treasury Bonds.²⁷ The past six months have seen rates of returns varying between ten to fifteen percent. Most banks have no charges for CD IRAs though some may charge up to \$10 for the service. Penalties are stiff for premature withdrawal.

There are several advantages for holding CDs. The yields exceed the yields paid by other securities with similar maturities. The CD gives security. There is less risk since the investor will be paid if the bank fails.²⁸

CDs also have disadvantages. The investor surrenders substantial control of his money. It is complicated and time consuming to switch to different types of investments and institutions. CDs are less liquid, but this is of minor importance to an IRA.²⁹

It is advised that an investor shop around before depositing his money with a particular institution. The investor should check fees. Why pay when

²⁶Ibid., p. 201

²⁷Eisenberg, Richard. "Where to Start Your IRA", Money, December 1981, p. 74

²⁸Fabozzi and Zarb, op. cit., p. 201

²⁹Sloan, Allen. "Charting Your Own IRA Course", Money, May 1982, p. 105

you do not have to? Investigate the float rate and how often it changes. Finally, investigate how the interest is compounded. There is a whopping difference between daily and annual compounding of interest.³⁰

Annuities

Annuities are the only traditional financial instrument insurance companies can offer in the IRA market. An annuity by definition is a "systematic" liquidation of that which has been created either along life insurance or non-life insurance lines such as savings, investments or real estate.³¹ Most annuities are a retirement annuity contract which is a deferred annuity with a wide range of options making it a flexible annuity. Prior to maturity, the annuity is a pure investment contract used to accumulate a sum to provide income at retirement.

A flexible annuity allows the investor to decide how and when to contribute. The company invests the contribution as it sees fit. The contributions determine the amount of lifetime income that is bought or they can be used to accumulate assets for transfer to another account.³²

Annuities are the only financial instrument to guarantee a flow of benefits for the same period as the individual lives. There are two types of annuities, the fixed and variable annuities.

Fixed Annuity

A fixed annuity guarantees a fixed monthly income for life and is designed to protect the longevity of income. Fixed annuities can be classified

³⁰"Where to Stash Your IRA Cash", Changing Times, Feb 1982, p. 38

³¹Huebner & Black, Life Insurance, Appleton-Century-Croft Educational Division, New York, NY, 1969, p. 109

³²Ibid., p. 39

according to their pay out plans. A Joint-Last Survivor annuity covers two or more individuals. The benefit flows are greater when both recipients are alive and decrease after the death of a spouse. A Refund Annuity makes payments equal to the premium paid. The refund to a secondary beneficiary can be a lump sum or continued periodic payments. A Period Certain Annuity guarantees payment for a specified period. Following this period, benefits will continue until death. The different payout plans provide the investor flexibility.³³

Variable Annuity

A variable annuity guarantees payment of a fixed number of variable annuity units per month as long as the annuitant lives. The investor buys a set number of units whose value will fluctuate with the economy. In theory, annuity value will fluctuate at the same rate as the value of a comparable portfolio of securities. It assumes that a correlation exists between the cost of living and the value of a diversified stock portfolio over the long run. The monthly payments an annuitant receives equals the number of units received per month times the value of each unit.³⁴ IRAs are a form of variable annuities. They are a Guaranteed Income Contract which sets a minimum return either annually or semiannually but may pay more if the investment results warrant.³⁵

The IRS treats the annuity as a distribution when its paid and is included in gross income in the year it is received. An annuity contract is taxed at the

³³Pfeffer and Klock, Perspectives on Insurance, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1974, p. 134

³⁴Ibid., p. 135

³⁵"Everyone's Tax Shelter: IRA's Add A New Dimension to Investing", Business Week, Dec 28, 1981, p. 142

start of distributions to include the full amount of the payments as part of the annuitants' gross income. An endowment contract consists of two parts, insurance and retirement savings. The amount in the retirement savings is treated as a tax free rollover while the amount paid to the insurance portion is treated as gross income.³⁶

