

Heads Up

TWA Pilots' DAP/401(k) Plan Quarterly Review



April 1994, Volume 3, Issue 1

COMPOUNDING

The positive power of increase and the negative pull of interruptions

The King of Persia ordered a successful soldier to name his reward. The soldier turned to a chessboard and asked for one kernel of grain on the first square, two kernels on the next square; double the amount from each preceding square on each following square. The King, pleased by the soldier's seemingly modest request, told his advisors to start the process.

The single kernel doubled and re-doubled, and bankrupted the Persian treasury long before the 64th square. Compounding was born. The soldier was beheaded.

Investing 101: Invest X amount of money at Y percent for Z years. Thanks to compounding, you'll end up with a lump sum much larger than what you contribute. The *principle* is simple.

But in reality, the *practice* may be tough. We regularly confront many reasons to stop investing. Major cash events strain any investor's resolve to hold the line on a retirement savings account. Mortgages, weddings, college educations, and health care expenses require cash—sometimes

unexpectedly. The DAP/401(k) Plan loan feature looks like a logical resource to fund the unexpected. If only it didn't cost so much later on.

Tax deferred retirement programs take small regular contributions and, over time, compound them into large pools of money. Unbroken time to work is the key to success. When you take money from your retirement program early, you not only remove its value from your total later on, you also reduce your account's potential to compound. Hence, you will end up with less when it is time to withdraw.

Starting from square one

Let's illustrate how interruptions affect compound interest. If you doubled the kernels on the Persian chessboard, you

would have 32,768 by the 16th square. If you remove those kernels and repeat the process from square 1, you end up with another 32,768. However, if you go on from square 17 to square 32, how many kernels do you have? More than two *billion*.

When you take money from your retirement program early, you not only remove its value from your total later on, you also reduce your account's potential to compound.

While your investment program behaves differently than the kernels of grain in the Persian legend, the concept is the same. *Interrupt* the compounding process, and you greatly reduce its potential to add value.

What borrowing really costs
When you borrow from your account, you give away a lot. For one thing, you replace the money with

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U P U P A N D A W A Y

1993 was a great year for the TWA Pilots' DAP/401(k) Plan. We have successfully begun a new era of tax-deferred investing that will make a large difference for all of us at retirement. HEADS UP is an important tool in the process. Each quarter, HEADS UP will highlight one of the investment options, present some investment concepts, and review performance of the Plan. Inside this issue:

- What interruptions can do to your retirement savings
- Withdrawing at age 70^{1/2}
- A look at the Fixed Income Fund
- Performance

We want to thank everyone who helped bring the DAP/401(k) Plan to life. We also want to thank all participants for their support and suggestions. Remember to check for up-to-date performance and Plan news in FIP/52 and FIP/54.

Best for 1994 and beyond.

For the TWA Pilots' DAP/401(k) Plan Investment Committee,

Joe Montanaro

Ken Turk

Dave La Rocque

WITHDRAWING AT AGE 70½

Dealing with Uncle Sam

When are you planning to begin regular retirement withdrawals from your DAP/401(k) account?

Many of us plan to finance part of our retirement with the money we've accumulated through our retirement savings. Some of us may wish to leave our balances in the Plan after we've retired. All of us must settle with the IRS, which calls in the taxes on all deferred investments eventually. However, each of us has some control over how and when we pay.

Withdrawing

Any tax-deferred money withdrawn from the DAP/401(k) Plan is taxable as income in the year you take it out. This includes DAP contributions, 401(k) contributions, and the interest, capital gains and earnings that your account has sheltered while it was growing. Additionally, the IRS withholds for income taxes as they do for your salary. If you take tax-deferred money before age 59½, you may have to pay the IRS a 10% penalty for early withdrawal.

