

Don't save 10% of income (spend just 50% of every raise)

Michael Kitces | Pinnacle Advisory Group | 20 June 2014

The approach of "save a percentage of your income" is a staple of retirement planning. While much debate exists about the exact ideal percentage, the concept is relatively straightforward – have savings as one of the slices of your income pie, ideally automate the process with an ongoing percentage of your income that always gets saved first, and you'll be well on your way to retirement.

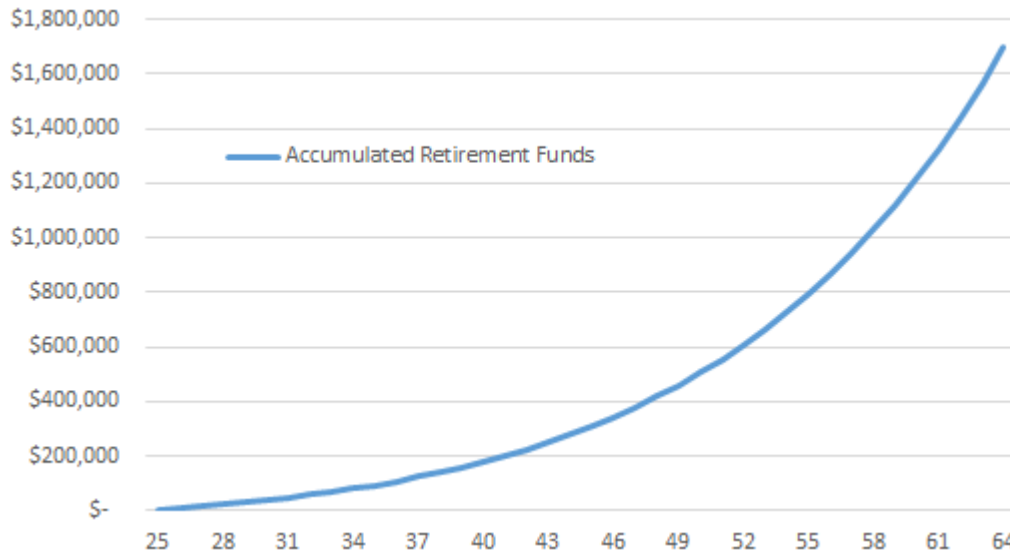
Yet the reality is that saving something like 10% of your income also implicitly means you're spending the other 90%. And, continuing to do so over time means you'll also be saving (only) 10% and implicitly increasing your standard of living by 90% of every raise you receive in the future. As a result, your standard of living rises as fast as your retirement savings, which means the amount needed to reach retirement gets larger and larger given the retirement costs to be supported. In the end, it's surprisingly difficult to ever reach retirement at all as the goal forever outpaces the savings to reach it.

By contrast, an alternative approach is to try to spend "just" 50% of each pay raise you receive in the future (implicitly saving the other 50%). The end result of such an approach is that increases in the standard of living are more controlled and rise far more slowly, savings grow exponentially (to more than 20% of income within just a decade, even from a starting point of 0%), and you can even retire early... all while feeling like your lifestyle is steadily rising as you're still committed to spending more every year, just not increasing as rapidly as saving 10% of your income (and spending the rest).

THE CHALLENGE WITH SAVING 10% OF INCOME

To understand the challenges of saving a percentage of income, assume "Jerry" is in his mid-20s and generating about \$50,000 per year in take-home pay. Figure 1 shows how much wealth Jerry will accumulate by saving 10% per year of his income. Assuming his wages rise by 4% per year (including those raises he'll get above cost-of-living adjustments as his career builds), and a long-term average annual growth rate of 7%, Jerry finishes with a healthy \$1.7 million accumulated after 40 years.