Annuity Benefits

Annuities provide many benefits not provided by other securities. Annuities protect against outliving either one's capital or capacity to work. Annuities are based on the pooling concept used in life insurance. Annuitants who die early contribute toward the payment of benefits to annuitants who live longer than average. As a result annuitants are guaranteed a large and certain guaranteed income for life. Annuities provide a hedge against shrunken estates affected by inflation. The annuitant gets the benefit of an investment management service. It provides a dependable means of liquidating the investment. Annuities are claimed to prolong the life of annuitants by easing financial fears. Finally, annuities facilitate writing of wills.³⁷

Disadvantages of Annuities

Annuities are also loaded with pitfalls. The yield on some annuity programs is not compounded. As a result the annual advertised yield of 15% is actually closer to 12%. The high guaranteed rates can disappear. Equitable's Equivast IRA annuity guaranteed 14% during the last quarter of 1981, but dropped to a guaranteed rate of 3% after that.³⁸ The annual fees charged by

³⁶U.S. Internal Revenue Service, Tax Information on Individual Retirement Arrangements, Department of Treasury IRS Publication 590 (Rev Nov 81), Washington, Government Printing Office, 1981, p. 7

³⁷Huebner & Black, Life Insurance, Appleton-Century-Croft Educational Division, New York, NY, 1969, pp. 120-121

³⁸Eisenberg, Richard. "Where to Start Your IRA", Money, December 1981, p. 74

annuities are higher than fees charged by mutual funds having load charges. There is no guarantee that the total annuity's payment will reach a specified amount. Finally, many annuities will not pay heirs if the annuitant dies ten years or more after he began receiving the annuities.³⁹

Self Directed IRA Account

A self directed IRA opens up to the investor a wide variety of instruments not available any other way. Self directed accounts will be discussed before analyzing other investment instruments. A self directed account allows the investment of IRA funds through a trustee in stocks, bonds, mutual funds, options, and limited partnerships. The individual is responsible for directing the trustee as to investing.⁴⁰

The self directed account gives the investor a wide array of investment vehicles. The investor has a wide choice of conventional securities. The investor can choose to invest in recently developed securities such as zero coupon bonds. If an investor already owns stocks and bonds, it gives the investor a place to stash them and lower his tax bill. Finally, a self directed account is the only access to certain investments.⁴¹

Setting up a self directed account is expensive. The most expensive part is hidden costs. It normally costs \$20 to \$30 to open an account. Commissions on transactions are assessed at 3% of the amount of transaction. For a \$2,000 transaction this would amount to \$60. In addition, there is an annual fee ranging from \$20 to \$30. There are also extra charges for certain investments

³⁹Ibid., p. 74

⁴⁰Kulsrud, William N. "Individual Retirement Accounts: A Close Examination of the Opportunities," Taxes, February 1982, p. 85

⁴¹Sloan, Allan. "Charting Your Own IRA Course", Money, May 1982, p. 106

like limited partnerships.⁴² SUTRO, a San Francisco investment company, is a good example of the expenses involved. The company advertised for customers to buy shares of high technology companies with their IRA dollars. The commission to buy the stock was \$130 and the investor would have to pay another commission to sell the stock!⁴³ It is recommended that self directed accounts be considered after the IRA has grown to at least \$10,000.⁴⁴

The advantage of a self directed account is the flexibility it allows. The investor can easily buy and sell securities by making a telephone call. It offers a greater choice of instruments and affords the only access to certain accounts. The investor has complete control of his money.

The disadvantages require careful consideration. It is expensive to operate a self directed account. The commissions can "eat up" the account's earnings. The self directed accounts are limited to sophisticated investors with accounts greater than \$10,000.

Mutual Funds

Mutual funds refer to a term used by investors to collectively describe open-end management and closed end investment companies that trade securities.⁴⁵ Individuals may participate in a mutual fund through either a custodial account or self directed trustee account.

