

International Financial Management Course

Investing Strategy CH1: What Is Investing?

Investing Strategy CH2: The Concept Of Compounding

Investing Strategy CH3: Knowing Yourself

Investing Strategy CH4: How Technology Has Changed Investing

Investing Strategy CH5: Types Of Investments

Investing Strategy CH6: Portfolios And Diversification

Investing Strategy CH7: Conclusion

Dr. Chao Yuang Shiang

Investing Strategy CH1:: What Is Investing?

<http://www.investopedia.com/university/beginner/beginner1.asp#ixzz4wctPkitT>

Investing: The act of committing money or capital to an endeavor with the expectation of obtaining an additional income or profit.

Legendary investor Warren Buffett defines investing as “... the process of laying out money now to receive more money in the future.” The goal of investing is to put your money to work in one or more types of investment vehicles in the hopes of growing your money over time.

What is investing?

Investing is really about “working smarter and not harder.” Most of us work hard at our jobs, whether for a company or our own business. We often work long hours, which requires sacrifice and adds stress. Taking some of our hard-earned money and investing for our future needs is a way to make the most of what we earn.

Investing is also about making priorities for your money. Spending is easy and gives instant gratification—whether the splurge is on a new outfit, a vacation to some exotic spot or dinner in a fancy restaurant. All of these are wonderful and make life more enjoyable. But investing requires prioritizing our financial futures over our present desires.

Investing is a way to set aside money while you are busy with life and have that money work for you so that you can fully reap the rewards of your labor in the future. Investing is a means to a happier ending.

Investing Vehicles

There are many different ways you can go about investing, including putting money into [stocks](#), [bonds](#), [mutual funds](#), ETFs, real estate (and other alternative investment vehicles), or even starting your own business.

Every investment vehicle has its positives and negatives, which we'll discuss in a later section of this tutorial. Understanding how different types of investment vehicles work is critical to your success. For example, what does a mutual fund invest in? Who is managing the fund? What are the fees and expenses? Are

there any costs or penalties for accessing your money? These are all questions that should be answered before making an investment. While it is true there are no guarantees of making money, some work on your part can increase your odds of being a successful investor. Analysis, research and even just reading up on investing can all help.

Now that you have a general idea of what investing is and why you should do it, it's time to learn about how investing lets you take advantage of one of the miracles of mathematics: [compound interest](#).

Investing Strategy CH2: The Concept of Compounding

Compounding is the process of generating more return on an asset's reinvested earnings. To work, it requires two things: the reinvestment of earnings and time. Compound interest can help your initial investment grow exponentially. For younger investors, it is the greatest investing tool possible, and the #1 argument for starting as early as possible. Below we give a couple of examples of compound interest.

Example #1: Apple stock

An investment of \$10,000 in the stock of Apple (AAPL) that was made on December 31, 1980 would have grown to \$2,709,248 as of the market's close on February 28, 2017 according to Morningstar's Advisor Workstation tool. This translates to an annual return of 16.75%, including the reinvestment of all dividends from the stock.

Apple started paying dividends in 2012. Even so, if those dividends hadn't been reinvested the ending balance of this investment would have been \$2,247,949 or 83% of the amount that you would have had by reinvesting.

While Apple is one of the most successful companies, and their stock is a winner year-in and year-out, compound interest also works for index funds, which are managed to replicate the performance of a major market index such as the S&P 500.

Example #2: Vanguard 500 Index

Another example of the benefits of compounding is the popular Vanguard 500 Index fund (VFINX) held for the 20 years ending February 28, 2017.

A \$10,000 investment into the fund made on February 28, 1997 would have grown to a value of \$42,650 at the end of the 20-year period. This assumes the reinvestment of all fund distributions for dividends, interest or capital gains back into the fund.

Without reinvesting the distributions, the value of the initial \$10,000 investment would have grown to \$29,548 or 69% of the amount with reinvestment.

In this and the Apple example, current year taxes would have been due on any fund distributions or stock dividends if the investment was held in a taxable account, but for most investors, these earnings can grow tax-deferred in a retirement account such as a employer-sponsored 401(k).