Figure 1: Saving 10% per year of income



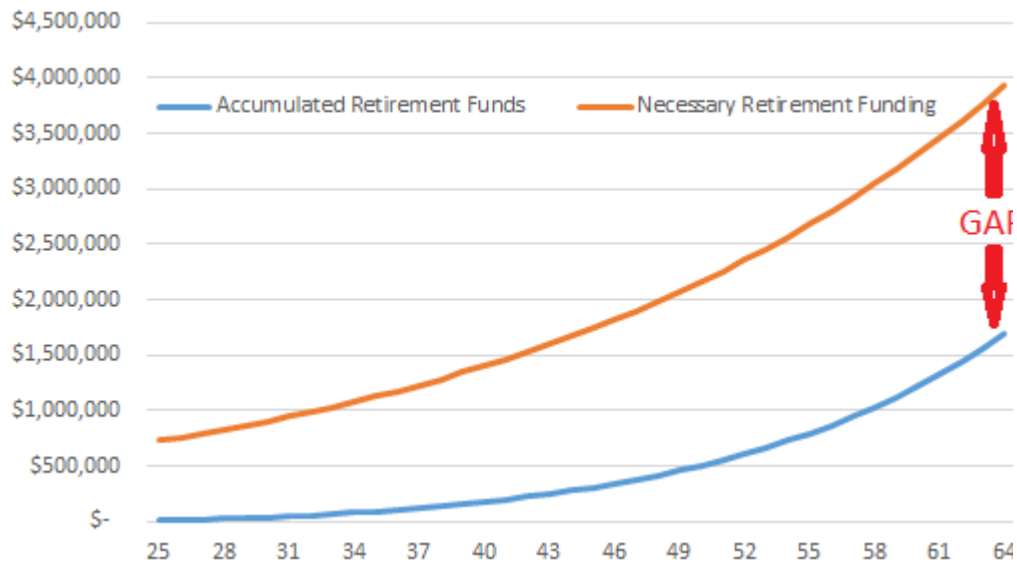
Source: Michael Kitces' Nerd's Eye View 2014. Notes: assumes a starting balance of \$50,000, wage increases of 4% per annum real, and long-term growth rate of 7% per annum.

The caveat, however, is that by pursuing this path, Jerry's actual cost of living will rise rather significantly along the way as well. After all, if he's saving 10% of his income (and each raise along the way), he'll also be ramping up his lifestyle costs by 90% of each raise over time. This means that at age 65, Jerry's annual cost of living – which started at \$45,000 per year (the \$50,000 take-home pay minus 10% savings) is now up over \$200,000 per year! Suddenly, that \$1.7 million of accumulations won't go so far in supporting a \$200,000 per year lifestyle.

Of course, today's future retirees will likely still enjoy some government benefit as well. But even assuming an average benefit of \$1,294 per month (which would be a little over \$50,000 per year in 40 years assuming 3% inflation), Jerry still might need at least \$150,000 per year of income to support his future standard of living. Under a 4% withdrawal rate, that means he would actually need about \$3.75 million (or 25 times the spending goal) to fund his retirement successfully. By saving 10% of his income for 40 years, Jerry isn't even half way there.

In fact, as Figure 2 illustrates, simply assuming a retirement goal of 25 times inflation-adjusted spending after netting out a \$1,294 per month benefit, by saving 10% of his take-home pay (and adjusting his standard of living every year by the other 90% of your raises), Jerry never really makes much progress to retirement at all, as his standard of living and the necessary retirement funding ramps up as quickly as the savings itself, and a huge retirement gap remains at the end.

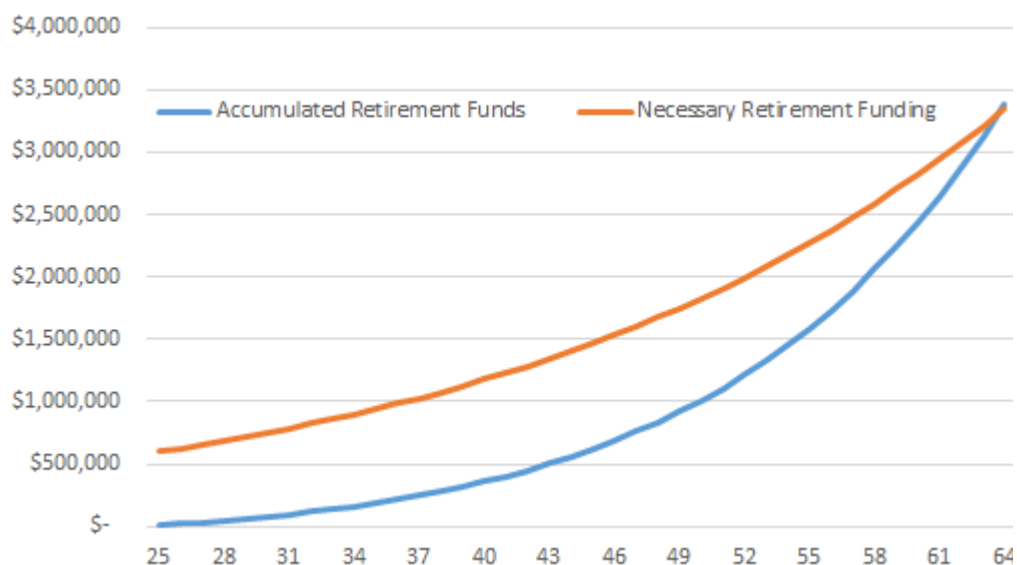
Figure 2: Saving 10% per year of income – funding gap