Your responsibilities at age 70½

By April 1 following the year that you turn 70½, you will need to withdraw a portion of your tax deferred savings. You must declare the withdrawal as taxable income. It's the law. Some key points to remember:

The IRS provides a schedule to calculate how much you must withdraw, based on actuarial tables. From 70½ on, the amount will change, reflecting your balance and age each year.

You may withdraw as sole owner, or you can designate a beneficiary. Naming a beneficiary who is younger will lengthen the actuarial table and reduce the percentage you must take out. A 10 year "default" calculation may be used for beneficiaries (other than spouses) more than 10 years younger than you. Other calculations are available which may better suit your needs. Contact the IRS for more information.

If you don't begin withdrawing after age 70½, the IRS penalty is 50% of the minimum amount that you should have withdrawn.

Other points

- You may re-invest any money you had to withdraw and don't want to spend, but not in a tax-deferred plan.
- Withholding applies to these distributions as well, and will be credited toward your annual income tax.
- You can specify a monthly installment distribution in any amount. The minimum supplemental lump sum distribution is \$5,000.

Coming soon: Lifetime Withdrawal Option

We are planning to introduce a Lifetime Withdrawal Option soon. It is not available yet, but is designed to:

- Address your end-of-year balance to calculate monthly distributions
- Divide the balance into annual amounts, based on your (and your beneficiary's) actuarial life span so you won't outlive your assets
- Consider IRS age 70½ minimum distribution rules
- Assume a 5% rate of return
- At your option, Lifetime Withdrawal will automatically send you the appropriate monthly amount

We expect to give you details on how to order and use this option later this year. In the meantime, **please do not call Benefits Express** about the Lifetime Withdrawal Option.

We will send you an announcement and more information as soon as it becomes available.

Get competent advice

Consider consulting a tax expert before making decisions with your retirement savings. Tax laws change from time to time, and so does your financial status. Putting a tax expert on your team can save you valuable time and money. **HU**

New investments for the International Stock fund

As of March 1, the DAP/401(k) Plan has added two funds managed by Morgan Stanley Asset Management. Morgan Stanley, founded in 1975, manages total assets worth more than \$47.2 billion.

The Funds:

Morgan Stanley Institutional Asian Equity Ex-Japan Fund. This value-oriented fund concentrates on Asian stocks from markets other than Japan, including Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, and Hong Kong.

Morgan Stanley Institutional Emerging Markets Fund. This growth-oriented stock fund concentrates on stocks from attractive emerging industrializing countries.

The check is in the mail...

Many retired pilots have asked for the timetable for installment checks. Here it is for the rest of 1994.

RECEIVE TRANSMISSION FROM RECORDKEEPER	EDIT AND POST	ENTER PARAMETERS BUILD AND PROCESS CHECK RUN	ELECTRONIC TRANSFERS/CHECKS MAILED
April 4	April 4 & 5	April 5	April 6
May 3	May 3 & 4	May 5	May 6
June 2	June 2 & 3	June 3	June 6
July 5	July 5 & 6	July 6	July 7
August 2	August 2 & 3	August 4	August 5
September 2	September 2 & 6	September 6	September 7
October 4	October 4 & 5	October 5	October 6
November 2	November 2 & 3	November 3	November 4
December 2	December 2 & 5	December 5	December 6

All payments are dated as of the 8th of the month. Additional time allows the checks to clear the Federal Reserve.

COMPOUNDING

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after-tax dollars. But wait, it costs more.

Suppose two participants contribute 6% to the 401(k) feature for 30 years, investing for an annual 8% return. Let's assume they start with a \$50,000 annual salary that increases 4% a year for 30 years. Pilot "A" ends up with \$1,565,020 at age 60.

Pilot "B" decides to remove \$50,000 from the Plan after 10 years.

If **Pilot "B" withdraws** and does not replace the money, the account will ultimately earn \$1,313,328. **It will cost Pilot "B" \$251,691 at age 60.**

Withdrawals may be taken only in situations of eligible financial hardship as defined by the IRS.

