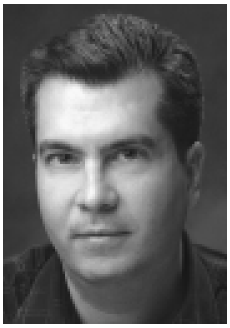

Rebalancing Acts

Dan Bortolotti

One of the most important decisions an investor will ever make is his or her asset allocation – the percentage of stocks, bonds, cash and other asset classes in their portfolio. The academic research is clear that this is by far the most significant factor in a diversified portfolio's long-term returns.

Deciding on a suitable blend of equities and fixed income is also a key way to manage risk. A balance of 60% stocks and 40% bonds is the traditional starting point – conservative or aggressive investors can adjust that up or down as they see fit.

The challenge, of course, is that asset allocations don't stay constant. As the markets move month by month, your portfolio's stock-bond mix will change, sometimes dramatically. If you had a 60-40 portfolio in mid-2008, the stock portion fell to about 45% during the crash that began that autumn. And if you were at 60-40 when the market bottomed in early 2009, then your mix would be about 75% equities today, thanks to a tremendous two-year rally.

Many investment strategies call for a portfolio to be regularly rebalanced back to its target. This can be accomplished in two ways. First, you can add new money to the underperforming asset classes to bring them up to the target allocation. Or you can sell off some of the outperforming funds and use the proceeds to prop up the laggards.

Rebalancing has two potential benefits. The first is that it helps control risk by keeping an investor's asset allocation more or less consistent. The other advantage – assuming you have the discipline – is that it encourages you to sell high and buy low, which is the exact opposite of what most of us are inclined to do. That might lead to higher returns over the long run.

A Case Study in Rebalancing

That's the theory, anyway. But I wanted to know how things would have worked out in practice for investors who religiously rebalanced their portfolios over the last 20 years. So I ran the numbers using two decades of historical index data.

I assumed that two investors – let's call them Norman and Reba – started on January 1, 1991 with $10,000 in a globally diversified portfolio of 20% Canadian equities, 20% U.S. equities, 20% international equities and 40% Canadian bonds. Norman never touched his portfolio for 20 years, while Reba rebalanced back to the target allocations annually on January 1.

Table 1 shows what their portfolios would have looked like on December 31 of each year. The percentage in the last column indicates how much larger (or, in the case of a negative number, smaller) Reba's portfolio would have been because of her rebalancing strategy.

Does Rebalancing Enhance Returns?

The first question investors are likely to ask is, "Would

TABLE 1 - THE EFFECT OF REBALANCING A $10,000 PORTFOLIO (1991–2010)

	Norman's portfolio (never rebalanced)	Reba's portfolio (rebalanced annually)	Balancing advantage
1991	$11,962	$11,962	0.00%
1992	$12,820	$12,766	-0.42%
1993	$15,785	$15,865	0.51%
1994	$16,209	$16,287	0.48%
1995	$19,463	$19,490	0.14%
1996	$22,763	$22,740	-0.10%
1997	$26,911	$26,374	-2.00%
1998	$32,191	$30,784	-4.37%
1999	$36,378	$34,675	-4.68%
2000	$36,380	$35,480	-2.48%
2001	$34,598	$34,124	-1.37%
2002	$31,293	$31,783	1.57%
2003	$34,673	$35,616	2.72%
2004	$37,428	$38,708	3.42%
2005	$40,895	$42,494	3.91%
2006	$46,381	$48,324	4.19%
2007	$46,460	$48,507	4.41%
2008	$38,972	$41,444	6.34%
2009	$44,245	$47,188	6.65%
2010	$48,307	$51,104	5.79%

annual rebalancing have led to higher returns?" If we go right to the bottom row in Table 1, the answer seems to be yes. Reba's rebalanced portfolio has 5.79% more money than Norman's. Over the full 20-year period, the annualized returns work out to 8.2% for Norman and 8.5% for Reba. An extra 30 basis points (30/100s of 1%) compounded over the long term is a significant benefit.

However, rebalancing did not enhance returns over every time frame. At the end of 1995 and 1996, the portfolios were virtually neck and neck, and over the next six years, Norman pulled ahead by a considerable margin. His high point came just before the dot-com bubble burst in early 2000, when Norman's account was about 5% larger. Reba did not regain the lead until 2002, but since that time she's stayed out in front, peaking in 2009 when her portfolio was almost 7% larger.