Source: Nerd's Eye View 2014

Ultimately, to make this approach work, it takes a massive 20% annual savings rate to accumulate about \$3.4 million of wealth in 40 years, for Jerry to be able to fund the remaining 80%-of-take-home-pay standard of living in retirement (again, after netting out government benefits). Notably, the reason this works is not "just" because Jerry saves twice as much, but because he needs a bit less to retire when his standard of living is lower (because he was "only" spending 80% of his annual take-home pay).

Figure 3: Saving 10% of income vs 20% of income



Source: Nerd's Eye View 2014

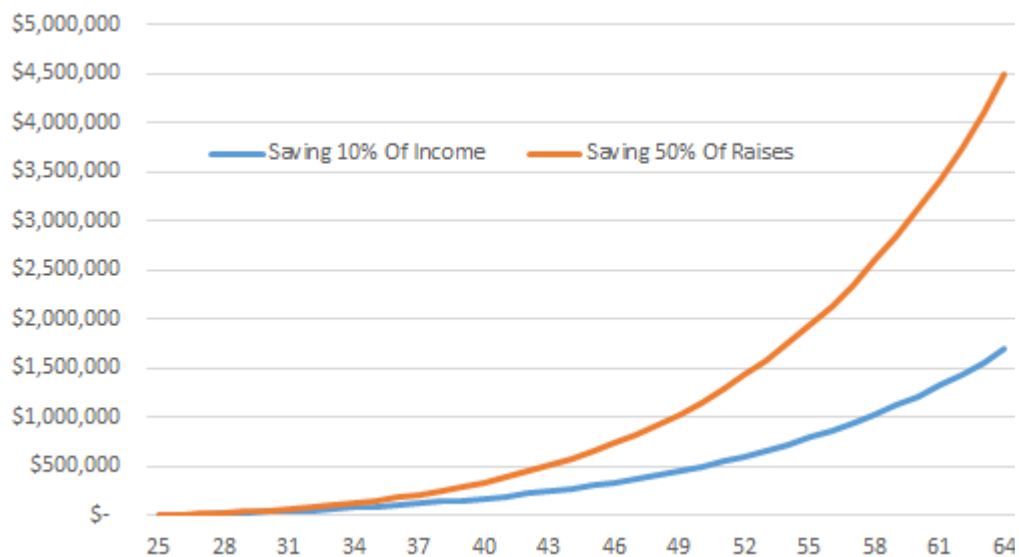
TRY SPENDING 50% OF PAY RISES INSTEAD

As a sheer accumulation approach, saving a percentage of your income (or take-home pay) every year is not a bad way to go, and leads to a steadily rising contribution to savings. The problem, however, as shown above, is that it also inherently directs the individual to spend the other 90% of his/her income as well, which increases the standard of living so much that there's little progress ever made towards retirement goals. The funding needed for retirement grows as rapidly as the account balance does.

By contrast, an alternative approach is to focus more significantly on spending instead, in an effort to control the rising standard of living.

For instance, assume Jerry's twin sister, Sally, doesn't save 10% of her income. Instead, she's already living on \$45,000 per year (and saving \$5,000 per year), and tries to bridge the gap by deliberately spending 50% (and only 50%) of each of her pay rises, earmarking the remainder of each pay raise to savings. Figure 4 shows how Sally's retirement savings accumulate accordingly. After 30 years, she nearly triples the savings of Jerry's 10%-of-income approach.

