

Calculating your investment wage and the opportunity cost of your time

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Calculating Your Personal Investment Management Wage and the Opportunity Cost of Your Time

Your personal investment management contribution is the total value that you add to your investment portfolio less the opportunity cost of your time. When divided by the hours you spend, you can estimate an hourly wage for your personal investment management contribution. Obviously, the objective is to have a high investment wage. Unfortunately, for most people their wage is likely to be negative. The more time they spend, the more they lose, because they do poorly with their strategies and/or they could be doing something else of greater value with their time. Many people lose money on their investments due to poor strategy and tactics. Moreover, they pay an additional opportunity cost, because they could be doing something more productive with their time. To determine your investment wage and the opportunity cost of your time, you need first to determine whether you are generating or losing value for the time that you spend. Concerning any value that you may or may not generate, see the article: [Value-added and value-diminishing investor activities](#). Estimating whether an investor generates positive or negative value for his time is the trickiest part of the calculation. The investor needs 1) to be knowledgeable about optimal investment strategies, 2) to track and benchmark his risk-adjusted performance carefully, and 3) to be rational and honestly self-critical in his self-evaluation. This can be challenging. Individual investors are confused about optimal strategies and usually are not careful about tracking and calculating their risk-adjusted performance against market benchmarks. In addition, rational self-evaluation is always challenging for people – although investing is one realm where it really pays well to be honest with yourself. Nevertheless, for the motivated investor who wants to be more productive with his investing, he can do a reasonable "ballpark" estimate of his likely hourly investment wage. Here are some ideas about how to make this estimate. For purposes of illustration in this discussion, we will assume two cases: one where the investor makes a positive value contribution and one where he does not generate value through his efforts. Assume that the investor spends about two hours a week or 100 hours per year on research, decisions, and actions about his investments. This many hours is probably higher than necessary, and it might indicate some level of unnecessary investment activism. Let us also assume that he has either a \$100,000 portfolio or a \$1 million dollar investment portfolio. This helps us to understand if his asset base is sufficiently large to make it worth spending time. A value generating investor would tend to hold passive market index investments in mutual funds and ETFs. He would avoid trying to beat the market. Instead, he would spend most of his time tracking and correcting investment inefficiencies, looking for low cost investments, and minimizing taxes. Overall, his total annual industry costs would typically be in the range of .25% to .5% of assets. In comparison, investors that are more typical usually have total annual visible and hidden investment costs that range between 1.5% of assets to 5% or even more of assets. Where their costs fall within this wide range depends upon their strategies, the channels through which they acquire investments, and how much they pay advisors who have custody of their assets. Average total visible and hidden investment costs are probably about 2.5% annually for the average investor. See: Excessive investment costs are a huge problem for individual investors. Compared to the average investor with 2.5% total annual investment expenses, this value generating investor improves his net return on assets by about 2% each year. He would generate \$2,000 more a year on a \$100,000

