

Companion website includes quizzes,
webcasts, and supplemental reading

THE
Forbes[®]



CFA Institute

INVESTMENT COURSE

[TIMELESS PRINCIPLES
for BUILDING WEALTH]

VAHAN JANJIGIAN, CFA
STEPHEN M. HORAN, CFA
CHARLES TRZCINKA

THE
Forbes[®]



CFA Institute

**INVESTMENT
COURSE**

THE
Forbes[®]



CFA Institute

**INVESTMENT
COURSE**

TIMELESS PRINCIPLES
for BUILDING WEALTH

**VAHAN JANJIGIAN, CFA
STEPHEN M. HORAN, CFA
CHARLES TRZCINKA**

WILEY

Copyright © 2011 by Forbes, LLC. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

FORBES is a registered trademark of Forbes LLC. Its use is pursuant to a license agreement.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the Web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books. For more information about Wiley products, visit our web site at www.wiley.com.

Library of Congress Cataloging-in-Publication Data:

Janjigian, Vahan.

The Forbes/CFA Institute investment course : timeless principles for building wealth / Vahan Janjigian, Stephen M. Horan, Charles Trzcinka.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-470-91965-1 (cloth); ISBN 978-0-470-94922-1 (ebk);

ISBN 978-0-470-94923-8 (ebk); ISBN 978-0-470-94924-5 (ebk);

I. Investments. 2. Finance, Personal. I. Horan, Stephen Michael.

II. Trzcinka, Charles A. III. Title.

HG4521.J287 2011

332.024'01—dc22

2010032750

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

*To our beautiful wives,
Nooné, Connie, and Jaden,*

*and our happy children,
Lori, Lucine, Lily, and Cayse*

Contents

Preface	xiii
Acknowledgments	xvii
Chapter 1 Building Capital	1
Role of the Stock Market in Building Wealth	2
Determining Your Financial Position	3
Your Financial Inventory Guide	4
Investment Margin	11
Defining Your Goals	12
Return Requirements	13
Risk Profile	14
Life Cycle and the Risk/Return Mix	15
Other Considerations	16
Asset Classes	17
Asset Allocation	20
Active versus Passive Investing	22
Diversification	23
Dollar Cost Averaging	24
Chapter Takeaways	31
Chapter 2 How Securities Markets Function	33
Role of Securities Markets	33
The Securities Exchanges	36
Over-the-Counter Markets	37

NASDAQ	38	
Electronic Communication Networks	39	
Stock Quotes	39	
The Third Market	40	
Other Markets	40	
How the New York Stock Exchange Operates	41	
How the NASDAQ Operates	43	
From SOES to SuperMontage	44	
OTC Bulletin Board and Pink Sheets	45	
How the ECNs Operate	45	
Crossing Systems	46	
Electronic versus Floor Trading	46	
Preferencing	48	
Internalization	49	
Chapter Takeaways	49	
Chapter 3	Selecting a Broker and Trading	51
	Structure of a Brokerage Firm	52
	Activities of a Brokerage Firm	53
	Services Offered by All Brokers	54
	Full-Service versus Discount Brokers	55
	Online Brokers	58
	Choosing a Brokerage Firm	58
	Commissions	60
	Direct Purchase of Securities	62
	Placing Orders	63
	Odd-Lot Trading	66
	Margin	67
	Transaction Example	68
	Settlement	69
	Stock Symbols and the Ticker Tape	70
	Questions to Ask Your Broker	71
	Chapter Takeaways	73

Chapter 4	Tax-Favored Investment Strategies	75
	Capital Gains and Dividends	75
	Traditional IRAs	77
	Roth IRAs	79
	401(k) Plans	80
	Education Savings Accounts and 529 Plans	82
	Other Pension Plans	83
	Mutual Funds and Taxes	85
	Using Tax-Advantaged Accounts	86
	Chapter Takeaways	87
Chapter 5	Reading Financial Statements	89
	Income Statements	91
	Balance Sheet	95
	Statement of Cash Flows	99
	Making Sense of the Numbers	102
	Profitability Ratios	102
	Asset Utilization Ratios	105
	Leverage Ratios	108
	Revisiting ROE	110
	Liquidity Ratios	110
	Market Multiples	112
	Look Beyond the Numbers	114
	Read the Footnotes	115
	Can You Trust Financial Statements?	115
	Chapter Takeaways	119
Chapter 6	Sources for Investment Information	121
	Where to Obtain Information	123
	Securities and Exchange Commission	124
	Earnings Releases and Regulation Fair Disclosure	125
	Investment Brokers and Dealers	127
	Can You Trust Brokerage House Reports?	128

