

# Quality Asset Management

Grow Your Wealth with Peace of Mind

## Could you withstand another Great Depression?

By Gil Hanoch, May 4, 2006

If you accumulated a large amount of money, one of your biggest fears might be losing it during a severe stock market crash like the Great Depression.

This article analyzes several portfolios that could survive the Great Depression, ranking them by the security level that they provide. The table below presents the following information about these portfolios, based on data from 1927 to 2005:

1. The highest amount of annual fixed income that a \$1,000,000 portfolio can provide and still fully recover from the Great Depression. It accounts for taxes and inflation.
2. The relative security level of the portfolio, when invested during the Great Depression. The portfolio allowing for the highest withdrawals is the safest. Viewed differently, for any required withdrawal rate, the safest portfolio is most likely to outlive the Great Depression.

Some simplifying assumptions, that should not affect the general conclusions, are made:

1. The total tax rate is assumed to be 35%. In practice, there may also be state taxes, and long-term stock gains are currently taxed at 15%. This assumption presents the stock portfolios more negatively than they really are.
2. There are no transaction costs. These should be minimal for large portfolios.
3. There are no mutual fund fees. These are not negligible, but are small enough to not affect the security ranking of the portfolios.

Portfolio		Annual fixed income per \$1,000,000 portfolio	Security level during Great Depression
Long-Term US Government Bonds		\$5,000 <sup>1</sup>	Lowest
Long-Term US Corporate Bonds		\$7,400 <sup>2</sup>	Low
Stocks +	\$0 bonds	\$15,600 <sup>4</sup>	Medium
Long-Term US Corporate Bonds <sup>3</sup>	\$200,000 bonds	\$27,300 <sup>4</sup>	High
	\$500,000 bonds	\$40,000 <sup>4</sup>	Highest

<sup>1</sup> \$5,000 = 0.5% x \$1,000,000; 0.5% = 5.5% x (1-0.35) - 3.1 = average returns - taxes - inflation

<sup>2</sup> \$7,400 = 0.74% x \$1,000,000; 0.74% = 5.9% x (1-0.35) - 3.1 = average returns - taxes - inflation

<sup>3</sup> The bond component is used only during recessions, and is adjusted with inflation. The stock portion is invested using the following indexes: 1/3 US Large Value and 2/3 US Small Value.

<sup>4</sup> The figures were calculated using a spreadsheet that tracked the annual values of the stock component, bond component and withdrawal rate, based on the annual returns of the different components and inflation. The withdrawal rates of 1.56%, 2.73% and 4% are the highest values that resulted in a portfolio that recovered and kept growing until 2005, as simulated. Detailed values are available upon request.

Note that there are many other investments that are considered very conservative. These include: CDs, insurance, fixed and variable annuities, municipal bonds and corporate bonds. A common trait

to these investments is that they all depend on the solvency of a single company or entity. If the company issuing any of the above declares bankruptcy, your investment is at risk. During the Great Depression, this happened to many companies, so we avoid discussing these options. Only investments that can be significantly diversified (e.g., using index mutual funds) were considered. The two main categories are bonds and stocks.

Note several remarkable findings:

1. The portfolio of government bonds was effectively the riskiest portfolio. This is remarkable since government bonds are considered virtually risk-free, given that the government can always raise taxes to repay its debt. Any withdrawals above \$5,000 resulted in depletion of the portfolio.
2. The portfolio that is usually considered riskiest: 100% stocks (\$0 bonds), was much safer than all bond portfolios, allowing for a 2-3 times higher withdrawal rate.
3. A stock portfolio that included a fixed amount of bonds to be used only during recessions was the safest, allowing for a remarkable \$40,000 withdrawal rate after inflation and taxes.

A few notes that make the results above even more remarkable:

1. We used a stock portfolio that is concentrated in a single country (US) while the country experienced a severe depression. A globally diversified portfolio would increase the stability of the stock portion, and would require more in stocks and less in bonds.
2. The analysis assumes that we started investing at the same year the depression started (1929). This is the toughest assumption we could make and is necessary from the most conservative viewpoint. If you would use any other beginning year, the results should favor portfolios with a higher stock allocation.

Note: Any allocation to stocks assumes avoiding market timing or specific stock selection. These are strategies that made rich people poor during the depression, and are avoided altogether.

### **To Summarize**

If you want your money to provide you with fixed income that grows with inflation despite severe economic disasters, the most secure solution may need to include a significant stock allocation. We don't know what the future will bring us, but we do know that a large diversified stock allocation was necessary to outlive the greatest recorded economic disaster in recent history – the Great Depression.

This is great news, because you have to hold stocks to avoid losing your long-term investments and you have to hold stocks to grow your investments significantly. One decision promotes both goals at once.

Past performance may not be indicative of future results. Simulated data was used for periods prior to the inception of mutual funds (see [Performance Data Disclosure](http://www.qualityasset.com/disclosure.htm) at <http://www.qualityasset.com/disclosure.htm>). Different types of investments involve varying degrees of risk, and there can be no assurance that the future performance of any specific investment, investment strategy, or product made reference to directly or indirectly in this article, will be profitable, equal any corresponding indicated historical performance level(s), or be suitable for your portfolio. Due to various factors, including changing market conditions, the content may no longer be reflective of current opinions or positions. Note that services are limited to investment advice and do not include financial planning and/or non-investment related consultation services. You should not assume that any discussion or information contained in this article serves as the receipt of, or as a substitute for, personalized investment advice from Quality Asset Management. If you have any questions regarding the applicability of any specific issue discussed above to your individual situation, you are encouraged to consult with the professional advisor of your choosing. A copy of our current written disclosure statement discussing our advisory services and fees is available for review upon request.