

Company stock in defined contribution plans: An update

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- Since 2005, the incidence of company stock in defined contribution (DC) plans has declined. Fewer plans offer employer stock and fewer participants hold concentrated company stock positions in their retirement savings accounts. A higher proportion of plans offering company stock now impose restrictions on the option.

Background

Employers continue to evaluate company stock in light of litigation and single-stock risk as well as its impact on retirement accumulations. Plan sponsor interest surged in response to the recent *Dudenhoeffer* case.¹ We present this update of our prior research on the changing nature of company stock in employer plans.²

Our analysis of company stock is based on Vanguard recordkeeping data as of June 2014, including 1,497 sponsors with 1,901 distinct DC plans. Our interest is in the incidence of company stock and how demographic and plan design attributes are related to active participant investment decisions. Accordingly, we limit our analysis to the 2.5 million active participants with account balances greater than \$100.³

One important caveat is that our data set is subject to survivorship bias. We are only able to examine plans and participants that have survived through June 2014. We do not observe plans and participants associated with employers that went bankrupt over the period, that were acquired by another entity (whether due to financial

distress or other reasons), or that left our recordkeeping services business. For example, if a firm went bankrupt during the financial crisis of 2008–2009 and its stock became worthless, and it liquidated the plan or left our recordkeeping service business, it would not appear in our sample.

Another feature of our data is that large employers, who are more likely to offer company stock, are also more likely to sponsor multiple DC plans. As a result, participants at large companies often have more than one DC plan account with the plan sponsor. For example, participants at one company might have a 401(k) account with no company stock and a stand-alone employee stock ownership plan (ESOP) account with company stock. At another company, participants may have a 401(k)/ESOP plan with company stock and a stand-alone profit-sharing plan with no company stock. Where multiple plans are offered by a sponsor, we have aggregated participant-level account balances so as to more accurately quantify the effect of company stock on the participant's entire DC account wealth with the current plan sponsor.

¹ In June 2014, the United States Supreme Court issued an opinion affecting plan sponsors of plans that offer company stock. In *Fifth Third Bancorp et. al. v. Dudenhoeffer*, the Supreme Court ruled that there is no presumption of prudence associated with company stock in an employer stock ownership plan. While aspects of the ruling may make it more difficult for plaintiffs to pursue so-called "stock-drop" cases, plan sponsors offering company stock are reevaluating the role that the investment option plays in their DC plans. See also *Regulatory Brief: Implications for company stock after the Fifth Third Bancorp v. Dudenhoeffer decision*, 2014 (institutional.vanguard.com).

² This research note is an update to our paper, *The evolution of company stock in defined contribution plans*, originally issued in 2012 and reissued in 2014 (institutional.vanguard.com). Please see that paper for an overview of the role of company stock in DC plans, the evolution of the legislative and regulatory implications over time, and references to prior research on company stock.

³ Active participants are those currently eligible to participate in the plan and currently making employee-elective deferrals and/or receiving employer contributions.

Changing incidence of company stock

We examined the changing incidence of company stock in Vanguard plans by analyzing a set of 1,152 plan sponsors who were continuously on our recordkeeping systems between December 2005 and June 2014. Over that period, the incidence of company stock fell within these plans. The fraction of plan sponsors offering company stock fell from 11% to 9%, a relative decline of 18% (Figure 1). The fraction of participants offered or investing in company stock declined by even larger amounts. Importantly, the percentage of participants with a concentrated stock position (greater than 20% of their total account balance) dropped by about half.

One important reason for the decline in stock concentration was plan design changes made by sponsors. Between December 2005 and June 2014, about one-third of company stock funds were closed to new money and/or eliminated from the plan (Figure 2). Closing a company stock fund to new money is often a precursor to liquidating the company stock fund.

Finally, three organizations launched new company stock funds between December 2005 and June 2014.

Plans actively offering company stock

How do sponsors offering company stock differ from those that do not? To answer this question, we examined all Vanguard plans and actively contributing participants at a single point in time in June, 2014. In this sample, 6% of sponsors were actively offering company stock to 28% of plan participants (Figure 3).⁴ Company stock plans tend to be larger, with a median participant population of 2,704 versus 236 for non-company-stock plans. Among employers actively offering company stock, 52% of actively contributing participants had an investment in company stock.

Participants in plans with access to company stock are more likely to be male. The median equity allocation of participants in plans with company stock was higher by five percentage points—86% in plans with company stock versus 81% for plans not offering company stock.