	Investment Newsletters and Other Publications	129
	Corporate Reports	130
	Reading the Annual Report	130
	Government Reports	131
	Chapter Takeaways	131
Chapter 7	Common Stocks and Economic Indicators	133
	Another Look at the Balance Sheet	133
	Why Common Shares Have Value	136
	Macroeconomic Factors	136
	Industry-Specific Factors	140
	Other Barometers	141
	Evaluating Data	141
	Chapter Takeaways	143
Chapter 8	Fundamental Analysis	145
	Investing versus Trading	145
	Passive Investing	146
	Active Investing	147
	Business Focus	153
	Industry Outlook	154
	Company Status	155
	Major Trends	157
	Earnings History and Outlook	158
	Dividends	159
	Price-Earnings and Price-Book Ratios Revisited	161
	Discounted Cash Flow	163
	Evaluating Management	164
	Some Final Thoughts on Fundamental Analysis	165
	Chapter Takeaways	165
Chapter 9	Technical Analysis	167
	The Value of Charts	169
	Reading Charts	171
	Dow Theory	171

Head and Shoulders	175
Support and Resistance Levels	176
Trading Ranges	177
Breakaway Gaps	178
Importance of Volume	179
Other Technical Indicators	182
Time to Grow Bullish	184
Chapter Takeaways	187
Chapter 10 Fixed-Income Securities	189
Bonds	189
Understanding Bonds	190
Understanding Bond Prices	191
Bond Prices and Interest Rates	192
Call Feature	194
Credit Quality of Bonds	194
Other Issues Concerning Bonds	196
How to Buy Bonds	199
Money Market Securities	200
Preferred Stock	201
Understanding Preferred Stock	202
Tax Treatment	203
Trust Preferred Securities	204
Final Thoughts on Bonds and Preferred Stocks	204
Chapter Takeaways	205
Chapter 11 Derivatives	207
Defining Derivative Instruments	207
Futures	209
Spot Asset	209
The Futures Market	210
Delivery	211
Hedging	212
Stock Index Futures	212
Single-Stock Futures	214

xii Contents

Options	215
Definition of Options	216
Options Markets	216
Important Terms to Know	216
Listed Options	217
What an Option Is Worth	219
Commissions	221
To Sell or to Exercise	222
Some Popular Option Strategies	222
A Warning about Naked Option Writing	225
Chapter Takeaways	226
Chapter 12 Mutual Funds	229
An Investment Company	229
Closed-End or Open-End	230
A Short History of the Mutual Fund Industry	232
Categories of Mutual Funds	232
Advantages of Mutual Funds	237
Disadvantages of Mutual Funds	238
Mutual Fund Expenses	239
How to Choose a Fund	242
Some Final Thoughts about Mutual Funds	243
Hedge Funds	243
Chapter Takeaways	247
Chapter 13 Rules of Thumb and Key Phrases	249
Final Comments	254
Suggested Readings	255
About the Authors	257
Index	259

Preface

Bertie Charles “B.C.” Forbes was born in Scotland in 1880. At a young age, he developed an interest in journalism and business. Eventually he made his way to South Africa and then to the United States. In 1917, he founded *Forbes* magazine, the first publication devoted solely to reporting on business. In his first editorial he wrote, “Business was originated to produce happiness, not to pile up millions.”

His son, Malcolm Stevenson Forbes, served as Editor-in-Chief from 1954 to 1990. Prior to taking over the reins, Malcolm got the bright idea of creating the *Forbes Stock Market Course*, which was first published in 1948. World War II had recently ended and things were looking up, but Malcolm was concerned that many Americans simply did not understand how the markets worked or how to go about beginning an investment program. He wanted to help them get started on the path toward building wealth.

Just about the same time Malcolm Forbes was putting together the first edition of the *Forbes Stock Market Course*, Benjamin Graham, today known by many as the father of fundamental investing, outlined the merits of a rating system for financial analysts, saying, “The analyst who qualifies for the rating . . . is likely to develop a more professional attitude toward his work and a keener interest in maintaining and advancing the standards of his calling.”* The organization now known as CFA Institute, a global association of almost 100,000 investment professionals, was born in 1947 from that initial call to action.

