INDV 102, Money, Consumers, and Family (Personal Finance)

Course Conclusion

By Richard Serlin

This article concludes my personal finance 1 course by sumarizing what I think are for most people the three most important things to know in personal finance today: 1) Professor Warren's Balanced Money Plan, 2) The key basics of real estate, and 3) The importance of diversification (in many areas, not just stock investing). I assign this article only after students have read cover-to-cover Harvard Professor Warren's book, "All Your Worth: The Ultimate Lifetime Money Plan" (with Amelia Warren Tyagi). If you haven't read this book, you can still get a great deal out of the article, but there are some terms and concepts you may not be familiar with. I do, though, strongly recommend this inexpensive paperback to everyone. I think it is by far the best personal finance book on the market.

You are now finishing up a course that I think for most of you will be one of the most valuable you will ever take. As you've seen throughout, it is absolutely crucial to understand well personal finance today. Otherwise, the odds are much too good that you will have to regularly endure substantial financial stress that can really hurt the quality of your life. And, far too often, for those who understand little about personal finance, there is more than just constant financial stress; there is ruin, with more bankruptcy filings today than divorce filings.

At the same time, we've learned that with smart personal finance, the odds are great that you will overall live a financially secure and prosperous life. We saw in assignment 1 that it is within the reach of everyone in this course to eventually be a millionaire – even adjusting for inflation – in his or her lifetime, with smart and consistent saving.

So as we near the end of the course, what are the most important things to remember, to take with you throughout your life? They are: 1) Professor Warren’s Balanced Money Plan, 2) The Real Estate Material, and 3) The Importance of Diversification.

1) Professor Warren's Balanced Money Plan

This is sometimes called the "50/30/20" plan. That's a short compact way of describing it, but like lots of short compact descriptions and sound bites, it's not literally correct, and it can be misleading. Really it's a "Less Than 50/The Remainder/At Least 20" plan. During stable normal times, you should spend *less than* 50% of your after tax pay on Must-Haves, *at least* 20% of your after tax pay should go to Savings, and the remainder is for Wants. Exceptional periods when it may be ok to deviate from the Balanced Money Plan include, for example, completing your education and job loss.

The single most important lesson in this course is to keep your Must-Haves below 50%. That is just so crucial in today's far riskier world. With Must-Haves below 50%, you can usually respond to set backs without having to even touch your savings – let alone completely destroy them and then begin a debt spiral. You have a great deal of room to cut back during emergencies. Unemployment insurance, plus your spouse's income, may be easily enough to get by until the storm is over without having to destroy your savings and/or go into debt. If you are single, you are usually more flexible, and starting with Must-Haves of less than 50%, you can usually find a way to temporarily live off of unemployment or an in-between job, again without destroying your savings and going into a debt spiral.

Moreover, high Must-Haves can bring constant financial stress and worry, substantially hurting the quality of your life, and they can make it almost impossible to save any substantial amount, because to get any decent savings in, you would have to constantly deny yourself day-to-day Wants to feed those huge and relentless Must-Haves.

The substantial rise in Must-Have spending over the last generation is the biggest reason for today's epidemic of financial stress and distress. If you do nothing else, during stable normal times keep your Must-Haves below 50%.

2) The Real Estate Material

The most important reason for today's epidemic of financial distress is overspending on Must-Haves, and the most important reason for overspending on Must-Haves is overspending on one's home.

Professor Warren in "The Two Income Trap" talks about the desire to live in a better school district as a reason for dangerously overspending on one's home. I think the bigger reason is an unprecedented desire to look prestigious to others that has gripped society, and strangled so many with financial stress. As I've said before:

> The desire to look prestigious to others can often cause people to do harmful and dangerous things. Yes, it's great to be seen driving around in a new Lexus. It's fun. But if you let the cost of that fun mean constant financial stress and tragedy, it is unlikely to be worth it.
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> Be proud of the kind of person you are, your unique abilities and personality, and what you have achieved, and try not to over rely on how you look to others. I believe you will be happier if you do so, and less likely to put yourself in a position where you, and your family, will have to live with constant financial stress and perhaps tragedy.