Figure 1. Plan incidence of company stock

Continuous panel of DC plan sponsors from December 2005 to June 2014 (n = 1,152)

	Pre PPA		PPA		Post PPA					June
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Percentage of plan sponsors offering company stock	11%	11%	10%	10%	9%	9%	9%	9%	9%	9%
Percentage of all participants offered company stock	40	39	35	33	32	32	30	29	29	29
Percentage of all participants using company stock	26	25	23	21	20	20	17	17	16	15
Percentage of participants using company stock if offered	66	64	65	63	62	62	58	57	54	53
Percentage of all participants with company stock concentrations greater than 20%	17	15	13	11	11	10	9	9	9	8

Source: Vanguard, 2014.

⁴ An organization is categorized as actively offering company stock if any contributions, employee and/or employer, are permitted to be invested in company stock as of June 2014. A participant is considered active if they received any contributions during the prior 12-month period and their account balance was greater than \$100.

Figure 2. Type of company stock fund offered

Continuous panel of DC plan sponsors from December 2005 to June 2014

Sponsor incidence of company stock	Number of sponsors	Percentage of sponsors
Offering company stock	128	11%
Not offering company stock	1,024	89
Total sponsors	1,152	100%
Changes in company stock among sponsors offering	Number of sponsors	Percentage of sponsors offering
<i>Company stock remaining open to new monies June 2014</i>		
Company stock funds	40	31%
Employee stock ownership plan	45	35
	85	66%
<i>Company stock closed to new monies June 2014</i>		
Closed company stock funds	19	15%
Liquidated company stock funds	24	19
	43	34%
Total sponsors offering company stock	128	100%

Source: Vanguard, 2014.

Figure 3. Plan sponsor and participant characteristics

DC plan sponsors and active participants as of June 2014 with balances >\$100

	Plan sponsors with active company stock funds	Plan sponsors with no (or closed) company stock funds	All plan sponsors
<i>Plan sponsor characteristics</i>			
Number of plan sponsors	97	1,400	1,497
Percentage of plan sponsors	6%	94%	
Number of unique active participants (with balances > \$100)	674,374	1,776,606	2,450,980
Percentage of active participants	28%	72%	
Number of active participants holding company stock	348,128	31,144	379,272
Percentage of active participants holding company stock	52%	2%	15%
<i>Demographic characteristics*</i>			
Participants per plan sponsor	2,704	236	274
Age	45	45	45
Job tenure	7	8	7
Percentage male	65%	58%	60%
Percentage completing college	50%	54%	53%
Household income	\$62,500	\$62,500	\$62,500
Non-retirement wealth	\$51,008	\$64,525	\$60,522
<i>DC plan characteristics*</i>			
Account balance	\$41,237	\$33,394	\$35,308
Participant contributions for 12 months ended June 2014	\$3,388	\$2,765	\$2,932
Employer contributions for 12 months ended June 2014	\$2,163	\$1,910	\$1,976
Equity allocation	86%	81%	83%

* Median values among active participants with balances >\$100

Source: Vanguard, 2014.

Company stock plans tend to be more generous and well-funded than non-company-stock plans. Median account balances are higher in company stock plans, as are median employee and employer contributions.

One reason for the greater generosity of company stock plans is the prevalence of employer matching or other employer contributions. All of these plans make such contributions compared with 83% for all Vanguard plans (Figure 4). Slightly more than half of organizations with active company stock funds make both matching and other employer contributions to participant accounts—

compared with one-third of all Vanguard plans. One-quarter of organizations actively offering company stock direct an employer contribution to company stock, and 1 in 12 directs both a matching and another employer contribution to company stock. This represents a shift: Three years ago, 37% of organizations directed an employer contribution to company stock.

Figure 4. Employer contributions

DC plan sponsors as of June 2014

	Plan sponsors actively offering company stock		All Vanguard plans
	Number	Percentage	
Plan sponsors actively offering company stock	97		
Plan sponsors with either matching or nonmatching contributions	97	100%	83%
Plan sponsors with both matching and nonmatching contributions	56	58	34
Plan sponsors with a match	89	92%	73%
Plan sponsors matching in company stock	15	15	1
Plan sponsors with nonmatching employer contributions	61	63%	42%
Plan sponsors directing nonmatching contributions to company stock	12	12	1
Plan sponsors directing any employer contributions to company stock	24	25%	2%
Plan sponsors directing both matching and nonmatching contributions to company stock	8	8	1

Source: Vanguard, 2014.