Each year, CFA Institute administers a series of exams to candidates worldwide who are trying to earn the prestigious Chartered

* Benjamin Graham, “Should Security Analysts Have a Professional Rating? The Affirmative Case,” *Analysts Journal* 1, no. 1 (1945): 37–41.

Financial Analyst (CFA[®]) designation. The CFA charter is respected as the gold standard of professional credentials within the global investment community. To earn this credential, candidates must pass a series of three exams, have at least four years of relevant work experience, and agree to abide by the industry's most stringent code of ethics and standards of practice. They must master a Candidate Body of Knowledge, which includes ethical and professional standards, quantitative methods, economics, financial reporting and analysis, alternative investments, corporate finance, equity investments, fixed income, derivatives, portfolio management, and wealth planning.

Now Forbes and CFA Institute have teamed up to bring you *The Forbes/CFA Institute Investment Course*. This collaboration between two of the world's leading investment brands is a natural fit. Since 1917, Forbes has promoted a commonsense approach to investing. Retail investors often turn to Forbes's publications for investment ideas and for information about the latest investment trends. CFA Institute has long promoted the highest standards of ethics, education, and professional excellence. Investment professionals worldwide value the information they find in the CFA Institute's journals and briefs. Furthermore, the co-authors of *The Forbes/CFA Institute Investment Course* have worked together over the years on previous drafts of what used to be called the *Forbes Stock Market Course*. Two of the authors are longtime CFA charter holders. One is chief investment officer at Greenwich Wealth Management and editor of the *Forbes Special Situation Survey* investment newsletter; the other is the head of Professional Education Content at CFA Institute. The third author is the James and Virginia Cozad Professor of Finance at Indiana University School of Business. All three hold PhD degrees in finance, have years of experience teaching undergraduate and graduate courses at leading universities, and have published their research in respected academic journals.

We have created a special web site at www.cfainstitute.org/forbes as a supplement to this text. The web site includes quizzes and additional materials. Throughout the book, you will find references to information available on this web site. While we have written the book to stand on its own, we think many of you will want to learn more about specific topics. We believe the information provided on this web site will satisfy your curiosity.

In recent years, investors have been rocked by scandal and financial crises. Some simply had their money stolen by crooks such as Bernie Madoff. Others saw their life savings suddenly dwindle with the bursting of the housing bubble. Whether you rely on professional advice or follow a do-it-yourself approach, managing your wealth is ultimately your responsibility alone. To make the right decisions, you must have a certain amount of knowledge—if only so you can ask the right questions. *The Forbes/CFA Institute Investment Course* provides much of the information you will need to take control of your investments. This educational tool will answer many of the questions you might already have, and give you a deeper understanding of stocks, bonds, mutual funds, and a host of other investment vehicles. We believe *The Forbes/CFA Institute Investment Course* is an indispensable resource for both experienced and novice investors. We hope you will agree.

Acknowledgments

We want to acknowledge the contributions of several individuals who were instrumental in helping to make this project a reality. The original *Forbes Stock Market Course* got its start in 1948 under the leadership of Malcolm Forbes. We are grateful to the entire Forbes family—especially to Wallace Forbes—for their encouragement during the process of bringing the publication into its current form. We offer special thanks to our research assistants, Ethan Sufian and Kristen Santerian, for their careful fact-checking skills, and to Taesik Yoon and Samuel Ro for their assistance in proofreading this and previous drafts. Special thanks also to Thomas Collimore, CFA, for developing chapter summaries and supporting web site materials, as well as to Frances Melville and William Ortel for their assistance in these efforts. Finally, we thank Nina LaFrance, Laura Walsh, and Judy Howarth for their guidance throughout the publication process.

CHAPTER 1

Building Capital

Congratulations on your decision to learn how to build wealth. By purchasing *The Forbes/CFA Institute Investment Course*, you have taken the first step toward learning about stocks and other securities. This book focuses primarily on stocks because their returns have historically exceeded those on most other assets. As a result, stocks have helped many people with modest sums of money build sizable portfolios over time. Of course, there is no guarantee that stocks will always rise over the long term. In fact, equity investors, on average, would have lost a considerable amount of money for the 10 years ending March 9, 2009, when most market averages sank to multiyear lows. Nonetheless, stocks can be among the best long-term investments. Long-term equity portfolios have been used to fund children's educations, retirement plans, and other major expenditures in life. This is because the evidence shows that over long investment horizons stocks have outperformed cash, bonds, and commodities throughout the economic history of the United States.