Starting Early

Another way to look at the power of compounding is to compare how much less initial investment you need if you start early to reach the same goal.

A 25-year-old who wishes to **accumulate \$1 million by age 60** would need to invest \$880.21 each month assuming a constant return of 5%.

A 35-year-old wishing to accumulate \$1 million by age 60 would need to invest \$1,679.23 each month using the same assumptions.

A 45-year-old would need to invest \$3,741.27 each month to accumulate the same \$1 million by age 60. That's almost 4 times the amount that the 25-year old needs. Starting early is especially helpful when saving for retirement, when putting aside a little bit early in your career can reap great benefits.

Read more: [Investing 101: The Concept of Compounding](#)

<http://www.investopedia.com/university/beginner/beginner2.asp#ixzz4wcu6uj1j>

Investing Strategy CH3: Knowing Yourself

No one investing strategy or approach fits all. Every investor has different reasons for investing, different goals, different time horizons and varying degrees of comfort with investing. It's important to define and articulate your own parameters.

Goals

What are your objectives for the money that you will be investing? Is safety of principal with some level of return sufficient? Are you trying to accumulate money for a longer-term goal such as a college education for your kids or perhaps a comfortable retirement for yourself?

You might even have different investments for different goals. The point is that before you decide to invest any money it is important to understand why you are investing and the end result that you are seeking.

Goals and objectives should not be created in a vacuum. You also need to know your risk tolerance and time horizon as part of the goal-setting process.

Risk tolerance

Risk can mean a lot of things, but in the context of investing it means the risk of losing money. In other words, the risk that the amount of money invested will decrease in value, possibly to zero.

All investing involves risk in one way or another. Stocks can and often do go down in value over certain periods of time—in 2008, the S&P 500 dropped by 37%. While this decline in the stock market was one of the worst in history, less severe market corrections are not uncommon.

How much of a drop in value for your investments can you stomach? Your risk tolerance will likely be in part a function of when you need the money—known as your time horizon—which is usually a function of age. Someone in their 20s or 30s who is saving for retirement shouldn't give too much thought to fluctuations in the value—known as the volatility—of their investments.

In contrast, someone in their 60s likely will and should have a lower risk tolerance if for no other reason than they don't have the time to fully recoup a major loss in the value of their investments.

Your investments should be aligned with the time horizon in which you will need the money, especially if some or all of your investments are targeted for a specific goal.

For example, if you are young parents investing for your newborn's college education, your long time horizon allows you to take a bit more risk in the initial years. When your kid gets to high school, you might adjust the investment mix to help ensure that you don't suffer any major losses in the years leading up to the start of college.

Trading Frequency

How long will you stay in one particular investment? Legendary investor Warren Buffett rarely sells a stock he owns and doesn't get rattled by market fluctuations. This is generally known as a "buy-and-hold" strategy.

At the other extreme are traders who buy and sell stocks on a daily basis. This is fine for professionals, but rarely a good idea for the average investor.

Nobody is advocating that you need to hold an investment forever, and in fact things change and you should be reviewing your individual holdings periodically to ensure they are still appropriate for your situation.

Knowledge and comfort

Some investment vehicles require sophisticated knowledge and monitoring, while others are more set-and-forget. Your investment decisions should be based on your comfort level and your willingness to devote time to researching your choices.

An easy route is to choose a variety of low-cost index funds that cover various parts of the markets such as bonds, domestic stocks and foreign stocks. Another alternative to consider are professionally managed vehicles such as target date mutual funds, where the manager allocates portfolio over time. These funds are

designed to gradually reduce their exposure to equities as the target date of the fund gets closer

Investors with more knowledge and experience might consider actively managed mutual funds, individual stocks, real estate or other alternative investments.

Understand what you don't know

It is important that investors understand what they do and don't know. They should never be talked into investing in something that they don't understand or are uncomfortable with.

Read more:

[Knowing Yourself](#)

<http://www.investopedia.com/university/beginner/beginner3.asp#ixzz4wcvLxw>
IV

Investing Strategy CH4:

How Technology Has Changed Investing

Technology has had a profound impact on most every aspect of our lives. Investing is certainly no exception. In fact, technology has democratized investing in the last several decades and also exerted significant downward pressure on fees.