Diversification restrictions

After the passage of the Pension Protection Act of 2006 (PPA), participants are able to diversify their own contributions to employer stock at any time, while plans retain the option of restricting diversification of employer contributions to participants reaching three years of

service.⁵ As of June 2014, 67% of Vanguard-administered plans directing an employer contribution to company stock allowed participants to immediately diversify those contributions to other plan investment options (Figure 5).

Figure 5. Restrictions on diversification of employer contributions

DC plan sponsors with active company stock funds as of June 2014

	Total	
	Number	Percentage
Plan sponsors actively offering company stock	97	
Plan sponsors directing any employer contributions to company stock	24	25%
Among plan sponsors directing any employer contributions to company stock		
Plan sponsors allowing immediate diversification of employer contributions to company stock	16	67%
Plan sponsors with restrictions on diversification of employer stock contributions	8	33
	24	100%
Among plan sponsors restricting diversification of employer contributions to company stock		
<i>Restricted using PPA guidelines</i>		
Rolling 12-month restriction	0	
2 years of service	0	
3 years of service	3	
<i>Restricted using PPA exemptions</i>		
5 years of service, 10% annually up to 50%	1	
Age 55 and 10 years of service	2	
Age 55 and 100% vested	1	
Privately held stock restricted	1	

Source: Vanguard, 2014.

⁵ The PPA diversification rules do not apply to privately held stock or stand-alone ESOPs.

Figure 6. Restrictions on concentration

DC plan sponsors with active company stock funds as of June 2014

	Total	
	Number	Percentage
Plan sponsors actively offering company stock	97	
Plan sponsors restricting employee elective contributions or exchanges into company stock	55	57%
Among plan sponsors restricting contributions or exchanges into company stock		
Direct a matching and/or an other employer contribution to company stock	18	
Employer contributions follow employee elections	37	
Type of restriction		
Same restriction on contributions and exchanges	50	
Restrict employee elective contributions, but do not allow exchanges into company stock	2	
Restrict exchanges in, but do not allow employee elective contributions to company stock	3	
Restrict and redirect when company stock exceeds restriction level	13	
Level of restriction		
Employee elective contributions restricted	46	47%
Employee elective contributions restricted at:		
0%	21	
10%	4	
15%	1	
20%	9	
25%	8	
35%	1	
50%	2	
Exchanges into company stock restricted	47	48%
Exchanges into company stock limited to:		
0%	18	
10%	3	
15%	1	
20%	9	
25%	7	
35%	3	
50%	6	
60-day round-trip restriction	37	38%
1 p.m. trading cutoff	34	35
8 a.m. trading cutoff	3	3

Source: Vanguard, 2014.

Restrictions on concentration

One development in company stock plans, driven by fiduciary concerns, has been the introduction of rules designed to mitigate concentrated single-stock positions. As of June 2014, about 6 in 10 organizations offering company stock either restricted contributions and/or exchanges into company stock (Figure 6). This represents another shift: Three years ago, 50% of organizations had company stock restrictions.

Typically, the same restrictions are imposed on contributions and exchanges. However, a few plans allow employee-elective contributions to company stock, but do not allow participants to exchange into company stock. The reverse is also true, with a few plans allowing exchanges into company stock, but not allowing participant contributions. In some ways, these restrictions appear motivated by sponsor recognition of the risks of participants “doubling down”—in other words, if employers provide contributions in company stock, participants may increase single-stock risk by directing their own monies to the option. A total of 6 in 10 organizations directing a matching and/or another employer contribution to company stock do not allow participants to direct employee-elective contributions to company stock.

If an organization restricts the investment of participant employee-elective contributions in company stock, the most common restriction is 0%—in other words, no participant-directed contributions may be made to company stock. The next most common restrictions are 20% and 25%.

The same is true for restrictions on exchanges. Some organizations allow the company stock allocation to float above the restriction level because of market fluctuation and/or ongoing contributions. For example, once a participant account balance reaches 20% in stock, the participant may be restricted from making additional contributions and/or exchanges—but the concentration level can rise above 20% because of market appreciation. A few organizations go further by restricting and redirecting participant account balances such that the amount of company stock does not breach the limit. These organizations typically redirect contributions and/or account balances to the plan’s qualified default investment alternative when the company stock position exceeds the limit.

