Visualizing the After-tax Value of Required Minimum Distributions When Still Working Versus Not Working

Julie Hansen, Charles W. Lamden School of Accountancy, Fowler College of Business, San Diego State University, San Diego, CA 92182, 619-594-5070, *julie.hansen@sdsu.edu*
Hung C. "Leon" Chan, Charles W. Lamden School of Accountancy, Fowler College of Business, San Diego State University, San Diego, CA 92182, 619-594-5070, hchan@sdsu.edu
Nathan Oestreich, Charles W. Lamden School of Accountancy, Fowler College of Business, San Diego State University, San Diego, CA 92182, 619-594-5070, drno@sdsu.edu

ABSTRACT

A taxpayer just turned age-73. Now what? Are they now required to take required minimum distributions, affectionately known as RMDs, from traditional retirement accounts? An exception applies to "employer" accounts for persons who are still working. This study is a financial analysis of the RMD decision, with visual graphics. Results indicate that there is no after-tax advantage gained by delaying RMDs, which may require continuing to work. Other tax savings and deferral opportunities might be available.

KEY WORDS: Required Minimum Distribution (RMD), Traditional Retirement Account, Still Working, Qualified Charitable Distributions, Present Value, Future Value

INTRODUCTION

Required minimum distributions, known to many simply as RMDs, are a part of reaching advanced age for savers. These distributions are "required" once a person with qualified defined contribution retirement plans reaches age 73. The Secure act 2.0 increased the age at which RMDs are required from 72 to 73, which remains in effect until 2033 when it goes to 75 (Secure, § 302).

The distributions for the year when this age is reached are required by April 1 of the year after reaching age-73. The distributions for the year during which one attains age-73 year and for the year they reach age-74 are required by the end of the latter year. As a result, to avoid piling more income into the age-74 year, distributions may be advised in the age-73 year.

PLANNING FOR RMDs

Planning can be done to accomplish a desirable result, but most importantly, owners of traditional defined contribution account must be aware of the rules and the hazards related to the failure to take a required distribution. Beginning in 2024, the 50%, yes 50%, penalty for failure to take RMDs has been reduced to 25% and is further reduced to 10% if corrective distributions are made on a timely basis (Secure, § 302).

This study, although not an attempt to cover the universe of RMDs, will survey the rules for people who are still working and their opportunities to defer taxes with appropriate planning.

Paying ordinary income tax on RMDs—only required for distributions from traditional retirement accounts, which include Individual Retirement Accounts (IRAs), § 401(k) plans, § 403(b) plans, and Simplified Employer Pensions (SEPs)—can be bad enough. After all, they are on top of one's other income and can affect one's Medicare premium(s). But, failure to make the required RMDs can trigger the penalty.

Research shows that good savers do not take distributions before they are required. Apparently, if they do not need the money, they would prefer to defer the tax. About 84% of people reaching the RMD age took the required minimum amounts (CNBC).

Let's say an account holder is still working and can defer the distributions for five years. The benefit varies depending on the individual's marginal tax rate and the discount rate. Using \$100,000 in deferred distributions, a 33 percent marginal tax rate (in all years) and a discount rate of 6 percent, the deferral is worth \$8,340, or 8.34 percent of the amount deferred:

$$\$33{,}000 - \$33{,}000 / 1.06^5$$

Of course, the savings increase if either the marginal tax rate or the discount rate is higher. Essentially, these assume that the individual does not need the money (i.e., the tax is deferred but so is the cash flow).