Buying and selling securities

Years ago, if you wanted to make a trade you would need to call your stockbroker and place an order. The commission rates to buy or sell stocks was pretty much fixed and high due to a lack of information and alternatives. Investors wouldn't know how their investments were faring until they received their account statements in the mail.

Today investors can search the web to see which brokerage firm has the lowest transaction fees and buy and sell securities themselves at the click of a mouse. Fidelity started a new price war in the cost of trading stocks and ETFs by lowering their transaction costs to \$4.95 per trade. Schwab quickly lowered their price to match Fidelity, while TD Ameritrade also reduced their trading commissions.

Many brokerage firms and other custodians offer apps to allow investors to track their investments using their phones. Alerts can be established on various holdings and so much more.

Technology has also armed both individual investors and investment advisors with the tools to perform cutting edge research and analysis on investments and to help manage portfolios.

Robo advisors

One of the biggest innovations of the past ten years has been the advent of the robo advisor. Firms like Betterment, Wealthfront and others have used technology to allow them to construct and manage client portfolios using

algorithms. Most robo advisors invest in low cost ETFs. Taking the human element out of the investing equation can drastically lower the cost of investing.

Robo advisors have been adding additional services as well. Both Betterment and WealthFront offer tax loss harvesting for taxable accounts. Betterment offers a 401(k) product and has a version that partners with financial advisors as well.

Bigger players like Schwab, Vanguard and Fidelity have taken notice and have started their own robo services, sometimes augmented with human advisor. This technology promises to continue to revolutionize the investing landscape in the years to come.

Read more: [Investing 101: How Technology Has Changed Investing | Investopedia](http://www.investopedia.com/university/beginner/how-technology-has-changed-investing.asp#ixzz4wcxBzvNR) <http://www.investopedia.com/university/beginner/how-technology-has-changed-investing.asp#ixzz4wcxBzvNR>

Investing Strategy CH5: Types of Investments

There are many types of investments and investing styles to choose from. Mutual funds, ETFs, individual stocks and bonds, closed-end mutual funds, real estate, various alternative investments and owning all or part of a business are just a few examples.

Stocks

Buying **shares of stock** gives the buyer the opportunity to participate in the company's success via increases in the stock's price and **dividends** that the company might declare. Shareholders have a claim on the company's assets in the event of liquidation, but do not own the assets.

Holders of common stock have voting rights at shareholders' meetings and the right to receive dividends if they are declared. Holders of preferred stock don't have voting rights, but do receive preference in terms of the payment of any dividends over common shareholders. They also have a higher claim on company assets than holders of common stock.

Bonds

Bonds are debt instruments whereby an investor effectively is loaning money to a company or agency (the issuer) in exchange for periodic interest payments plus the return of the bond's face amount when the bond matures. Bonds are issued by corporations, the federal government plus many states, municipalities and governmental agencies.

A typical corporate bond might have a face value of \$1,000 and pay interest semi-annually. Interest on these bonds are fully taxable, but interest on municipal bonds is exempt from federal taxes and may be exempt from state taxes for residents of the issuing state. Interest on **Treasuries are taxed** at the federal level only.

Bonds can be purchased as new offerings or on the secondary market, just like stocks. A bond's value can rise and fall based on a number of factors, the most important being the direction of interest rates. Bond prices move inversely with the direction of interest rates.

Mutual funds

A **mutual fund** is a pooled investment vehicle managed by an investment manager that allows investors to have their money invested in stocks, bonds or other investment vehicles as stated in the fund's prospectus.

Mutual funds are valued at the end of trading day and any transactions to buy or sell shares are executed after the market close as well.

Mutual funds can passively track stock or bond market indexes such as the S&P 500, the Barclay's Aggregate Bond Index and many others. Other mutual funds are actively managed where the manager actively selects the stocks, bonds or other investments held by the fund. Actively managed mutual funds are generally more costly to own. A fund's underlying expenses serve to reduce the net investment returns to the mutual fund shareholders.