Mutual funds utilize four types of securities. Common stock funds invest

⁴²Greenebaum, Mary. "IRA Alternatives for the Venturesome", Fortune, February 22, 1982, p. 49

⁴³Eisenberg, Richard. "Where to Start Your IRA", Money, December 1981, p. 74

⁴⁴Ibid., p. 72

⁴⁵Gup, Benton E. The Basics of Investing, New York: John Wiley & Sons, Inc., 1979, p. 42

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⁴⁴Ibid., p. 72

⁴⁵Gup, Benton E. The Basics of Investing, New York: John Wiley & Sons, Inc., 1979, p. 42

in common stock and emphasize capital appreciation. Income funds invest in stocks paying dividends and emphasize the preservation of capital and income. Balanced funds are a combination of capital appreciation and income funds. Finally, special funds exist that specialize in a particular type of security such as money market or balance funds.⁴⁶

Common Stock Funds

Common stock funds are sometimes called growth funds. The objective of a common stock fund is capital appreciation. The fund invests in common stocks or rights of progressive companies for long term appreciation of capital. The fund diversifies assets to reduce risk.⁴⁷ Joan Ferguson, a Washington, D.C. planner estimates that the top 24 performers have returns of up to 36.9%.⁴⁸

Income Funds

Income funds seek maximum income without undue risk to the principle. These funds seek to satisfy the aggressive and defensive needs of investors by providing stable income and dividends. They seek high dividends over capital appreciation. Income funds can not assure a specific rate of return nor protect the principle. Their portfolios consist of bonds, preferred stock, common stock and government securities.⁴⁹

⁴⁶Ibid., p. 44

⁴⁷"USAA Mutual Fund, Inc Prospectus", USAA Mutual Fund, Inc. San Antonio, Texas, 29 January, 1982, p.24

⁴⁸Eisenberg, Richard. "Where to Start Your IRA", Money, December 1981, p. 74

⁴⁹Ibid., p. 30

Balanced Funds

Balanced funds are designed for the conservative investor seeking diversification and stable income. The portfolio is restricted to a specified percentage of bonds, preferred stock, and equities. The actual percentage is set in the funds prospectus. These funds minimize risk while providing income for long term growth. The problem is that they favor a fixed income security portfolio and tend to ignore capital growth.⁵⁰

Special Funds

Special funds deal with specific securities. One type is a money market fund. The money market is a wholesale market for debt securities consisting of low risk, and highly liquid short term IOUs. The objective is the highest income consistent with the preservation of capital and maintenance of liquidity. The instruments are debt obligations such as CDs, US Government market securities, Banker Acceptances, and high grade commercial paper. Money markets have been averaging a 10 to 15 percent return.⁵¹ The risk in money market funds is that the interest rates may decline and not meet the advertised rate. In addition, a proliferation of funds reduces the availability of high quality, short term paper and results in a downgrade of the portfolio mix.⁵²

Another type of special fund is a Dual Purpose Fund. Dual purpose funds deal in two types of securities. Income securities and capital shares. The income securities seek current income. They receive dividends on proviso cum

⁵⁰Fabozzi, F. J. and Zarb, F. G. Handbook of Financial Markets, Securities, Options, and Futures, Dow Jones - Irwin, Homewood, Inc., 1981, p. 512

⁵¹"USAA Mutual Fund, Inc Prospectus", USAA Mutual Fund, Inc. San Antonio, Texas, 29 January, 1982, p.33

⁵²Fabozzi & Zarb, op. cit., p. 516

payments when the company is in arrears. This provides income leverage for maximum current income. The second portion of the dual purpose fund is the capital shares. These are limited to capital gains and receive no dividends and seek capital appreciation.⁵³

Mutual funds are either one of two types. A Load Fund which charges a sales commission when shares are purchased. A No-Load Fund in which no commission is charged when the shares are bought, but is assessed when shares are sold. It costs about \$2 to \$10 to open an account with a mutual fund. Both load and no-load accounts are assessed a \$5 management fee by the fund advisor for his managing of the account.⁵⁴

Mutual Fund Advantages

Mutual Funds have several advantages to offer the IRA investor. Diversification is one advantage of an IRA. One share invested in a mutual fund company represents fractional ownership in twenty five to one hundred companies. A mutual fund allows an investor to switch money very easily as economic conditions and the investor's situation changes. Larry Biehl, a financial planner at Bailard, Biehl, and Kaiser feels a "large fund group is the best place for an IRA. The costs are low, the choices are numerous, and you can move your money around."⁵⁵ In addition, mutual funds have made substantial gains the past five years. Changing Times noted that the top 25 funds during the last five years had gained over 465% versus a gain of 148%

