IMPACTS OF ROTHIFICATION

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RETIREMENT DISCOVERIES

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The new administration is proposing a major tax reform that would simplify tax brackets and reduce tax rates. To balance the budget, however, tax revenue needs to be generated elsewhere. For instance, itemized deductions could be restricted or workers could be required to pay taxes upfront when saving for retirement (Roth accounts) instead of through pre-tax contributions (Traditional accounts).

How would this "*Rothification*" of retirement plans affect workers? Based on numerical illustrations and behavioral considerations, we believe that a forced switch from traditional defined contribution (DC) accounts to Roth accounts could undermine workers' efforts towards retirement readiness.

The loss of the immediate tax deferral, despite the future benefits of Roth, might weaken workers' incentive to save. Absent other routes, a partial *Rothification* would likely be less hurtful financially for workers, and politically more feasible, than a complete replacement.

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WEALTH ACCUMULATION IN DC PLANS

Let's look at a few workers to assess the impact of *Rothification*. Suppose the workers contribute, pre-tax, 6% of their earnings to a traditional account and pay income tax on their withdrawals. These savings, plus investment returns, would likely put them in a tax bracket one notch lower in retirement than in working years, as listed in Figure 1, which is estimated based on detailed federal tax schedules.

Alternatively, suppose workers were to use Roth accounts only. Assume they would mobilize the same level of 6% of their earnings for retirement purpose but use part of it to pay tax before depositing to Roth. That is, they would keep their take-home pay roughly unchanged to maintain their lifestyle. The dollar contributions to Roth would thus be smaller but there would be no income tax on Roth withdrawals. Differences in wealth accumulation through a traditional vs. a Roth account are reported in Figure 1.

FIGURE 1: Potential opportunity cost of *Rothification* on wealth accumulation

	A	B	C	D
Initial earnings at age 25	$25,000	$50,000	$100,000	$200,000
Peak marginal tax rate in working years	15%	25%	28%	33%
Marginal tax rate in retirement	10%	15%	25%	28%
Account balance ($) in retirement, after tax				
Traditional only	$439,088	$831,129	$1,466,699	$2,816,062
Roth only	$414,695	$733,350	$1,412,724	$2,620,502
Roth balance relative to traditional				
Complete *Rothification*	-6%	-12%	-4%	-7%
Half *Rothification* ($ balance not shown)	-3%	-6%	-3%	-3%

Notes: Workers' pay raise is assumed to be 1% above inflation (1%+2.5%= 3.5%) until age 55 and 0.25% above inflation until retirement at age 65. A constant 6.5% investment return is assumed for simplicity.
Source: Illustrations by Northern Trust Retirement Solutions.

ASSESSING THE FINANCIAL IMPACT

If traditional accounts were replaced with Roth accounts, workers would likely be worse off, with fewer resources to support retirement, by 4-12%, after consideration of taxes. This indicates that a complete *Rothification* would undermine workers' retirement readiness. For the worker who is assumed to make $50,000 now, the *Rothification* would be very impactful – a traditional account would have allowed her to defer tax and benefit from a large drop in tax bracket upon retirement.

An alternative 50-50 split between traditional and Roth accounts -- "half *Rothification*" -- would soften the impact, reducing wealth by 3-6%. This could be more realistic for workers to swallow.

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State income taxes are ignored in this analysis, given that they vary widely. If workers fall into lower federal tax brackets upon retirement, odds are good that they will also have lower state tax brackets. Factoring in state tax, the lost opportunity of wealth accumulation could be larger than illustrated above.

We assume employer contributions will continue to be tax deductible so that the incentive for employers to sponsor retirement plans remains intact. As such, employer match does not tilt the scale for or against Roth.

WEIGHING THE BEHAVIORAL INFLUENCE

Rothification may weaken workers' mental commitment to retirement savings. Humans have the tendency to postpone effortful actions, opting to enjoy the moment instead. It is harder for workers to pay tax now and project and embrace the potential advantage of Roth in the remote future than to capture the "instant gratification" of tax benefit through a traditional account.

Workers are generally aware of the importance of saving for retirement, but often succumb to immediate temptations that lead to lack of savings for retirement. Roth alone would run the risk of demoralizing workers' combat against under-saving.

A complete reversal to Roth would possibly create an image of governmental fickleness about retirement. The "tax-free" expectation of Roth withdrawals has some embedded uncertainty in terms of potential tax code changes over time – nothing is ever "off the table," as would be just demonstrated by a full *Rothification* maneuver. This would ratchet up workers' skepticism and chill down their contributions toward retirement plans.

CONSIDERING FUTURE TAX REFORM

The ongoing legislative activities could make the future tax system significantly different than the current one. The comparison results would change quantitatively. The above experiments, however, would remain valid. That is, the wealth accumulation through a traditional account would be compared with that through a Roth account, both under the new tax regime. Traditional accounts would still appeal to many workers, as long as the shift of tax brackets is downward upon retirement.

CONCLUSION

This brief discussion is not against Roth plans entirely. Without much elaboration, we summarily highlight that Roth is worth serious consideration for many workers for its merits of tax diversification and withdrawal flexibility. Nonetheless, we do not believe a forced complete switch from traditional to Roth accounts (full *Rothification*) is a sensible idea.

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