Mutual funds can make distributions in the form of dividends, interest and capital gains. These distributions will be taxable if held in a non-retirement account. Selling a mutual fund can result in a gain or loss on the investment, just as with individual stocks or bonds.

Mutual funds allow small investors to instantly buy diversified exposure to a number of investment holdings within the fund's investment objective. For instance, a foreign stock mutual might hold 50 or 100 or more different foreign stocks in the portfolio. An initial investment as low as \$1,000 (or less in some cases) might allow an investor to own all the underlying holdings of the fund. Mutual funds are a great way for investors large and small to achieve a level of instant diversification.

ETFs

ETFs or exchange-traded funds are like mutual funds in many respects, but are traded on the stock exchange during the trading day just like shares of stock. Unlike mutual funds which are valued at the end of each trading day, ETFs are valued constantly while the markets are open.

Many ETFs track passive market indexes like the S&P 500, the Barclay's Aggregate Bond Index, and the Russell 2000 index of small cap stocks and many others.

In recent years, actively managed ETFs have come into being, as have so-called smart beta ETFs which create indexes based on “factors” such as quality, low volatility and momentum.

Alternative investments

Beyond stocks, bonds, mutual funds and ETFs, there are many other ways to invest. We will discuss a few of these here.

Real estate investments can be made by buying a commercial or residential property directly. Real estate investment trusts (REITs) pool investor’s money and purchase properties. REITS are traded like stocks. There are mutual funds and ETFs that invest in REITs as well.

Hedge funds and private equity also fall into the category of alternative investments, although they are only open to those who meet the income and net worth requirements of being an accredited investor. Hedge funds may invest almost anywhere and may hold up better than conventional investment vehicles in turbulent markets.

Private equity allows companies to raise capital without going public. There are also private real estate funds that offer shares to investors in a pool of properties. Often alternatives have restrictions in terms of how often investors can have access to their money.

In recent years, alternative strategies have been introduced in mutual fund and ETF formats, allowing for lower minimum investments and great liquidity for investors. These vehicles are known as liquid alternatives.

Read more: [Investing 101: Types of Investments](#)

<http://www.investopedia.com/university/beginner/beginner5.asp#ixzz4wcxvITSH>

Investing Strategy CH6: Portfolios and Diversification

An investment portfolio is a collection of investments. Ideally these investments were chosen to work in harmony to help the investor achieve their goals and also to provide a certain degree of diversification so that you are not putting all your eggs in one basket.

An investment portfolio is a combination of asset classes such as stocks, bonds and cash. The portfolio might be further divided into sub-asset classes like large cap stocks, mid-cap stocks, small cap stocks and international stocks. On the bond side you might have some short-term bonds, intermediate-term, tax-exempt municipal bonds and foreign bonds.

Each asset class and sub-asset class can be further sub-divided.

Investment vehicles used might include mutual funds, ETFs, individual stocks and bonds and others.

You might view all of your investment holdings across various types of accounts as a single overall portfolio, or you might segment certain portions of your holdings as separate portfolios. For example your account for college savings might be one portfolio and the money earmarked for retirement might be managed as another.

Ideally a portfolio consists of a variety of investments, not all of which are highly correlated to each other.

Let's look at a simple example using three Vanguard index mutual funds:

Vanguard Total Stock Market Index (ticker VTSMX) – A market cap weighted fund replicating the total U.S. stock market.

Vanguard Total Intl Stock Index (VGTSX) – A market cap weighted index fund covering non-U.S. developed and emerging market stocks.

Vanguard Total Bond Market Index (VBMFX) – A market cap weighted fund largely replicating the U.S bond market.

Over the five years ending February 28, 2017, these funds were correlated to each other as follows:

	Vanguard Total Stock	Vanguard Total International Stock Market	Vanguard Total Bond Market
Vanguard Total Stock		0.79	-0.12
Vanguard Total International Stock Market	0.79		0.08
Vanguard Total Bond Market	-0.12	0.08	

Source: Morningstar

A correlation of 1.00 between two investment vehicles mean that their performance is perfectly tied to each other, while a correlation of zero means there is no relationship between the two investment vehicles being compared. At 0.79, the Vanguard Total Stock Market fund and the Vanguard Total International Stock Market fund are highly, but not perfectly, correlated.