And, as Professor Warren has said, with regard to the desire to keep up in how prestigious you look with the Jones's – those same Jones's who live everyday with serious financial stress or worse:

> It seems so sensible. Prudent. Maybe even a little conservative.
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> You spend your money on the things you need. Who could fault you for that?
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> No one goes on television or criticizes people for spending too much on the basics. Oh sure, someone may chide people for buying an oversized McMansion or a brand-new Lexus. But the real point is that those things are more than anyone really needs—fancy, oversized, expensive stuff that normal people could easily do without. Who says that you shouldn't spend all of your money on a normal house and a normal car.
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> We do.
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> It doesn't matter if you are living in a regular house. It doesn't matter if you are driving an average car. It doesn't matter if all of your Must-Haves seem perfectly ordinary and no different from those of your neighbors. Because you can't use your neighbors as a guide. Why not? Because most of your neighbors are not building wealth. They probably owe money on their credit cards, and they don't have any plans for a better future. They may not talk about it, but the odds are high that they worry about money. A lot.
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> In recent years, worry over money has become normal. Living out of balance has become normal. Which all adds up to one very important point: Normal isn't good enough. If you want to build real wealth and make the most of your worth, then you need to have a plan that is better than normal. And that starts with getting your Must-Haves into balance. ("All Your Worth", pages 71-72)

I've written this quote several times throughout the course because it is so important to remember.

So it's crucial not to overspend on a home. And it's also crucial to buy a home at the right time. If the monthly cost of a typical mortgage, with a downpayment of 20%, is more than 50% higher than rent on a comparable home, then housing is substantially overpriced, or in a bubble. Except for some unusual reason, you should wait until prices come down (or wait until *real* prices come down. For example, if prices stay the same for 5 years, but over those 5 years there was inflation of 3% every year, then the *real* price of homes went down by about 15%). You should also consider looking for an area that's not currently overpriced.

Please save the electronic real estate material on your hard drive, a CD, or other back up. And, of course, I strongly recommend that you don't sell "All Your Worth". Having that reference, and reminder, on hand for years to come, to help you in your personal financial management will likely make you ridiculously more money than the approximately $7 you will get from selling it.

To the real estate material I've given you thus far, I'd like to add an excerpt from an article I wrote recently for the Take Charge America Institute Quarterly Report (with minor modifications):

> The biggest of the big expenses is typically, of course, one's home, and Professor Warren doesn't hide from confronting readers with the importance of getting out of a dangerously large mortgage:
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> > If you are living in a home you can't afford, you stand to lose that home and everything else you have built up in life. The fact is that home foreclosures have tripled in less than 20 years. You want to be prosperous for life, not another crash statistic. If your Must-Haves are still way too high, and taking a roommate or getting a higher paying job just isn't in the cards, then consider moving someplace more affordable. Getting out from under that heavy house payment may be your best chance for building a lifetime of riches. ("All Your Worth", page 102)
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> Of course, you will still often hear how stretching to buy the most expensive home you can is the best way to get rich, but that's just not the reality. When you average in the bubbles with the busts, flat periods, and slow periods, real estate appreciation has historically only been 0.4% above inflation (from an extensive study described in Yale Economist Robert Shiller's book, "Irrational Exuberance", 2nd Edition). A well diversified stock portfolio, on the other hand, has had an average return of approximately 9% above inflation.
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> With real estate, the leverage you often hear about on average works against you in a home you live in (In a home you live in, you collect zero rent income. You're living in the home, not renting it out.). If you borrow $400,000 to purchase a home at 6%, but the home appreciates at only 3.4% (and 3.4% is what you can expect on average, as average inflation is about 3%, and average home appreciation is 0.4% above inflation), then you're paying in mortgage interest: $400,000 x 6% = $24,000 per year, but you're getting in price appreciation only $400,000 x 3.4% = $13,600 per year.
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> On average, you're losing each year: $24,000 – $13,600 = $10,400. The more expensive a home you buy to live in, the more the leverage hurts you. If you bought an $800,000 home you would double all of these numbers, and on average you would be losing 2 x $10,400 = $20,800 per year. On the other hand, if you bought a home to live in that was just half the price, $200,000, you would only lose half as much per year, ½ x $10,400 = $5,200.
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> What about the tax deduction on mortgage interest?

Let's look at other factors.

There is the federal income tax deduction on the interest you pay with your mortgage loan. How much will that make you? For some people 0. The typical Standard Deduction for a married couple is $10,700 in 2007. If your mortgage interest for that year, plus other deductions, is less than $10,700 you get nothing. You only get a tax savings for the deduction dollars over $10,700. In our example, we have $24,000 in mortgage interest. Suppose there were $8,000 in other deductions that the family had. That would be $24,000 + $8,000 = $32,000 in tax deductions. Subtracting out the standard deduction, you get $32,000 – $10,700 = $21,300 in additional tax deductions due to being able to deduct mortgage interest.