Figure 4: Saving 10% of income vs saving 50% of pay rises

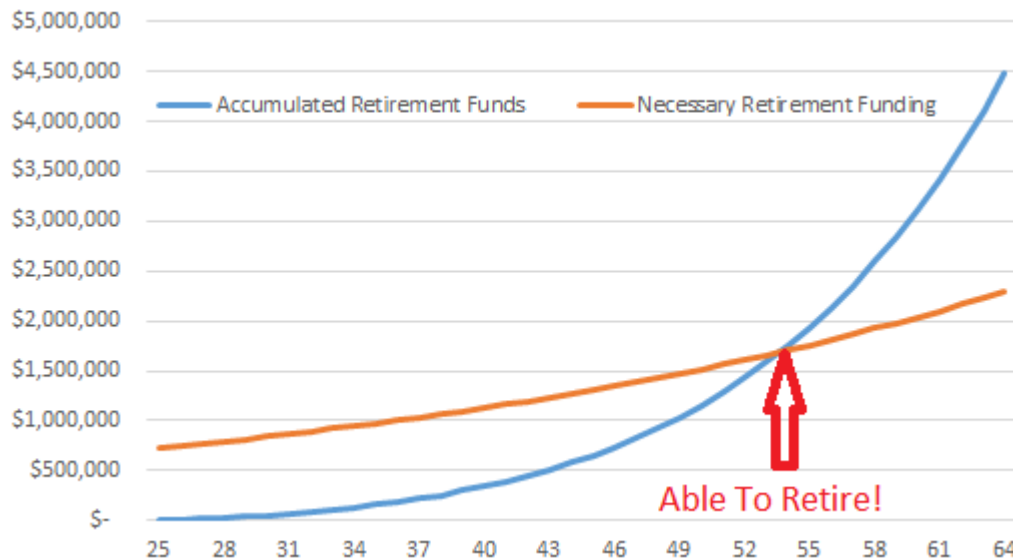


Source: Nerd's Eye View 2014

In addition, the reality is that by systematically NOT spending 50% of every raise, and thereby controlling her standard of living, the amount of money Sally needs to fund retirement never grows as much in the first place. After 40 years, by only spending 50% of each raise, Sally has a standard of living that is 30% lower than Jerry's – but without ever

needing to give up current spending or having her lifestyle go backwards (it merely grew more slowly). In fact, the increased retirement savings, combined with the decreased need for retirement funds due to the less expensive standard of living, means Sally can actually retire 10 years early, by age 55.

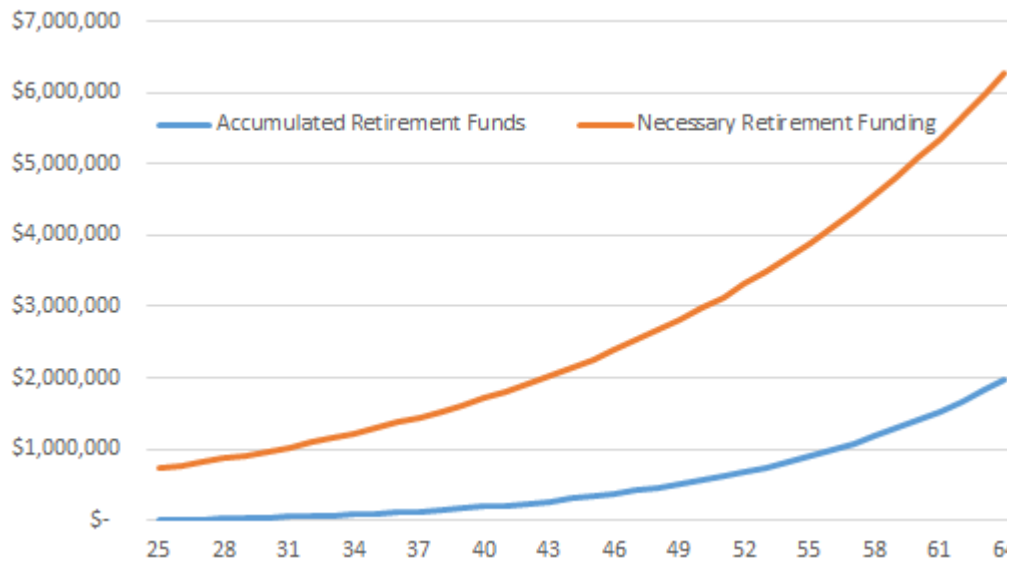
Figure 5: Saving 50% of pay rises – age of retirement