But a correlation of 0.08 between the Vanguard Total Bond Market Fund and the Vanguard Total International Stock Market fund means that there is very little relationship in the performance of these two funds.

The correlation of -0.12 between the Vanguard Total Bond Market Fund and the Vanguard Total Stock Market Fund means that there is actually an inverse relationship.

Here is a look at the risk and return of three portfolios using combinations of these three funds. These results are via Morningstar Advisor Workstation's hypothetical portfolio tool.

The simulation assumes:

- Investments were purchased on 4/29/1996 with results through 2/28/2017.
- There are no taxes on the portfolio, as if held in a tax-deferred account such as an IRA.
- The portfolio was rebalanced back to the original allocation semi-annually.
- An initial investment of \$50,000.

Conservative 40/60

- Vanguard Total Stock Market 30%
- Vanguard Total International Stock Market 10%
- Vanguard Total Bond Market 60%

Moderate 60/40

- Vanguard Total Stock Market 45%
- Vanguard Total International Stock Market 15%
- Vanguard Total Bond Market 40%

Aggressive 80/20

- Vanguard Total Stock Market 60%
- Vanguard Total International Stock Market 20%
- Vanguard Total Bond Market 20%

Here are the comparative results for these model portfolios:

	Growth of \$50,000	Cumulative % return	Loss in Value 2008 (%)	Loss in Value 2002 (%)	% of variability in return compared to S&P 500 (last 10 years)	% of modeled return compared to S&P 500 (last 10 years)
Conservative 40/60	\$193,435	286.87%	-14.03%	-2.26%	44.25%	72.80%
Moderate 60/40	\$211,527	323.05%	-22.78%	-7.81	63.86%	78.19%
Aggressive 80/20	\$222,267	344.53%	-31.02	-13.56	84.84%	80.81%

Source: Morningstar Advisor Workstation

As you would, expect, the conservative portfolio had the smallest loss in 2008 of 14.03%. This compares to a loss for the S&P 500 Index of 37.00% that year.

As you would also expect, this portfolio had the smallest rate of growth over the time period with an ending value of \$193,435.

The aggressive portfolio had the largest decline of the three in 2008 with a loss of 31.02% for the year. This portfolio had the largest increase in value over the period with an ending value of \$222,267.

The point is that combining different investments in various allocations will have an impact on both the growth of your portfolio and the downside risk over time.

Read more: [Investing 101: Portfolios and Diversification](#)

<http://www.investopedia.com/university/beginner/beginner6.asp#ixzz4wcz3BtRk>

Through the various sections of this tutorial, we've introduced and discussed a number of investing concepts and investing vehicles. Among them are:

- Stocks
- Bonds
- Mutual Funds
- Passive index mutual funds and ETFs
- Active management
- ETFs
- Real estate and alternative investing
- The importance of diversification
- Compounding and the benefit of starting early
- The concept of building a diversified portfolio
- Correlation between different investments
- Investing expenses
- The impact of technology on investing

- **Robo advisors**

Moreover, we stressed the idea that investing is not one size fits all. Different strategies work for different investors and different situations. Additionally, an investor might employ more than one strategy, or choose a variety of investment vehicles depending upon their goals.

Have a plan and a strategy

Just like going on trip in your car, it is important that investors have a plan and a destination in mind before investing their money. Your goals—whether planning for retirement or buying a home—dictate your time horizon, which dictates your tolerance for risk. Additionally, you want to make sure that you diversify your investments so that some do well when the rest of your portfolio might not. This approach allows an investor to construct a portfolio that is in line with their risk tolerance and that balances potential return with some downside risk protection.

Hopefully our tutorial has provided some insights and good ideas as you invest for your future.

Your journey is just beginning, however. Your challenge is to keep learning and stay informed.

Read more: [Investing 101:](#)

Conclusion <http://www.investopedia.com/university/beginner/beginner7.asp#ixzz4wd0nmgKT>