Concentrated positions in company stock

A concentrated position in company stock can pose a substantial risk to a participant’s retirement security. It also raises litigation risks for plan fiduciaries.

In general, concentrated positions are strongly associated with the sponsor’s decision to direct employer contributions to company stock. When an organization directs any employer contributions to company stock, 56% of participants hold a concentrated position greater than 20% (Figure 7). By comparison, when the organization makes employer contributions in cash, and leaves investment decisions in company stock at the discretion of the participant, only 15% of participants hold a concentrated position.

Figure 7. Distribution of company stock exposure

DC plan sponsors with active company stock funds as of June 2014

	Company stock as fraction of plan assets/participant balances						Concentrated subtotal
	0%	1%–20%	21%–40%	41%–60%	61%–80%	>80%	
A. Plan concentration (percentage of plans)							
Employer contributions to company stock	0%	58%	21%	21%	0%	0%	42%
Employer contributions “in cash”*	0%	88%	9%	3%	0%	0%	12%
Company stock as a fraction of participant balances							
B. Participant concentration (percentage of participants)							
Employer contributions to company stock	16%	28%	29%	21%	2%	4%	56%
Employer contributions “in cash”*	63%	22%	8%	5%	1%	1%	15%

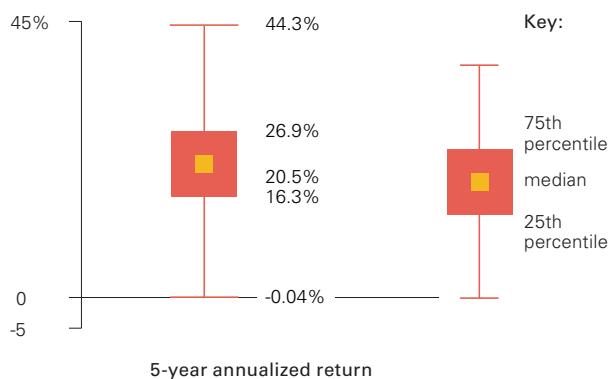
Note: Shaded areas are concentrated positions exceeding 20% of plan assets or participant balances.

*“In cash” means that participants may direct contributions to any plan investment option, including company stock.

Source: Vanguard, 2014.

The average 5-year annualized company stock fund return was 21.1% for the organizations in our data set. However, there was wide variation in these returns (Figure 8). The 5-year annualized return was a negative 0.04% at the 5th percentile and a positive 44.3% at the 95th percentile. This wide range underscores the risk of company stock. A 5-year annualized return of a negative 0.04% translates to a minor cumulative loss of 0.2% over the period, whereas a 5-year annualized return of a positive 44% translates to a cumulative return of more than 500%. For participants holding company stock, prior research suggests that participants do not understand the risks involved.

Figure 8. Distribution of five-year annualized returns
Active company stock funds as of June 2014



Source: Vanguard, 2014.

Implications

The incidence of company stock within DC plans has declined in recent years. Among Vanguard recordkeeping clients, both the percentage of plan sponsors actively offering company stock and the percentage of participants holding concentrated company stock positions have fallen.

About one-third of sponsors who had previously offered company stock no longer do. Also, permitting immediate diversification of employer contributions directed to company stock has become the norm, even though the PPA allows a three-year service requirement.

Moreover, a large number of sponsors have increasingly recognized the risks associated with single-stock ownership, whether to the participant or to plan fiduciaries, by imposing restrictions on concentrated holdings. Six in 10 sponsors now limit employee contributions and/or exchanges into company stock as of June 2014. On balance, the decline in company stock within DC plans seems largely a function of these employer plan design decisions, whether with respect to the presence of company stock in the menu, the direction of employer contributions to company stock, or the imposition of restrictions on concentrated holdings.

At the same time, about one-quarter of sponsors with active company stock funds continue to direct an employer contribution to company stock. This design decision has the strongest relationship with participant company stock holdings. The single-stock risks of company stock are well-known.

In evaluating the role of company stock within a DC plan, plan sponsors need to strike a balance between the incentive effects of employee stock ownership and the risks—including the fiduciary risk to the sponsor and the investment risk to participants. For organizations seeking to mitigate the risks arising from concentrated stock positions, two strategies to consider are, first, making employer contributions “in cash” (i.e., at the participant’s direction), and second, imposing restrictions on the amount participants can contribute or exchange into a company stock fund.

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