Clearly, then, there are times when rebalancing a portfolio will lead to lower returns for several years running. This is most likely to happen during prolonged trends, which explains why Norman outperformed during the relentless bull market of the mid- to late 1990s. Rebalancing during this period would have meant continually taking money out of soaring equities and pouring it into lagging bonds. On the other hand, when asset classes are highly uncorrelated and very volatile – as they have been since 2008 – then rebalancing is more likely to result in higher returns.

There's another interesting pattern here. If stocks outperform bonds over the long term – and we wouldn't invest in stocks if we didn't expect this – then a portfolio that is never rebalanced should naturally become more and more heavily weighted to equities over time. If we assume an annualized return of 10% for stocks and 5% for bonds, then a 60-40 portfolio would be almost 80% stocks after 20 years.

But that's not at all what happened from 1991 through 2010. The overall stock-bond mix ended up almost exactly the same after two full decades. Indeed, the bond allocation actually crept up a little, from 40% to 41%. The reasons for this surprising result? A 20-year trend of falling interest rates resulted in outstanding bond returns. The rising loonie also gutted foreign equity returns that were low to begin with. As a result of these overlapping trends, bonds actually outperformed a globally diversified portfolio of stocks over the last 20 years:

TABLE 2 - ANNUALIZED ASSET CLASS RETURNS (1991–2010)

Canadian equities (S&P/TSX Composite)	9.8%
U.S. equities (S&P 500 in Canadian dollars)	8.3%
International equities (MSCI EAFE in Canadian dollars)	5.4%
Canadian bonds (DEX Universe)	8.3%

During any time frame when stocks outperform bonds by four or five percentage points, rebalancing might be expected to lower returns. The period from 1991 through 2010, therefore, may have been an unusually good one for the strict rebalancer. Over the next 20 years, if stock and bond returns are closer to their historical norms, rebalancing may not deliver that extra 30 basis points a year.

The Cost of Rebalancing

For this illustration, I assumed that Reba was able to rebalance her portfolio every year for free. If you're using no-load mutual funds in an RRSP or TFSA, then this is easy enough to do because you'll pay no fees to buy or sell, and there are no taxes to worry about. However, investors who use exchange-traded funds (ETFs) will incur brokerage fees every time they buy and sell on the rebalancing date. A few trades each year in a large portfolio is not a big expense, but if your account is small and your commissions are high – or if you have a complex portfolio with many asset classes – the cost of rebalancing may overwhelm the benefits.

Taxes are another consideration for investors with non-registered accounts, since selling your winners each year can trigger capital gains. If you're an ETF investor, one way to avoid these is to use a loss-harvesting strategy, whereby you sell both winners and losers to reduce your net gains. Then you repurchase new ETFs that track slightly different indexes in the same asset classes – for example, you might sell an S&P 500 fund and buy back a total-market fund. This will give you almost identical market exposure, yet it avoids the CRA's rule about superficial losses. (For more information, see my two-part article "Tax-Loss Selling with Index Funds" at canadiancouchpotato.com.)

Another way to reduce your costs is to rebalance your portfolio only when you add new money – that is, by adding to the lagging funds without trimming the outperformers. This is especially attractive in a non-registered account, because it won't trigger capital gains. It also works well for RRSP investors who make annual lump-sum deposits rather than monthly contributions.

Playing the Percentages

Rebalancing once a year (or some other fixed interval) isn't the only option for investors who want to manage risk and strive for higher returns. Another method is to pull the trigger whenever your target allocations are off by a specified threshold. For example, financial author Larry Swedroe recommends the "5%/25% rule," which says you only need to rebalance when any asset class is off target by an absolute 5%, or a relative 25%.

For example, if your target bond allocation is 40%, you would rebalance anytime it was off by an absolute 5% – above 45%, or below 35%. The relative 25% figure is more useful for small allocations. If an asset class has a 10% target, you'd rebalance anytime it dipped below 7.5% or rose above 12.5% (because 2.5% is 25% of 10%). This method is more complex than the calendar method, and it requires you to monitor your portfolio closely. It may also be harder emotionally, because you'll be rebalancing after every significant market correction and rally, selling what's hot and buying what's not.

Whichever method you choose, the key is to stick to it. If you have an investment policy statement, incorporate your rebalancing strategy to enforce discipline. It's also important to have realistic expectations about what rebalancing will accomplish: the lesson of the last 20 years is that rebalancing should be thought of primarily as a risk-management strategy. Any additional returns you might enjoy are a bonus.

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