Sample Calculations

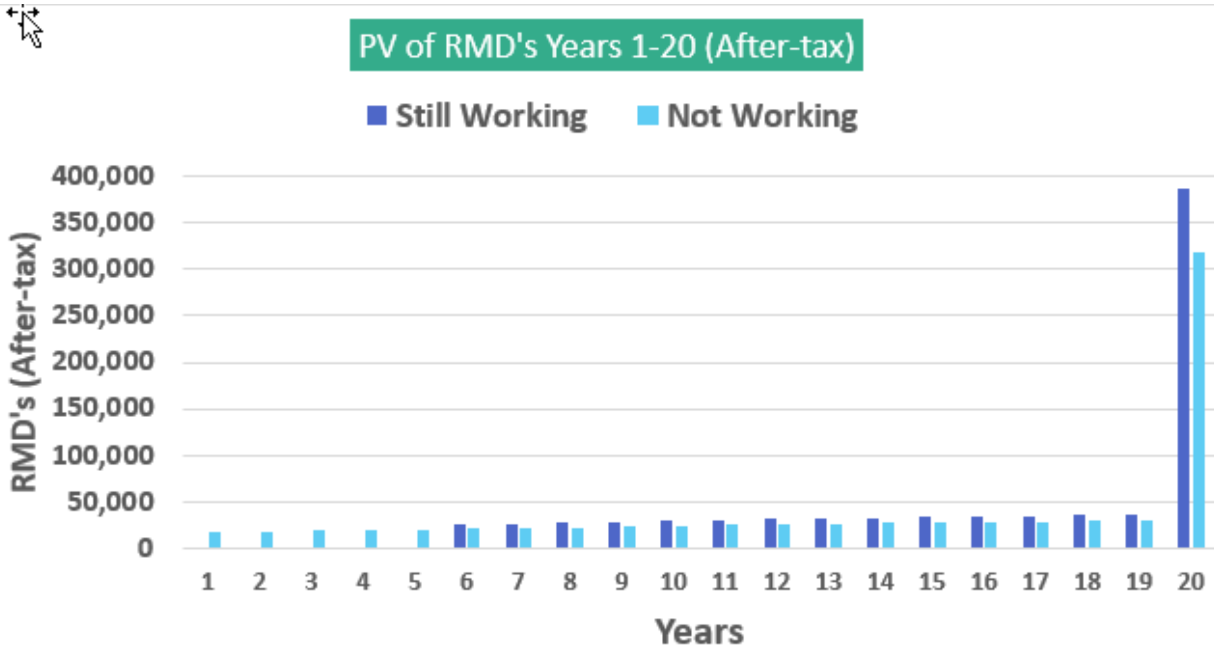
The \$100,000 number is the rough approximate amount of RMDs that would be required over 5 years on account(s) totaling \$475,000 (i.e., if the accounts totaled \$475,000 and RMDs were required over 5 years beginning at age 73, the RMDs would be about \$100,000). By continuing to work, and keeping funds in employer sponsored plans, these RMDs can be deferred.

Table 1: RMDs for Various Balances Over an Assumed 5-year Deferral Period (2023).

Opening Balance	Total RMDs for 5-years	age-73 25.6	age-74 24.7	age-75 23.8	age-76 22.9	age-77 22
\$ 500,000	\$ 105,344	\$ 19,531	\$ 20,243	\$ 21,008	\$ 21,834	\$ 22,727
\$ 750,000	\$ 158,016	\$ 29,297	\$ 30,364	\$ 31,513	\$ 32,751	\$ 34,091
\$ 1,000,000	\$ 210,688	\$ 39,063	\$ 40,486	\$ 42,017	\$ 43,668	\$ 45,455
\$ 475,000	\$ 100,077	\$ 18,555	\$ 19,231	\$ 19,958	\$20,742	\$ 21,591

The second row (i.e., 25.6, 24.7, etc.) represents the denominator for determining the portion that must be withdrawn (2023). For example, the first-year requirement for \$1 million is \$1 million / 25.6, or \$39,063 and the five-year total is \$210,688. If these amounts are in employer sponsored plans, the RMDs are not required, so they can be deferred along with any additional earnings.

Note: This five-year time period was selected because it fits the California State University Faculty Early Retirement Program (FERP). Other retirees may have more or less flexibility.


PV of RMD's Years 1-20 (After-tax)
Still Working
Not Working
RMD's (After-tax)
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Years