Source: Nerd's Eye View 2014

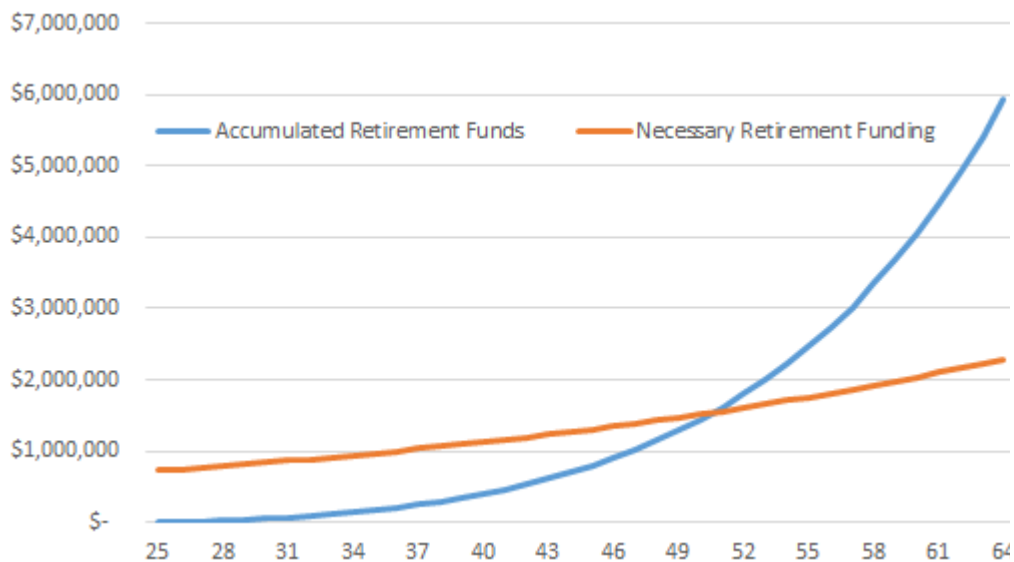
Notably, the effects are even more dramatic for those who have stronger careers that boost income more significantly than “just” 4% per year (real). For instance, if Jerry and Sally get wage growth of 5% per year, the importance of spending just 50% of each raise, and controlling the increase in the standard of living, is dramatic. Sally can now retire even earlier (around age 50), while Jerry is making absolutely no progress towards retirement because the greater income growth is just causing his standard of living to rise faster and his needs outpace his saving by even more!