⁵³Gup, Benton E. The Basics of Investing, New York: John Wiley & Sons, Inc., 1979, p. 44

⁵⁴Ibid., p. 44

⁵⁵Runde, Robert. "The Switch Fund Solution", Money, March 1981, pp. 85-86

for money markets.⁵⁶

Mutual Fund Disadvantages

Mutual funds do have a major disadvantage. Big profits are not guaranteed. If the funds in the portfolio suffer losses at the time the investor wishes to liquidate his account, the investor loses his money. Mutual funds make sense to an IRA saver who has faith in the market and in particular faith in a specific fund.⁵⁷

Zero Coupon Bonds

A new financial instrument available for IRAs is the zero coupon bond. A zero coupon bond is a bond sold at a fraction of its face value, pays no interest, and is redeemed at face value when it matures.⁵⁸

A zero is suited for an IRA since zeros require a tax shelter. "Normal" bonds must pay income tax on interest as it accrues. Zeros would also be assessed income tax annually even though no interest is paid. In effect the taxpayer would be paying taxes on income he did not receive. The IRA gives the zero a tax deferral making it a viable investment alternative.⁵⁹

The yields on zeros average one to two percentage points below the yields of comparable bonds. If an investor feels that interest rates are going to fall, he can lock into a set interest rate by buying zero coupon bonds. If rates actually fall companies would call in their outstanding bonds early and pay the bondholders a premium. Zeros would not be called in because a call

⁵⁶"Where to Stash Your IRA Cash", Changing Times, Feb 1982, p. 38

⁵⁷Ibid., p. 38

⁵⁸Sloan, Allan. "Charting Your Own IRA Course", Money, May 1982, p. 106

⁵⁹Ibid., p. 106

on zeros would force the company to prepay interest. Instead, companies would let zeros ride. Zeros are the only fixed income alternative for IRAs and can give an account predictability.⁶⁰

Zeros are bought through brokers and are sold at substantial discounts amounting to as much as 75% off the face value. Brokers normally assess a 5% sales charge when they handle zero coupon sales.⁶¹

Zero coupon bonds have several advantages. They allow an investor to know in advance the maturity value of his investment. They also allow investors to lock in a set interest rate if interest rates are expected to fall. Zeros will not be called in by the company if the rates do fall.⁶²

Zero coupon bonds have several disadvantages as well. The yield on zeros is lower than the yield on a standard issue bond. Standard issue bonds allow the investor to reinvest interest payments if interest rates rise while a zero coupon bond holder is stuck. A standard issue bond will outperform a zero if interest rates are stable since the standard's yield is greater than the zero's. If the bond issuer defaults holders of standard bonds at least get some interest payments while a zero holder gets nothing. The risk to a zero bond holder is that the company may go out of business.⁶³

Options

IRAs are allowed to use covered options as part of their portfolio. A

⁶⁰Ibid., p. 106

⁶¹Bettner, Jill. "New Wave of Zero Coupon Bonds for IRA's Could Sink Investors If Interest Rates Rise", The Wall Street Journal, 22 March 1982, p.

⁴⁴ ⁶²Ibid., p. 44

⁶³Ibid., p. 44

covered option is an option covering a security which the option writer already owns. Calls are the covered options utilized for IRAs. A call is an option to buy a security. They are contracts giving the call owner the right to buy one hundred shares of a security at a predetermined price in a specified time.⁶⁴

Calls are the most utilized options for IRAs. The IRA's annual contribution is used to buy a stable, dividend paying common stock on which options are listed in the stock market. A dealer is utilized to negotiate the call's premium, contract price, and specified time period between the call writer (holder of the stock) and call buyer (investor wishing to buy the stock on which the call is written).⁶⁵

In a stable to declining market the call writer earns a premium by "writing" a call and undertakes to deliver the stock if the stock's price reaches a certain value by a specified date. If the stock price declines, the call writer retains the stock and the premium. If the stock's price rises, the call writer delivers the stock and loses capital appreciation.⁶⁶