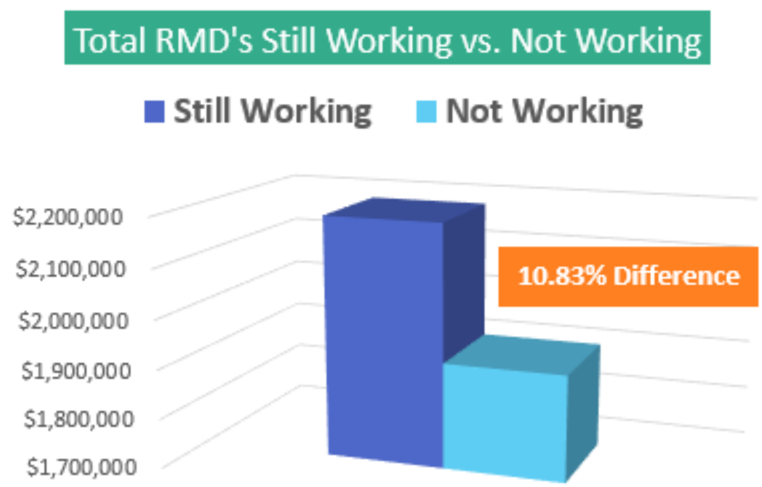

Total RMD's Still Working vs. Not Working
Still Working
Not Working
$2,200,000
$2,100,000
$2,000,000
$1,900,000
$1,800,000
$1,700,000
10.83% Difference

Table 2: RMDs With and Without the "Still Working" Assumption (Oestreich)

		Still Working			Not Working		
Factor	Year	RMD	Present Value of RMD After-tax	Still Working Taxes	RMD	Present Value of RMD After-tax	Not Working Taxes
25.6	1	$ -	$ -	$0	$18,555	$17,504	$5,567
24.7	2	$ -	$ -	$0	$20,403	$18,158	$6,121
23.8	3	$ -	$ -	$0	$22,434	$18,836	$6,730
22.9	4	$ -	$ -	$0	$24,668	$19,539	$7,400
22	5	$ -	$ -	$0	$27,124	$20,268	$8,137
21.2	6	$36,085	$25,438	$7,631	$29,682	$20,925	$8,905
20.3	7	$39,675	$26,386	$7,916	$32,636	$21,705	$9,791
19.5	8	$43,399	$27,229	$8,169	$35,699	$22,398	$10,710
18.7	9	$47,460	$28,091	$8,427	$39,040	$23,107	$11,712
17.9	10	$51,888	$28,974	$8,692	$42,682	$23,833	$12,805
17.1	11	$56,712	$29,875	$8,963	$46,650	$24,575	$13,995
16.3	12	$61,966	$30,795	$9,239	$50,972	$25,332	$15,292
15.5	13	$67,683	$31,732	$9,520	$55,675	$26,102	$16,703
14.8	14	$73,400	$32,465	$9,740	$60,377	$26,705	$18,113
14.1	15	$79,542	$33,190	$9,957	$65,430	$27,302	$19,629
13.4	16	$86,131	$33,905	$10,172	$70,850	$27,890	$21,255
12.7	17	$93,184	$34,605	$10,382	$76,651	$28,466	$22,995
12	18	$100,717	$35,285	$10,586	$82,847	$29,025	$24,854
11.4	19	$107,785	$35,624	$10,687	$88,661	$29,304	$26,598
10.8	20	$1,243,834	$387,833	$116,350	$1,023,152	$319,024	$306,946
Totals		**$2,189,461**	**$821,430**	**$246,428**	**$1,914,187**	**$769,998**	**$574,256**
Difference of Present Value of RMD After Tax					**$51,432**		
Percent of $475,000					**10.83%**		
Difference in Taxes							**$327,828**

Assumptions: Growth rate = 10%; Discount rate = 6%; Tax rate = 30%

This model is a first attempt to illustrate a process for measuring the effects of electing to defer distributions when one is still working. It is entirely possible that these benefits will affect the decision to continue working.

The accounts are deemed to be liquidated in Year 20. By the end of 20 years, the present value of the liquidated accounts is $51,432 greater for the "still working" account, which is more than 10 percent greater than the "not still working" account. This model provides some indication of the relative value of utilizing the employer sponsored account for those who are still working, with no degree of precision.

The RMDs in Table 2 were based on the tentative balances in the respective accounts. Each year the balance is adjusted for earnings at 10% reduced by the amount distributed. These account balances are disclosed in Appendix 1.