Using the stock market to achieve financial success, however, requires an understanding of the investment process, the factors that affect the stock market, and, perhaps most important, the risks of the stock market. This book gives you information used by professionals and small investors to make important financial decisions.

Whether you are new to the stock market or have been investing for years, we believe you will find the information in *The Forbes/CFA Institute Investment Course* easy to understand and retain. This

2 The Forbes/CFA Institute Investment Course

book provides the building blocks for your investment program and serves as an excellent resource to which you can refer often.

Many previously wealthy investors, and others who have had to delay retirement, will tell you that it is critical to understand the fundamental building blocks of investing so that you can prudently navigate the complex and ever-changing waters of the stock market. The information in this book, however, is not a substitute for an appropriately trained and experienced professional financial adviser or wealth manager who is skilled in applying the intricacies of portfolio management, asset allocation, taxes, and more to your unique situation. Be careful not to develop a false sense of confidence. Even after you finish reading this book, you may want to seek counsel from a credentialed adviser. You will certainly have a much richer conversation!

Role of the Stock Market in Building Wealth

Wealth can be increased in many ways. For example, you could invest in a particular *asset class* such as stocks, bonds, real estate, or commodities. An asset class is a group of securities that share some common risk and return characteristics. For example, stocks are typically more risky than bonds, but they tend to yield greater returns over time. As a result, some economists would argue that for very long investment horizons (i.e., 20 years or more), stocks are actually *less* risky than bonds or even cash.

Asset classes vary from one another, but securities can also vary substantially within an asset class. For example, some stocks, such as utility companies, tend to pay generous dividends and attract investors who plan to hold the stocks for long periods of time. Investors are willing to wait for these stocks to grow in value. In the meantime they receive a nice income stream in the form of dividends. This kind of investor is following a *buy-and-hold* strategy that produces *current income*.

Other stocks do not pay dividends, and their share prices tend to fluctuate more. These stocks are often used to build wealth in a more dynamic way. Investors who purchase such stocks hope to see the prices rise substantially over time. If a stock does appreciate in price, the investor can sell it for a *capital gain*. This method of building wealth requires more attention and knowledge but can also be more financially rewarding.

Publicly traded stocks are usually excellent vehicles for building wealth. Most are *liquid*, which means you can easily find a buyer or seller. Determining the price of an actively traded stock is usually easy because so many buyers and sellers exist and information about the market is widely available. Other forms of investments, such as real estate and collectibles, are not as liquid. Under normal circumstances, buying or selling a stock takes only a few minutes, sometimes just a few seconds. Initiating the transaction is as simple as phoning a broker or clicking your computer's mouse.

Probably the most compelling reason to buy stocks is their extraordinary profit potential. Stocks can frequently achieve gains of 10 percent or more in a year. In a strong up market (referred to as a *bull market*), gains can run much greater. However, investors can incur losses in a down market (commonly called a *bear market*). Sometimes those losses can be substantial. Yet astute investors can profit even in a bear market. The behavior of stocks in recent years has vividly illustrated both bull and bear markets.

One of the most important features of building wealth is that it is a cumulative process. Profits can be reinvested to produce more profits, so that a substantial amount of wealth can be accumulated over time. The process of earning profits on profits is called *compounding* and is explained later in this book. When an investor follows a disciplined investment plan, the accumulation of wealth can be much greater than in more conservative investments, such as savings accounts, certificates of deposit, and whole-life insurance policies.

Investing in stocks (and most other securities) often involves significant tax consequences. You may want to check with your accountant or tax adviser before committing a large amount of capital to stocks. Federal and state tax rules are ever-changing and can affect the way you should invest. If taxes are prohibitive, they may make stocks an unattractive choice. A good tax adviser should be able to clearly explain the best choices for you. As a general rule, however, you should not allow tax concerns to keep you from making sound long-term investment choices.

Determining Your Financial Position

The first step in creating a financial plan is to assess your current financial position. Credible financial advisers will walk you through a similar process before making an investment recommendation.

4 The Forbes/CFA Institute Investment Course

Like any business, you can assess your financial position by using a personal *balance sheet* and *income statement*. Your personal financial statements will help you determine the number and value of your assets, how your assets are invested, what asset classes you have exposure to, how much debt you have, and how much you might be able to invest in the stock market.

Your personal balance sheet represents an inventory of all your *assets* and *liabilities* at a particular point in time. Assets are anything with market value, such as a bank account, stock, car, or home. Liabilities represent your debts or obligations to others. Hopefully, your assets exceed your liabilities. If not, you are in a precarious financial position. The difference between your assets and liabilities is your *net worth*.