Covered calls have several benefits. A covered call is relatively riskless because the call writer already owns the security. One risk of a covered call in an IRA is the loss of capital appreciation of the stock.⁶⁷ A second risk is the loss of the stock itself from the portfolio and the benefits the stock could

⁶⁴Fabozzi, F. J. and Zarb, F. G. Handbook of Financial Markets, Securities, Options, and Futures, Dow Jones - Irwin, Homewood, Inc., 1981, p. 545

⁶⁵Ibid., p. 546

⁶⁶Flanagan, William G. "Cashing In Your IRA", Forbes, 15 February 1982, p. 123

⁶⁷Ibid., p. 123

have provided the IRA. Covered call writing is profitable since the writer settles for income from the sale of the call and foregoes any capital gains. Writing a covered call is an attractive strategy for the investor who does not care if his reward is income or capital growth.⁶⁸

Limited Partnerships

Limited partnerships were originally organized as tax shelters designed to produce maximum tax deductions and little if any income. These types of partnerships are not compatible with the aim of an IRA since losses are not recognized when the IRA is distributed at retirement.⁶⁹ Limited partnerships have been developed for use by IRAs by maximizing cash income and minimizing tax deductions.

A limited partnership consists of two parties. The general partners or the firm organizing the partnership and the limited partners who provide the investment capital. The program's general partners make all the investment decisions with no input from the limited partners. A limited partnership is very risky since no market exists for interests in a partnership. The investor can not liquidate his investment in an emergency. The most important factor affecting a limited partnership is the quality of the firm running the partnership. The general partners should have been in the business a long time and should historically show successful results with former partnerships. Limited partnerships are begun by the general partners offering a minimum and maximum subscription. The program is activated when the minimum subscription has been collected. Participation is limited by a statement of

⁶⁸ Ibid., p. 123

⁶⁹ Sloan, Allan. "Charting Your Own IRA Course", Money, May 1982, p. 106

suitability in the partnership's prospectus. The statement of suitability specifies the net worth a potential investor must have before he is allowed to participate in the program.

Some limited partnerships list the rights of the limited partners. These rights are similar to the rights of stockholders in a corporation. The rights can include but are not limited to the following:

1. Right to remove the general partners.
2. Right to call meetings.
3. Right to dissolve the partnership.
4. Right to amend the articles of partnership.
5. Right to limited liability.
6. Indemnification of the general partners.
7. Right to sale of property.⁷⁰

There are three types of limited partnerships: oil and gas, real estate, and venture capital partnership. Real estate limited partnerships buy mortgages or land under buildings and lease it back. Limited partners get the rewards of ownership through the use of kickers attached to the resulting loans. The kickers grant a share of the properties price appreciation over the life of the loan and passes it along with shares in rent increases.⁷¹

Real Estate Partnership

Real estate retirement funds have four objectives they try to meet. They attempt to preserve the limited partners capital. They provide regular income to the limited partner. They provide additional cash distributions through the

⁷⁰"Quinico 1982-83 Oil & Gas Income Program Prospectus", Quinico Securities, Inc., Denver, Co., 12 May 82, p. 55

⁷¹Greenebaum, Mary. "IRA Alternatives for the Venturesome", Fortune, February 22, 1982, p. 146

receipt of deferred interest. Finally, they attempt to gain maximum cash distributions through additional interest from equity participation.⁷²

Limited partnerships use two types of mortgages. The first type is a wrap around mortgage. The wrap around mortgage is a new mortgage in which the principal equals the total amount of earlier loans plus new money advanced by the partnership. The partnership pays the principal and interest on the old mortgages. The wrap around produces high rates of return through interest on the loan.⁷³

The Balloon mortgage is the second type of limited partnership mortgage. Balloon mortgages offer "financing" 3 to 6 points below the market rate. They "buy down" the mortgage, paying the lending institution a hefty portion of the interest up front. The buy down lasts for a term of three to five years. Once the term is up, either the mortgage is terminated and the full amount of the principal, the "balloon" is due and payable or the interest rate reverts to the market level.⁷⁴

The risk associated with real estate is default on the mortgage which is a common occurrence during present economic conditions. When a default occurs the partnership must foreclose to protect its loan. There is a very real chance of losing the property.