How much money does that $21,300 in deductions make you? It depends on your (marginal, or upper) tax bracket. Consider the 25% bracket (about middle to upper middle class). Every dollar of taxable income for a married couple between $63,700 and $128,500 is taxed at 25%. If a family's income is solidly in that range then deducting $21,300 from their taxable income will save them 25% x $21,300 = $5,325.

But, let's look at other factors in home ownership.

First, you have to pay local property taxes. In Arizona they average 1.3% per year (and in some places they are much higher). The more expensive the home, the more you pay. 1.3% of $400,000 is $5,200 per year in property taxes, and already you've basically wiped out the benefit of the mortgage interest deduction, and that benefit will only decrease over time. Every year you will pay off more principle, and so pay—and be able to deduct—less interest. Eventually the mortgage will be paid, and the mortgage interest deduction will be 0. Property taxes, however, on average, constantly increase, not decrease. You pay 1.3% per year of a home value which increases on average at 0.4% plus the inflation rate.

Next, there's homeowners insurance. This is typically about $50 per month for every $100,000 of coverage. Once again, the more expensive the home, the higher the cost. For our example $400,000 home, this comes to $200 per month, or $2,400 per year.

What about maintenance, modernization, and repair? Estimates of this cost usually range from ½ to 1 percent of the home's value per year. Let's be lenient in our $400,000 home example and make this expense—an expense which yet again typically increases with the price of the home—½%. The total cost then is ½% x $400,000 = $2,000 per year.

So where are we at so far? Our \$400,000 house on average brings us 3.4% in price appreciation, but we pay in interest on the \$400,000 we borrowed 6%, for a net cost of (6% – 3.4%) x \$400,000 = 2.6% x \$400,000 = \$10,400 each year.

Added to our \$10,400 cost from mortgage interest on average being substantially higher than home price appreciation is a \$5,200 annual property tax bill, \$2,400 in homeowners insurance premiums, and \$2,000 in maintenance. This sums to costs of \$19,760 per year *more than* what we get from average home price appreciation. Even with \$5,325 in tax savings from the mortgage interest deduction, the home is still costing you \$14,675 more per year than it makes you. And the more expensive a home, the higher the net cost.

And we haven't even included several large costs which typically go up with the price of the home: higher utilities, higher furniture and periodic remodeling costs, and higher closing costs and real estate agent commissions (typically 3% -6% of the price of the home is for the real estate agent, and 1%-3% is for closing expenses including points).

Nonetheless, it is, I repeat is, very valuable, and recommended, to purchase a home to live in <u>*at the right time*</u>, <u>*at the right price*</u>, and <u>*in the right way*</u>. The big reason is that you save 100% of your rent expense. BUT, as I often remind my students, you save 100% of your rent expense every single bit as much if you buy a \$200,000 home as if you buy a \$400,000 home. In either case you pay the same zero rent. It's not like you get to pay negative rent if you buy a more expensive home. You pay no rent if you buy a \$400,000 house. You pay no rent if you buy a \$100,000 condo. But the \$100,000 condo has far lower costs. Yes, you get 3.4% home price appreciation on only \$100,000 instead of \$400,000, but as we've seen, this is far outweighed *by paying 6% mortgage loan interest on only \$100,000 rather than on \$400,000*. And, all of the other expenses we've discussed are far lower with a \$100,000 home you live in, than with a \$400,000 home you live in.

Note also that the more expensive the home gets, the higher a risk you are to the mortgage lending institution. Eventually they will raise your interest rate and/or fees. 6% is for a very safe risk; as the home price goes up, this can go to 7%, 8%, and eventually well into the double digits with today's deregulation. Paying 8% on a \$400,000 home loan, but getting only average home price appreciation of 3.4% means that you're draining out 8% – 3.4% = 4.6% of \$400,000 every year, that's \$18,400 per year. And, if your downpayment is under 20%, you will be required to pay for private mortgage insurance (PMI), about \$45 per \$100,000, per month. Throw on another \$180 per month.

Does this mean that you should never buy a more expensive home? No. It may be worth it to you to accumulate less wealth than you could have (if you had invested, rather than spent, the money you saved from going with a less expensive home), in exchange for living in a nicer home. But Professor Warren and I only suggest you do so if you can keep your Must-Haves below 50%. Otherwise, you take too big a risk of entering what I call a debt spiral, and becoming what Professor Warren calls "another crash statistic".