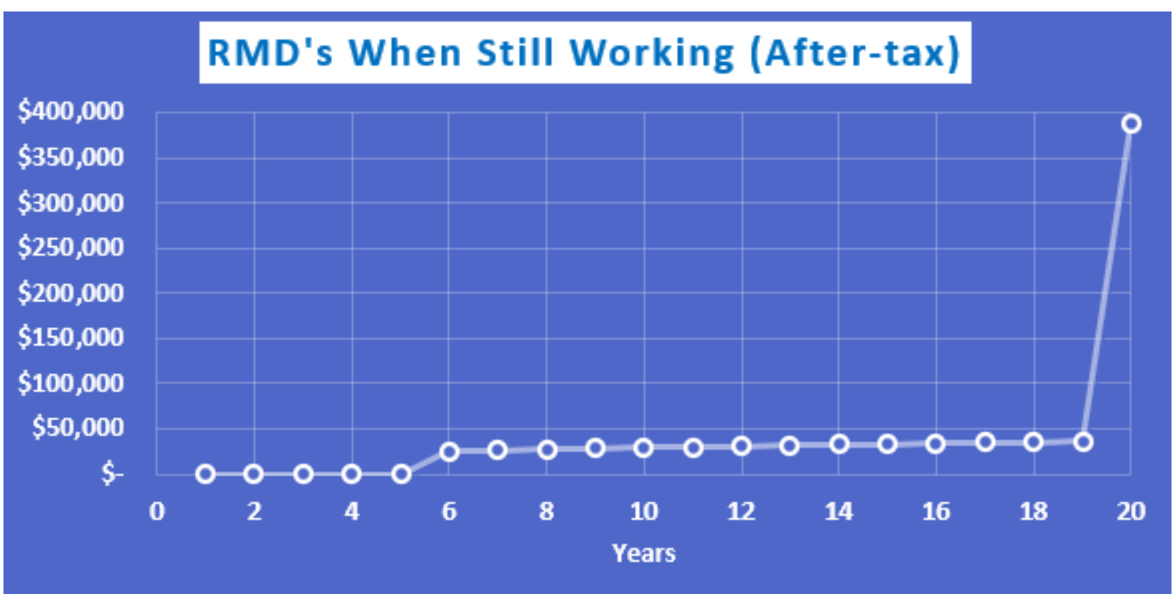
Time Value of Money

The next logical step would be to build the time value of money into the analysis. So far, the analysis assumes that the saver does not need, or want, the cash flow for personal spending or investing outside of the retirement account. Or, maybe just indifference.

Assuming that earnings, or opportunity costs, outside the retirement plan could be 7% (i.e., more conservative than the 10% assumed inside), the after-tax yield would be 4.9% (7% x *(1 – 30%)), the benefit of deferring distributions is reduced somewhat. Appendix 2 provides some rudimentary calculations that will be improved upon.

Still Working

Whether one is still working is determined based exclusively on employment on the last day of the calendar year. Planning opportunities that are the focus of this paper abound and are covered in the following paragraphs.



Retirees should be sure to check with their account sponsors. It is possible that once one stops working and starts RMDs, that they continue after the individual starts working again.

Another factor is that when one continues to work, they can defer additional amounts of compensation through cash or deferred arrangements, or CODAs. The limits for 2023 for such contributions by anyone age-50 or older is $30,000 (effectively, the limit is $30,000 or 100% of compensation) (IR-2022-188).

Setting Every Community Up for Retirement Enhancement Act of 2019.

Under prior law, RMDs were required for the year in which the plan owner reached age 70 ½ (distributions required by April 1 of the following year) [IRC § 401(a)(9)(C)]. This all changed with the SECURE Act of 2019 [5]. For 2020, no RMDs were required and beginning in 2021, RMDs are required beginning in the year an individual reaches age 72. The distribution for the year that the person reaches age 72 can be delayed as late as April 1 of the following year [IRC § 401(a)(9)(I)].

> Example: Alice reached the young age of 72 in 2022, having accumulated employer sponsored traditional defined contribution retirement accounts (e.g., § 401(k)) worth $1 million on January 1, 2022. Alice's RMDs from the account are zero as long as she is still working. If the accounts were not related to her employment, even if Alice is still working, RMDs of $39,063 in 2022, $40,486 in 2023, $42,017 in 2024, $43,668 in 2025 and $45,455 in 2026, assuming the account retains its value of $1 million (e.g., earnings equal withdrawals). The 2021 contribution could be made by April 1, 2020, but the 2022 contribution is also due in 2022, by year end.

EMPLOYER AND NON-EMPLOYER PLANS

As noted above, seniors are not required to take RMDs from employer plans if they are still employed on the last day of the year. This affects one's selection of a retirement date since employment status on December 31 controls for the entire year.