Oil and Gas Partnerships

Oil and Gas partnerships produce income by drilling or buying royalties. The least risky method is for the partnership to purchase and operate

⁷²"National Properties Investors 5 Prospectus Integrated Resource Management, Inc., June 4, 1982, p. 47

⁷³Ibid., p. 9

⁷⁴"Some New Gimmicks for Home Financing", Business Week, June 22, 1981, p. 118

properties producing oil and gas. Another method is to buy royalties in producing wells and invest about half of the remaining funds in undeveloped properties. The goal of an oil and gas program is to generate immediate regular income for partnership participation.⁷⁵

There are several advantages to investing in a limited partnership. These programs offer the opportunity for tremendous returns on investment. The general partners assume the risk for liabilities while the limited partners risk only the amount they have invested and the assets they have accumulated in the account. The day to day management of the account is left to professionals.

The disadvantages of limited partnerships are cause for concern. Limited partnerships are the riskiest of all financial instruments. The investor cannot sell his interests in a partnership in an emergency since a public market does not exist for them. A limited partnership can incur a tax liability and the investor may not receive any cash to pay the tax liability. Competition in the market place for suitable investments is fierce and investment opportunities may not exist.

Summary

Differences do exist between the financial instruments used for IRAs. They can briefly be summarized as follows:

Government Retirement Bonds represent the least risky IRA investment, but they offer the poorest performance.

Certificates of Deposit are a little riskier than retirement bonds and offer rates of return ranging from 10 to 15%.

⁷⁵"Dyco Oil and Gas Program 1983-1 Prospectus", Dain Bosworth, Inc., Minneapolis, Minnesota, 14 Oct 82, p. 10

Insurance Annuities are the only instruments that guarantee income for life. They are more costly than CDs or mutual funds and their performance may be misrepresented.

A self directed IRA account is the most expensive method of running an account, but it allows investments in riskier instruments.

Mutual Funds utilize stocks and bonds and offer rates of return greater than CDs during economic growth. They are more risky but offer greater returns.

Zero Coupon Bonds are exclusively for IRA Accounts. The return is dependent on economic conditions. The risk of a zero coupon bond is the company may go out of business resulting in a total loss of funds invested in the zero.

Covered calls are covered options written on stock the investor already owns. They are used to produce income. They present a risk consisting of a loss of a stock and its associated capital gains.

Limited Partnerships offer the greatest returns, but also the greatest risk for the loss of investment.

CHAPTER IV

CONCLUSION

Risk is important to the investor since it refers to the possibility of loss or harm to one's investment. This is crucial when one is considering instruments of investment for an IRA. Total risk consists of two components: 1) systematic risk, and 2) unsystematic risk. Systematic risk results from a common factor that affects the returns on all securities in the same manner and is measured by beta. Unsystematic risk is what remains after systematic risk has been subtracted from total risk. It is due to unique events that affect the returns of only one security.⁷⁶

Risks can arise from many different sources. Business risk refers to the possibility that the firm will fail. A firm's failure is terrible for an investor since he may lose most or all of his investments. Government policies and regulations can affect business risk. Purchasing power risk affects investments with fixed returns such as bonds, preferred stocks, etc. The risk is that the rate of inflation will erode the purchasing power of the fixed payments. During inflationary periods market interest rates rise and the market price of outstanding fixed payment securities declines. The investor is faced with a loss in purchasing power and an unrealized loss in capital value.⁷⁷

⁷⁶Gup, Benton E. The Basics of Investing, New York: John Wiley & Sons, Inc., 1979, p. 77-93

⁷⁷Ibid., . 93-94

Portfolio Theory

Harry Markowitz developed portfolio theory in 1952 in an article entitled "Portfolio Selection" to aid investors in asset selection and diversification. The theory deals with rules for intelligent selection of investments under conditions of risk.⁷⁸

Portfolio theory assumes that different investors have different aversions to risk. The most rational investors will take an additional risk only if it promises an increased return. Utility theory provides a means of assessing an investor's willingness to assume a specific amount of risk to get a specified rate of return. The risk-return issue is addressed by constructing a utility schedule for a given investor. This process involves asking a series of questions to establish the investor's indifference curves.