All other things equal, buying a more expensive home makes you poorer, not richer (at least if you would invest, rather than spend, the money you save on the downpayment, monthly payments, upkeep, property taxes, etc. from purchasing a more affordable home), unless you get lucky. But you don't want to base your family's well being on getting lucky. You want to base it on a well considered analysis of risk and return which takes into account that you may be lucky, you may be unlucky, you may end up somewhere in between, and the likelihoods of all of those outcomes.

A home that you live in is not purely an investment. It is part investment, and part useful item—like a car. If all that you get is the price appreciation, it cannot compete with the return of a well diversified stock portfolio (an good article explaining this is The New York Times', "In the Long Run, Sleep at Home and Invest in the Stock Market", 8/19/05), and because you live in it, that's all you get—price appreciation only. But if you rent out the home, then it is purely an investment. You get no personal usage, but you collect rent, plus get price appreciation. In this case, the risk adjusted return can be competitive with stocks, although real estate investment takes a good deal of expertise and time to do well (but if done well, the return can be more than enough to compensate you for your time).

With stocks, on the other hand, you can park your money in the Wilshire 5000 index, and let the experts at Wilshire pick an intelligent, well diversified, portfolio for you. And no one's going to call you in the middle of the night about their dripping faucet!

Another way to see that, all other things equal, you will be wealthier purchasing a less expensive home to live in is to note that instead of buying a $400,000 home to live in, you could have purchased a $200,000 home to live in, and a second $200,000 home to rent out. In both cases, you have spent $400,000 on housing, and will get price appreciation on $400,000 in housing, but in the second case you, in addition, get to collect monthly rent on a $200,000 home.

For most people, however, again, because rental real estate investing takes considerable time and expertise, it will be best to just take the downpayment savings, the monthly payment savings, and all of the other savings from purchasing a less expensive home to live in, and invest them long term predominantly in a well diversified stock index fund.

> The average return is approximately 9% above inflation as opposed to only 0.4% above inflation for home price appreciation only.
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> Again, the most important rule that Professor Warren and I both advocate is that whatever home you purchase, make sure it is priced to keep your Must-Haves below 50% of your after tax pay. (TCAI Quarterly Report, March 2007, pages 4-5)

As I've said, please be sure to keep your real estate material, and review it when you are considering buying a home. This includes all of the real estate material spread throughout the course; the real estate related sections of "All Your Worth", this course conclusion, the scans from the book "Irrational Exuberance", the articles, etc.

One final reminder, just to be clear:

Buying a more expensive home will, on average, make you <u>*less*</u> *wealthy than if you were to buy a less expensive home and take all of the money you save in lower mortgage payments, a lower downpayment, lower homeowners insurance, etc. and invest it all in a good diversified stock index fund like the Wilshire 5000.*

This doesn't mean that you should never buy a more expensive home. It may be worth it to be less wealthy over the long run in order to have a nicer home. But, if you do buy a bigger or nicer home it's crucial to be sure that it is not so expensive that it pushes your Must-Haves above 50%. That would create just too much risk to your and your family's financial security. Instead, keep saving so that you will have a bigger downpayment, and therefore lower monthly payments which won't push your Must-Haves above 50%.

Don't worry that, "If you don't buy now, you will never be able to, because housing prices will grow out of reach.". As I've repeated many times, and will continue to repeat many times—because it's important, and I want to make sure it's remembered—housing prices only grow *on average* by about 0.4% above inflation. The average American's income grows faster than that, and your savings in a diversified stock fund grow by about 9% above inflation. Yes, during a bubble housing prices can grow faster, but bubbles are short-lived and usually they end with a 20-40% drop over about 2 years and than stay flat for 7 to 10+ years. Again, the *average* return is only about 0.4% above inflation. Don't be rushed into a bubble by a pushy real estate agent. Look in a non-bubble-inflated area and/or keep saving. If you do, it's inevitable that you will eventually be able to afford a nice home without pushing your Must-Haves beyond 50%.

I know, there's always that uncle who bought his house in 1970 for $55,000, and today (2007) it's worth $300,000. Well, you know what, that equates to an average return of only 4.69%. Anytime you hold any kind of half-way decent asset for a very long time period like 37 years, it will grow greatly in price, but a 4.69% return is terrible compared to the average return of a diversified stock portfolio of about 12%. If that uncle had invested that $55,000 in 1970 in a typical diversified stock portfolio that earned 12%, it would have grown to $3.6 million!