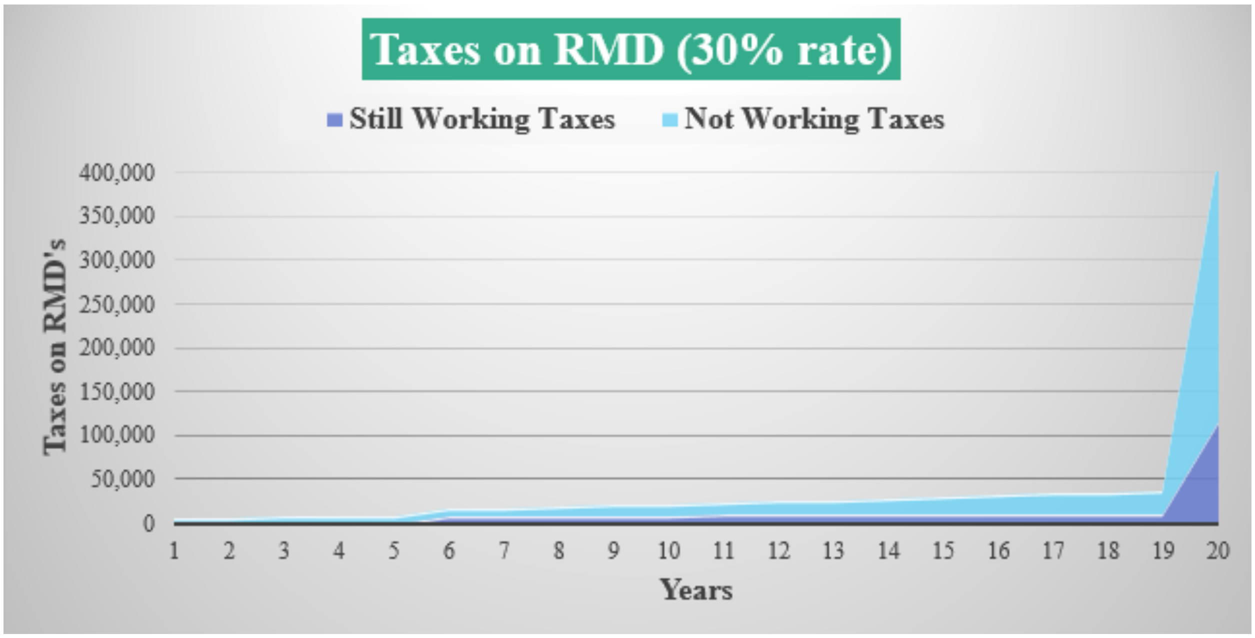
Certainly, this provides and incentive to continue working for many individuals. Even part-time employment may be sufficient.

Many will have other, non-employer accounts. They can roll these other accounts into the employer plans, assuming the employer plan will accept the rollovers [4]. One must consider early withdrawal penalties that may be triggered upon the rollover.