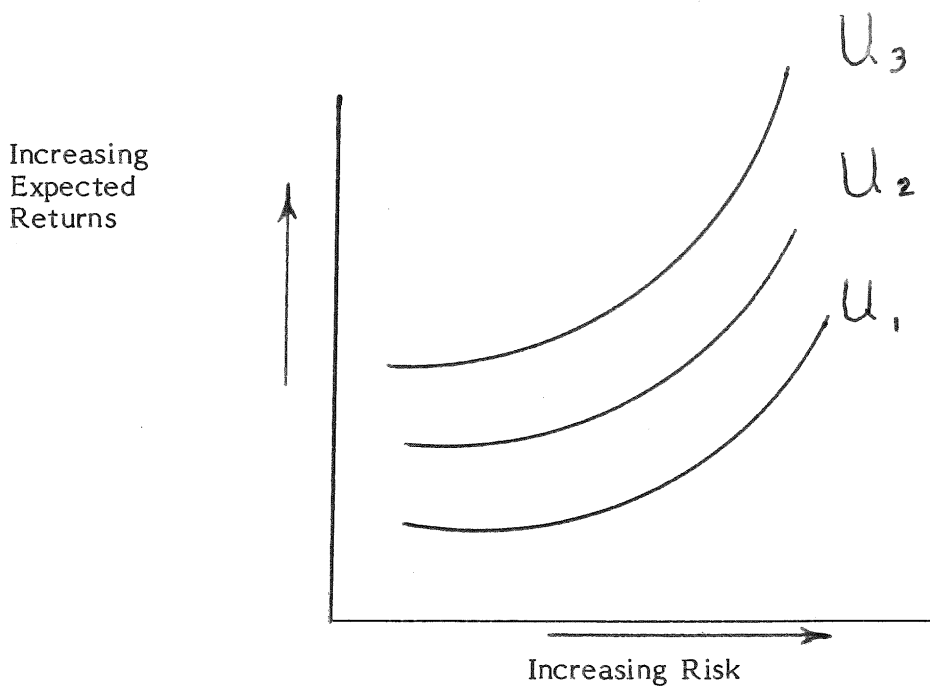


Figure 1. Utility Curves

⁷⁸Ibid., p. 437

The utility curve indicates the same satisfaction that an investor will get from various combinations of risk and return. The concave curves indicate that the investor's aversion to risk increases as the amount of risk increases.⁷⁹

Once the risk associated with a security is considered, the investor must select securities that provide the best combination of risk, return, and utility. Securities that provide the best relationship between risk and return are selected on the basis of two dominance rules:

1. The security with the least risk is preferred to all other securities with the same rate of return.
2. The security with the highest expected return is preferred to all other investments with the same degree of risk.

A portfolio that consists of dominant securities is called an efficient portfolio. An efficient portfolio has an efficient frontier which is a line drawn through a set of points that offer the maximum rate of return for each degree of risk in the set of securities that are under consideration.

Constructing a capital market line (CML) gives an investor a method for determining efficient combinations of risk free and risky securities. The capital market line is an efficient frontier for combinations of both risk-free and risky portfolios of securities. The portfolios on the capital market line are efficiently diversified and contain only systematic risk.⁸⁰

Utility Theory and CML

Utility Theory assumes that the utility curve for an individual investor gives the specific amount of risk that an investor is willing to assume in order

⁷⁹Ibid., pp. 441-442

⁸⁰Ibid., pp. 442-446

to get a specific rate of return. It is possible to integrate the CML with various utility curves to locate the optimal portfolio for each curve.