Let's begin with your assets. They can be categorized into liquid financial assets (such as cash); long-term financial assets (such as stocks, bonds, and mutual funds), which are less liquid than cash; and long-term tangible assets (such as cars, boats, or homes), which are not very liquid at all. Using the form provided in Figure 1.1, list your assets so that you can begin the process of assessing your financial position and knowing how much you can reasonably invest in the market.

Your Financial Inventory Guide

The following forms are for your private use. They require that you list certain confidential facts about your financial position, such as assets, liabilities, and free capital. You may need to tweak the forms for your personal situation. You may also want to share the information with your financial adviser; otherwise, keep it confidential. Use these forms as a guide and update them from time to time as your situation changes.

Now that you have listed your assets, take a moment to review the information. All three kinds of assets—liquid financial, long-term financial, and long-term tangible—are important. For example, if all your cash is invested in the stock market, none will be available for your daily needs or for unforeseen circumstances, such as car repairs, home maintenance, or the loss of a job. We will soon give you some rules of thumb for maintaining a cash reserve.

Also, your long-term tangible assets (particularly real estate) should be considered part of your investment portfolio. Although real estate prices have historically shown little volatility, rising steadily

Liquid Financial Assets

- 1. Cash in banks _____
- 2. Cash with brokers _____
- 3. Money market funds _____
- 4. Other _____
- Total Liquid Assets** _____

Long-Term Financial Assets

Bonds and Bond Mutual Funds

(1)	(2)	(3)	(4)
# of Bonds	Name of Issue	Bond Price*	Market Value [†]

Total Bonds _____

*Enter the *current* market price, not what you originally paid.

[†]Multiply column (1) and column (3).

Stocks and Stock Mutual Funds

(1)	(2)	(3)	(4)
# of Shares	Name of Issue	Share Price*	Market Value [†]

Total Stocks _____

*Enter the *current* market price, not what you originally paid.

[†]Multiply column (1) and column (3).

Figure 1.1 Assets

6 The Forbes/CFA Institute Investment Course

Total Liquid Assets	_____
Total Bonds	_____
Total Stocks	_____
Total Financial Assets	_____
Long-Term Tangible Assets	
1. Cars	_____
2. Real estate	_____
3. Art	_____
4. Other items with market value	_____
Total Tangible Assets	_____
Total Assets (Financial plus Tangible)	_____

Figure 1.1 (continued)

over time, the past few years have demonstrated that this is not always the case. After peaking in 2006, residential real estate prices plunged across the nation. For many people, their primary residence is their most valuable asset. If you have a second or third home, even more of your portfolio is committed to real estate. You should keep such factors in mind when deciding on the kinds of stocks or other investments to buy.

Your personal balance sheet may contain intangible or non-financial assets, as well. For example, the value and character of your expected earnings, Social Security benefits, or pension income represent an implied asset that affects your financial position. Capturing this value in a meaningful way is beyond the scope of this chapter, but trained advisers and wealth managers often perform this kind of analysis.

Now that we understand assets, let's turn to liabilities, which are debts owed to others. They are often categorized as *current liabilities* and *long-term liabilities*. The first two items listed in Figure 1.2 are considered current liabilities because they are typically due for payment within one year. Other loans, such as mortgages and auto loans, are long-term in nature and do not need to be paid in full immediately.

Some advisers like to consider your investment goals (or the intended uses of your capital) as an implied liability. However, that introduces complexities beyond what we consider here.

Investment Insight

The concept of a comprehensive personal or life balance sheet is central to holistic wealth management. In general, the more assets investors have relative to their liabilities, the greater their capacity to bear risk. The personal balance sheet approach also provides a risk management framework for comparing the risks associated with the assets against the risks associated with the liabilities. Ideally, asset allocation on the asset portion of the balance sheet should be designed to hedge the risks on the liabilities portion. A technical approach can be found in a Research Foundation of CFA Institute monograph titled *Investment Management for Taxable Private Clients*, which is available at www.cfainstitute.org/forbes.

As mentioned earlier, we hope your assets exceed your liabilities. If so, your net worth is positive. This difference between your total assets, shown in Figure 1.1, and your total liabilities, shown in Figure 1.2, is often used as a measure of personal wealth or net worth (Figure 1.3). The greater your net worth, the stronger your financial position and the more control you have over your life.