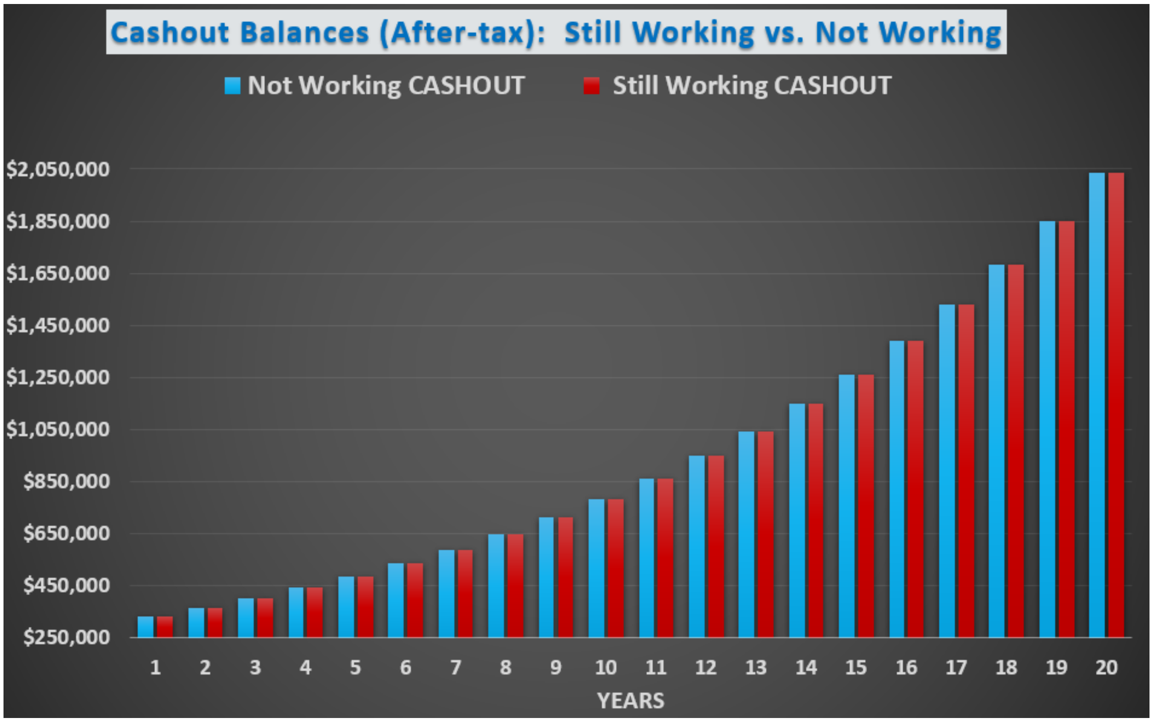
> Example: Felix, who turned 72 in 2022, has $500,000 in employer related defined contribution retirement accounts and $500,000 in other retirement accounts. If Felix is still working, there are no RMDs required for the employer related accounts, but RMDs of $19,531 in 2022, $20,243 in 2023, $21,008 in 2024, $21,834 in 2025 and $22,737 in 2026, are required. If the sponsor of the employer related plans will accept rollovers from the other plans, Felix can execute rollover before January 2022, thereby eliminating all RMDs.

BENEFITS OF DEFERRING THE DISTRIBUTIONS AND TAX

Intuitively, taxpayers and their planners anticipate that deferring taxes is beneficial. Reducing the present value of taxes paid is intuitively always good. By delaying RMDs or other distributions defers taxes. The present value of the taxes paid has been calculated (Graph 1) under the two scenarios. Changing the constant tax rate or the discount rate results in variations that are proportionately similar.



Delaying taxes, in this case, is not without a cost. The cost is that you must delay the distributions. The research question is whether deferring the distributions to defer the taxes works to the advantage of the taxpayer, or is it neutral, or detrimental. To analyze this, the future value of lifetime distributions (current and future, lifetime assumed to 20 years) after-tax, assuming a constant tax rate, have been calculated (Graph 2). It is assumed that over the lifetime, distributed funds are invested in vehicles paying the same rate as would be earned inside the retirement plan.



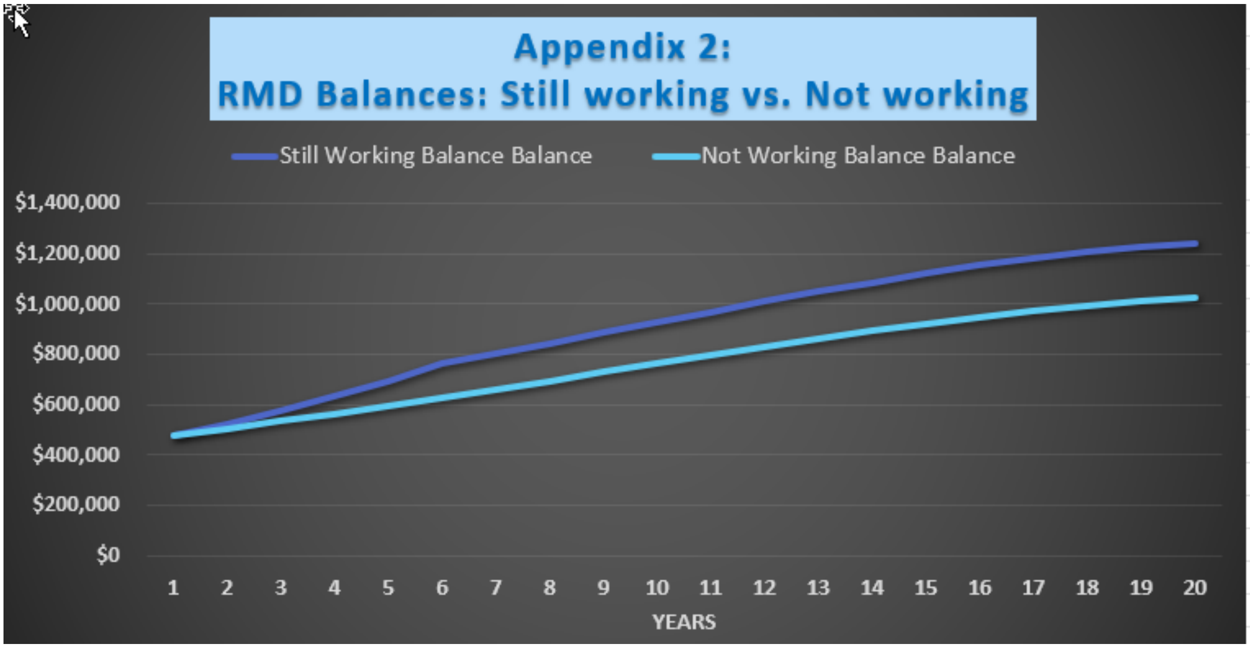
These results indicate that it is neither beneficial nor detrimental to delay distributions as long as larger distributions do not cause the tax rate to increase. With careful planning, a taxpayer can spread distributions over a number of years to avoid higher tax rates in their personal situation.