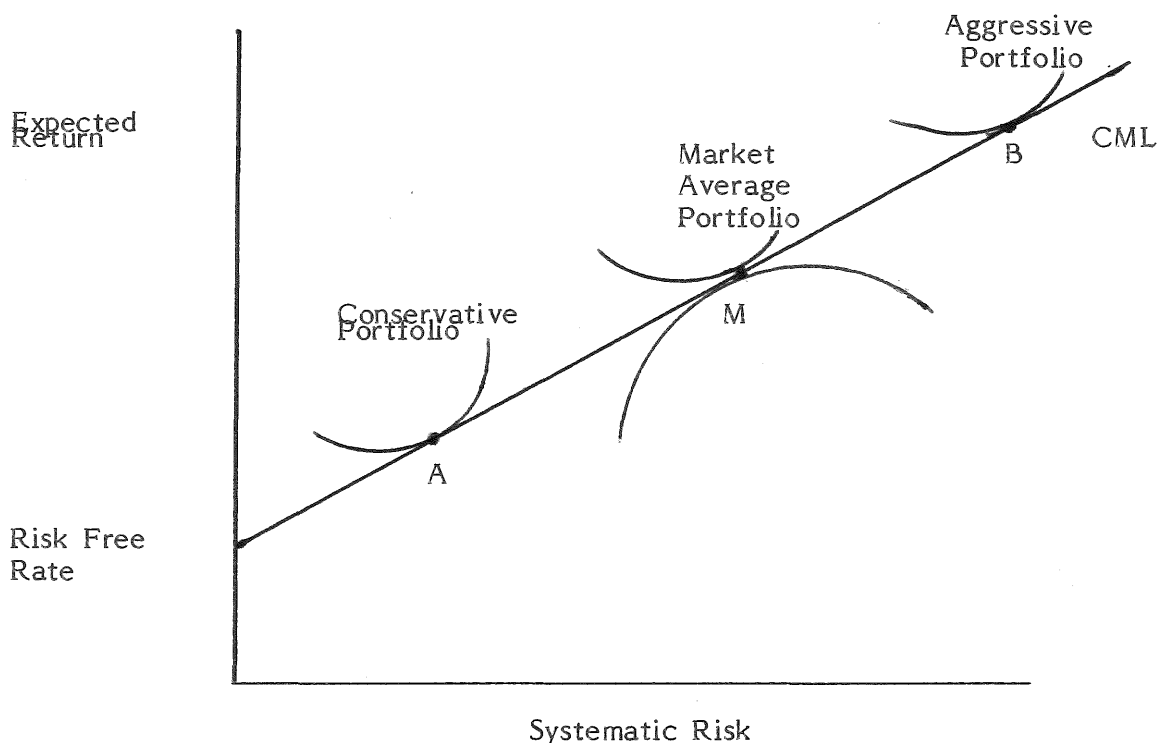


Figure 2. Utility and CML Curves Used to Determine Optimal Portfolios

The optimal portfolio is indicated by the point at which the highest utility curve that the investor can reach is tangent to the CML. The first portfolio containing risk-free securities and market portfolio securities is represented by point A. This is a conservative portfolio. A conservative IRA portfolio would consist of government retirement bonds, CDs, and retirement annuities. These are risk-free or low-risk securities.

The market average portfolio indicated by point M is one in which the funds are invested in market securities. The investor is willing to let the investments rise and fall with the security's market prices. An IRA portfolio consisting of stocks, bonds, zero coupon bonds, mutual funds, and CDs would probably fit this curve. They involve more risk and fluctuate with the securities market.

The aggressive portfolio indicated by point B is utilized by an investor who wants a higher rate of return and is willing to take the higher degree of risk necessary to obtain it. An IRA portfolio that is aggressive would utilize calls and limited partnerships.

Portfolio and Capital Market Line theory provides the investor a rational process in selecting investment instruments. The investor must know his aversion to risk. A rule of thumb for IRAs is that a young person can afford an aggressive portfolio and switch to more conservative portfolios as retirement nears. By using utility theory, the investor can determine the degree of risk and return that will satisfy his needs and provide the greatest amount of satisfaction. The investor can construct a Capital Market Line for the instruments he is considering and the tangent of his utility curve and the CML will be his optimum portfolio.

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