Figure 6: Saving 10% of income – assuming 5% pa wage growth



Source: Nerd's Eye View 2014

Figure 7: Spending 50% of pay rises – assuming 5% pa wage growth



Source: Nerd's Eye View 2014

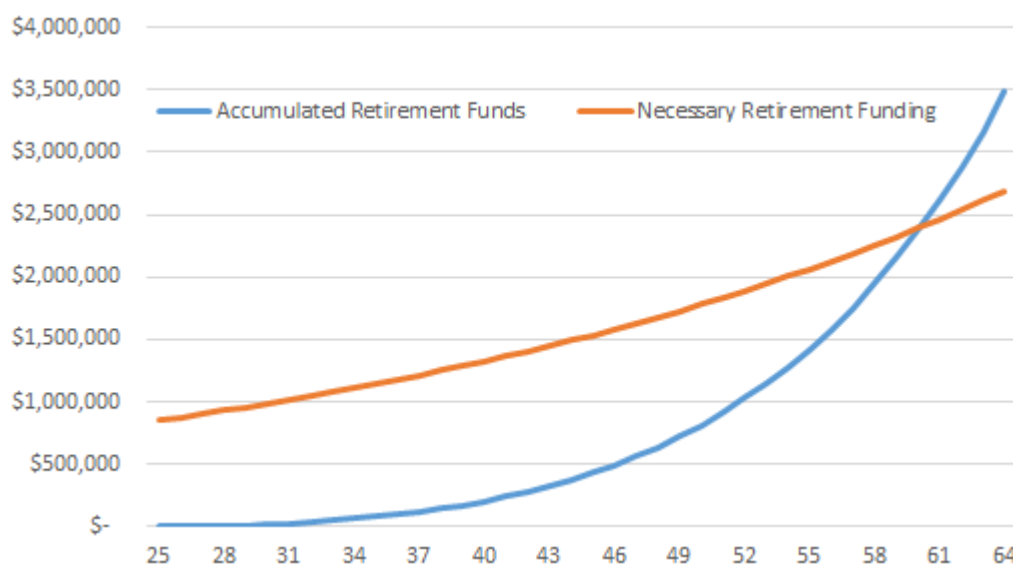
SPENDING (A PORTION OF) PAY RISES AND BEHAVIOURAL FINANCE

One of the interesting "indirect" effects of the spend-50%-of-your-raise philosophy is that it can achieve some astonishingly high savings rates. Sally starts at a 10% savings rate and begins to save 50% of every raise and, as a result, ends up with a savings rate of more than 20% after less than a decade, and is saving more than 30% of income after 20 years. These

high savings rates – along with the reducing spending that inevitably accompany them – are the primary reason Sally can retire a decade early, while Jerry still isn't even half way to his retirement goal despite starting to save 10% of his income every year beginning in his mid-20s. Even if Sally has to slow her savings pace a bit later (as if her wage growth is low enough, her spend-50%-of-raises may eventually materially lag inflation), she's still so far ahead there is ample room for adjustment.

Notably, the spend-50%-of-your-raise approach can also be an effective means of helping someone who isn't saving at all right now, begin to do so. In essence, the approach is a form of Benartzi and Thaler's "Save More Tomorrow" program, which takes advantage of our behavioral tendencies to help us to save – by recognising that it's much easier to commit to future saving than it is to try to save today. This can work not only because we tend to irrationally discount our future commitments – the reason we tend to put off saving because retirement is so distant is the same reason we'll commit to future saving, because it too is so distant – but the approach of spend-50%-of-every-raise still fundamentally focuses on the part of income that we like – the spending! By giving ourselves permission to spend a large chunk of every raise, it suddenly feels a lot easier to save since we know every raise will be accompanied by an enjoyable spending increase. Yet, the results over the long run can be significant, as shown in Figure 8. This individual had no accumulated saving and a 0% current savings rate. After 10 years, the individual who might have said in the first place "I can't figure out how to save, there's just no money left" is saving almost 20% of income, without ever being required to give up any aspects of their current lifestyle. And, s/he is on track to retire by age 60 without cutting current spending at all.

Figure 8: Spend 50% of pay rises – starting from \$0 savings



Source: Nerd's Eye View 2014

The focus on saving pay rises also shifts the focus to the importance of getting those in the first place. In fact, the impact of pay rises on the ability to save in the future is so powerful, young adults may actually be far better investing into their careers and training in their 20s. This is supported by some recent research suggesting that pay raises are not evenly distributed through our careers in the first place. Instead, real pay increases may be as much as 2% to 3% per year above inflation for the first 20 years or so, but then level off to being just even with inflation. Which means it's absolutely crucial to spend "just" 50% of pay raises in the early years, or the accumulator's standard of living will ramp up so much in their 20s and 30s than they'll never be able to bridge the gap by trying to save more in their 40s and 50s.

The bottom line, though, is simply this: an effective retirement saving strategy should consider not only how much of income to save, but also how those savings habits can impact spending habits as well. A strategy to save a percentage of income is also fundamentally a strategy to spend all the remainder of income, and every pay rise thereafter, which may actually be bad advice that puts retirement increasingly out of reach even as retirement savings accumulate.

By contrast, a philosophy of focusing on spending your raises – but "just" half of each pay rise – builds a path to increased spending, but in a much more controlled manner that makes it easier to save more and more income in the future, and makes the savings needed to retire a much less daunting goal in the first place. And, for those who are struggling to save at all – or who are saving less than they wish – an approach of spending just a portion of every pay rise can be a path to better savings habits in the future as well.



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