1. Outstanding credit card balances (current)	
2. Other unpaid bills due within one year (current)	
3. Investment borrowings	
4. Home mortgage	
5. Second mortgage	
6. Car loans and leases	
7. Other	
Total Liabilities	

Figure 1.2 Liabilities

Total Assets	
Less Total Liabilities	
Net Worth	

Figure 1.3 Network

Total Financial Assets	_____
Less Current Liabilities	_____
Free Capital	_____

Figure 1.4 Free Capital

Taken together, your assets, liabilities, and net worth comprise your personal balance sheet, which shows you what you own, what you owe, and how much you are worth.

Another important concept is *free capital*, or the amount of money you do not need for current living expenses or other immediate obligations. As shown in Figure 1.4, free capital is equal to the difference between your total financial assets and your *current* liabilities (not your total liabilities). (*Note:* Life insurance and annuities are not considered part of free capital because of their importance in meeting basic financial needs.)

To be able to plan better over the coming year, it is also useful to know how much additional free capital you will have by the end of your fiscal year. To estimate this, you can construct your personal *income statement* as shown in Figure 1.5. Your income statement considers cash coming in and cash going out. If you expect to earn more than you spend over the next year, you will have additional free capital available for investment.

Having determined the extent of your free capital, the next step is to determine your *safety reserve* or *emergency fund*. The purpose of an emergency fund is to keep cash or cashlike assets on hand for emergencies. The amount of total free capital to set aside for this purpose depends entirely on your personal circumstances. For example, all else being equal, if you are self-employed, have a high degree of income volatility, or have unstable employment prospects, you should have a larger safety reserve. Tenured teachers and union members who have little fear of losing their jobs can generally get by with a smaller safety reserve. One rule of thumb, however, is to maintain 20 percent of your free capital in cash. Cash can be in the form of a bank account, a money market fund, or any other very liquid, short-term asset. Another rule of thumb is to keep three months of living expenses in cash.

As shown in Figure 1.6, your total free capital less your safety reserve is the amount you can safely devote to common stocks or other risky investments. This is called *investment capital*.

Annual Income

Salary	_____
Rents	_____
Royalties	_____
Annuity income	_____
Interest	_____
Dividends	_____
Pensions	_____
Other	_____
Total Annual Income	_____

Annual Expenses

Rent, maintenance, and mortgage payments	_____
Food	_____
Utilities	_____
Clothing	_____
Children's education	_____
Medical emergencies	_____
Charitable contributions	_____
Life insurance	_____
Property insurance	_____
Federal income tax	_____
State and local taxes	_____
Property taxes	_____
Other (including health insurance and retirement contributions)	_____
Total Annual Expenses	_____
Total Annual Income	_____
Less Total Annual Expenses	_____
Additional Free Capital	_____

Figure 1.5 Personal Income Statement

Free Capital	_____
Less Safety Reserve	_____
Investment Capital	_____

Figure 1.6 Investment Capital

Personal Balance Sheet Example

A simple example of an investor's personal balance sheet may help illustrate the concepts just described (see Table 1.1). One thing you should notice immediately is that total assets equal total liabilities plus net worth. This is always the case. After all, net worth is the difference between assets and liabilities.

This investor has \$605,000 of free capital available for investment because financial assets total \$615,000 and current liabilities (i.e., credit card balances) total \$10,000. Most of the financial assets, \$600,000, are in long-term securities, specifically stocks and bonds; \$15,000 is in liquid assets.

Notice that we do not include the \$250,000 home value in the calculation of free capital since it is not available for investment. We still have not considered the emergency fund. If this investor requires \$15,000 in an emergency fund, investment capital is only \$590,000. This investor might want to consider increasing cash balances somewhat over the next year as additional free capital

Table 1.1 Investor's Personal Balance Sheet

	Market Value	Percent of Total Assets	Percent of Financial Assets
Assets			
Liquid financial assets	\$ 15,000	1.7%	2.4%
Long-term financial assets			
Stocks	\$400,000	46.2%	65.0%
Bonds	200,000	23.1	32.5
Total long-term financial assets	\$600,000	69.4%	97.6%
Total financial assets (liquid and long-term)	\$615,000	71.1%	100%
Home	250,000	28.9	
Total assets	\$865,000	100%	
Liabilities and Equity			
Credit card balances (current)	\$ 10,000	1.2%	
Home mortgage (long-term)	190,000	22.0	
Net worth	665,000	76.9	
Total liabilities and net worth	\$865,000	100%	