portfolio. Because he spends 100 hours, his hourly investment wage would be \$20/hour. On a \$1 million portfolio, this wage would be \$200/hour. The other amateur investor is much more active, favors hot individual securities over funds, and spends his 100 hours trying to pick stocks to beat the market. He does not focus on cost savings or tax reduction and trades frequently because of media stories, tips, and rumors. On average, the prognosis for this approach is not positive. Data from a study performed by Professors Kumar and Goetzmann indicates that self-directed individual investors using discount brokerage accounts probably lose about 2.5% per year due to lack of diversification and active investment mistakes. This figure does not include tax inefficiencies. See: [What is the cost to individual investors of sub-optimal portfolio diversification?](#) Costs of investors buying individual stocks and bonds through “full service” retail brokers are probably significantly higher due to higher trading costs and custody charges. The outcomes of active strategies are highly variable with a range that is far wider than for those who adopt a passive index strategy. Of course, that is the siren song of active strategies. Those who pursue them always hope to come out on top, when in reality, most will trail the market return even before costs and taxes are considered. See: [Can a limited number of stocks provide complete portfolio diversification?](#) Given this active investor’s approach, we will assume that his total visible and hidden costs and unnecessary taxes are 3.5% annually. Compared to average investor’s costs of 2.5%, he would lose 1% or \$1,000 per year on a \$100,000 portfolio. Therefore, compared to the average investor, his hourly value-diminishing wage is a negative \$10/hour. On a million dollar portfolio, the hourly value-diminishing wage would be negative \$100/hour. Instead of contrasting the costs of each of these investors with the 2.5% annual costs of an average investor, we can instead compare these two investors directly. With the assumptions above, if this rather active investor were to adopt the low cost, low tax, passive market strategy of the other investor, he could potentially reduce his expenses by 3% or \$3,000 annually on a \$100,000 portfolio. His hourly value-added wage would be \$30/hour compared to his previous active strategy. With a \$1 million portfolio, his value-added wage would be \$300/hour. Next, we need to place a value on the opportunity cost of the personal time of these investors. Whether or not his value-added investment wage was positive or negative, his time also may have an alternative value. How should this individual investor value his time? The net hourly wage from his compensated work provides a reference point. If the investor makes \$100,000 per year, this would translate into about a \$50/hour gross wage, or about \$32.50/hour net with an assumed 35% combined federal and state marginal income tax rate. If the investor has the opportunity to make more money by working more hours, then it would be appropriate to use his full hourly net earned income wage to value any time he spends on investment portfolio self-management. Instead of spending time on investing, he could earn more money to invest. For this example, the annual net opportunity cost on 100 hours would be negative \$3,250 per year. This investor would need a large portfolio and quite superior performance to offset this labor opportunity cost. For an investor with the opportunity to earn more income, the relative ease of selecting and holding mutual funds or ETFs should be a very appealing alternative because of the much lower time commitment. Conversely, the investor who absolutely loves studying businesses, industries, companies, and securities analysis and who would have no other hobby might wish to apply a much lower or even zero opportunity cost for his labor. However, *The Skilled Investor* suspects that the average individual investor would have an opportunity cost that is closer to his personal net earned income wage. Becoming skilled and efficient at investing is important to many people, but it does not rank high among the alternative pleasures and preferred hobbies of most people. Combining the hourly value-added wage with the hourly labor opportunity cost, allows us to estimate what the total benefit or cost of an investor’s effort might be. Compared to the 2.5% annual costs of the average investor, the cost efficient investor with a \$100,000 portfolio had an investment value-added wage of \$20/hour and an opportunity cost of \$32.50/hour. His net self-investment wage is negative \$12.50/hour. His portfolio is too small for his investment skill to outweigh his labor cost.

Nevertheless, his effort to optimize his investments is only modestly costly, but certainly is very worthwhile compared to the much greater costs of an average or high cost investor. If his portfolio were \$1 million dollars, then his total self-investment wage would be \$167.50/hour. (A \$200/hour value-added investment wage minus the \$32.50/hour opportunity cost.) Obviously, if assets are managed well, then the more assets the better. Regarding the more active, but inefficient investor, his strategy is both investment value and labor opportunity cost inefficient. Compared to the 2.5% costs of the average investor, on a \$100,000 portfolio, his value-added wage is negative \$10/hour and his net earned income opportunity cost wage is negative \$32.50/hour. The total is a negative \$42.50/hour. We assume that he is active, because he is trying to make more money. However, he might prefer to do something else with his time, if he realized that his efforts were really diminishing his assets. If this investor had a \$1 million portfolio, then his total self-investment wage would be negative \$132.50/hour. (Negative \$100/hour in investment value minus his \$32.50/hour opportunity cost.) The greater this investor's assets the less valuable it is for him to manage them with a poor strategy. The more time he spends, the worse it gets. To summarize, if this active and inefficient investor switched completely over to a passive cost conscious strategy, his total hourly wage could be a more tolerable negative \$2.50/hour on a \$100,000 portfolio. (A \$30 hourly value contribution less a \$32.50 hourly opportunity cost.) On a \$1 million portfolio, his total investment wage could be a positive \$267.50/hour. (A \$300 hourly value contribution less a \$32.50 hourly opportunity cost.) He is handsomely rewarded for being more efficient, especially when his assets are greater.