Taking money out of the retirement account could provide other tax deferral opportunities. Future research will investigate the possibilities using Roth rollovers. capital assets where gains are taxed at preferential rates, and others.

CONCLUSION

This study provides graphical depictions of the effects of delaying RMDs from employer accounts (the deferral only applies to employer accounts for the employer for which the employee is still working). It has been demonstrated that it is not simply a deferral for the years while the employee is still working (i.e., the benefit exceeds that from a simple tax deferral for the number of years working).

It is much more complex than that. If tax deferral is the only consideration, that might affect the worker's decision to work, or not. The analysis in this paper and the graphical illustrations indicate that delaying the distributions provides no after-tax benefits assuming a constant tax rate.



APPENDIX 1 -- Account Balances Used in Table 2

Year	Still Working Balance	Not Present Working Balance	After-tax Value RMD	Earnings at 4.9%
1	$475,000	$475,000	$107,504	$43,439
2	$522,500	$503,945	$18,158	$16,502
3	$574,750	$533,937	$18,836	$16,318
4	$632,225	$564,897	$19,539	$16,136
5	$695,448	$596,718	$20,268	$15,957
6	$764,992	$629,267	$(4,513)	$(3,387)
7	$805,407	$662,511	$(4,681)	$(3,349)
8	$846,272	$696,126	$(4,831)	$(3,295)
9	$887,501	$730,040	$(4,984)	$(3,240)
10	$928,791	$764,004	$(5,141)	$(3,186)
11	$969,783	$797,723	$(5,301)	$(3,132)
12	$1,010,048	$830,845	$(5,464)	$(3,077)
13	$1,049,087	$862,957	$(5,630)	$(3,023)
14	$1,086,313	$893,578	$(5,760)	$(2,948)
15	$1,121,545	$922,559	$(5,889)	$(2,873)
16	$1,154,157	$949,385	$(6,015)	$(2,798)
17	$1,183,441	$973,474	$(6,140)	$(2,722)
18	$1,208,601	$994,170	$(6,260)	$(2,646)
19	$1,228,744	$1,010,739	$(6,320)	$(2,547)
20	$1,243,834	$1,023,152	$(68,810)	$(26,433)
			$(51,432)	$39,694

APPENDIX 2 – PRESENT VALUE OF DISTRIBUTED AMOUNTS AND AFTER-TAX EARNINGS THEREOF

YEAR	STILL WORKING BALANCE	NOT WORKING BALANCE	PRESENT VALUE RMD	AFTER-TAX EARNINGS AT 4.9%
1	$475,000	$475,000	$17,504	$43,439
2	$522,500	$503,945	$18,158	$16,502
3	$574,750	$533,937	$18,836	$16,318
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20	$1,243,834	$1,023,152	$(68,810)	(26,433)
			$(51,432)	$39,694

(With further calculations the Net Cashout is EQUAL Still working vs. Not Working)

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