But you say, I don't have $55,000. With a home, the mortgage institution lends me the $55,000. I get leverage. Well, they don't loan you that money for free. You will have to pay about 6% interest (or a lot more), and on average you will only get home price appreciation of about 3.4%; that's less than the mortgage interest you have to pay. The leverage works against you on average, not for you.

But what about that aunt who purchased a condo in San Francisco last year for $500,000 and now it's worth $750,000. That's a 50% return in 1 year! Well, what about the guy who won the Lotto. Does that mean you should spend all of your money on Lotto tickets? Of course not. You don't base your life, and the security of your family, on getting really lucky. Really lucky is really rare. The average home price appreciation is only about 3.4%. Some people get a lot more, but some also get a lot less.

3) The Importance of Diversification

I talked about diversification most specifically in my article "Investment Strategy". The idea is not to put most, or all, of your wealth in just one substantially risky asset, or in too small a number of substantially risky assets. For example, if you put all of your long term savings in just one company's stock, there is a reasonable chance of a big loss or bankruptcy. This can even happen with large companies. Enron was the 7th largest company in the United States in 2001; just over a year later it was bankrupt. Amazon.com lost 91% of its value in a 13 month period in 1999 and 2000, and venerable IBM lost 48% of its value over 22 months in 1993 and 1994.

If, on the other hand, you spread you money out over 6,400 stocks as in the Wilshire 5000 (It used to have 5,000 stocks, but today it's up to about 6,400.), then the probability of them all going bankrupt is basically 0. It would take a nuclear war.

You also want to diversify across industries. If your money is spread across 1,000 companies, but they are all in the internet industry, then if something goes wrong in that industry, as happened with the recent dot-com bust, you can take a terrible loss. The Wilshire 5000 and the MSCI Broad Market Indices do a great job of diversifying your money across stocks in all major industries. And, in general, they do a great job of diversifying across all of the important dimensions. They are a great way to invest in stocks. For more details, please review my article "Investment Strategy".

If all of your long term savings is in a mutual fund account in your name that tracks the Wilshire 5000 or MSCI Broad, then you are well diversified. But what if 100% of your life savings is in the 401k of a small business that you work for? Then, unfortunately, you are not that well diversified. This is true even if the 401k money is invested in the Wilshire 5000 or MSCI Broad.

The reason is that there is currently little government protection regulation of the 401ks of businesses with less than 100 employees.

No independent audits are required, and they are only required to be insured for 10% of their assets or $1 million, whichever is *less*. There are 1,500 cases per year brought against employers for taking their workforce's 401k funds. Many employees lose almost their entire life savings.

You have to keep in mind the times we live in. We've gone through a period where those predominant in political power have acted on a principle of less government regulation and less government protection. You may agree with this or disagree; you're political opinions are up to you. But whether you agree or disagree, whether you're left, right, or center, the fact is there is less government regulation protection, so you have to be more careful, and you have to spend more time researching and monitoring things.

If you have a small business 401k (About 20% of people who have 401ks do.), be careful. Check it out. There are some good specifics on how to do this in a May 10th, 2006 Los Angeles Times article in the content section of our D2L site. Please read it (It's required).

How does this relate to diversification? In the article you will read stories of people who had 100% of their life savings in a small business 401k. Putting your life savings all in one substantially risky asset is not diversifying. These individuals should have had a substantial amount of money in ***personally owned*** mutual fund accounts (Wilshire 5000 or similar). This includes IRAs (Individual Retirement Accounts); they aren't through your employer. And/or they should have had a substantial amount of money in home equity, or a paid for home. Then, if their employer makes off with their 401k money, or uses it up running the business, they have other investments to fall back on.

I should make clear, though, that if you have 100% of your savings in the Wilshire 5000 (or a similar portfolio), in a mutual fund *you own*, then you're diversified just fine; the money is spread over thousands of stocks. The long term risk is very reasonable.

You just run into a problem when it's through a small business's 401k. Then the risk of appropriation is too high to have most, or all, of your savings from that source. You need to diversify. You should never have most, or all, of your money in a single substantially risky asset or source.

As you get older, eventually the time and situation will be right to purchase a home, and you will start paying it off. Owning a home (or having a substantial amount of equity in it) and a fat index fund account (in your name) is an excellent way to be diversified and secure.

Onward and Upward!

As you've seen, you live in a much riskier and more complicated world than that which existed when your parents were young, but with what you have learned in this course you are well positioned for financial security and prosperity. Please keep your materials; they will help guide you through the twists, turns, and milestones of what I expect to be very rewarding lives.

I wish you the best.

Richard Serlin
Tucson, 2007