Suppose **Pilot "B" borrows** \$50,000 and repays it in five years, continuing to contribute 6% to the 401(k) feature? **The loan will cost \$19,714 at age 60,** even though "B" repays the loan with interest, at the prime rate, currently 6%.

However, like most people **Pilot "B" can't afford to continue contributing and repay a loan at the same time.** In reality, **Pilot "B" will lose \$109,514 at age 60,** because the suspended contributions weren't invested in the Plan.

Remember, the DAP/401(k) Plan is for funding your retirement. It won't do its job if you keep tapping into it. **HU**

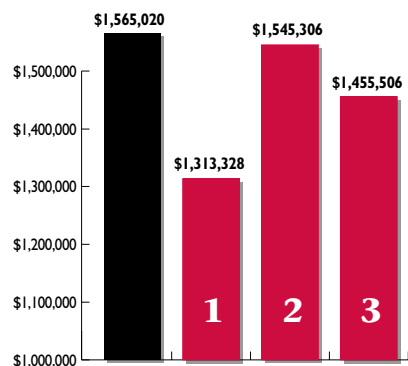
HOW INTERRUPTIONS AFFECT COMPOUNDING.

Assumptions: Contributions: 11% to DAP, 6% to 401(k) for 30 years, invested with an annual return of 8%. Starting salary of \$50,000 increases 4% per year.

Scenario 1: Pilot "B" withdraws \$50,000.

Scenario 2: Pilot "B" borrows \$50,000.

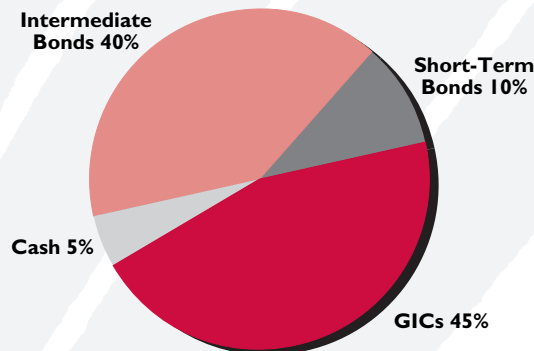
Scenario 3: Pilot "B" borrows \$50,000. Suspends 6% contributions for five years.



WHAT'S IN THE FIXED INCOME FUND?

Holdings in the Fixed Income Fund include high quality bonds, plus insurance and bank contracts, that are issued by the US Government, its agencies, and large corporations.

The fund has 40% of its assets in intermediate bonds and 10% in short-term bonds. The bond portfolio of the Fixed Income Fund is managed by the Wellington Management Company. 45% of the fixed income option is invested in contracts guaranteed by insurance companies and banks (GICs). PRIMCO manages this portion. A small percentage, around 5%, is in the Boston Safe Short Term Interest Fund (money market). **HU**



How the Fixed Income Fund Performs

The Fixed Income Fund has earned higher overall returns than its money market component. While it does carry somewhat more risk than a money market fund, its risk potential is low. Remember, past results cannot guarantee future performance. However, when the components in this fund are combined, they register only two negative quarters in the past 14 years. Overall, a hypothetical portfolio would not have lost money on an annual basis, but would have consistently outpaced inflation.

An overview of its components for the past 14 years.

COMPONENT	ANNUALIZED TOTAL RETURN-14 YEARS*	QUARTERLY COMPONENT PERFORMANCE WORST QUARTER	QUARTERLY PERFORMANCE AS WEIGHTED IN THE FUND-WORST QUARTER
10% Short-term Bonds	+10.4%	-2.6%	-0.26%
40% Intermediate Bonds	+11.3%	-5.0	-2.00
5% Money Market Funds	+8.1%	+0.8	+0.04
45% GICs	+11.49%	+1.875	+0.8438

Legend: This table shows how the Fixed Income Fund's components performed during the last 14 years. **Annual performance of this hypothetical portfolio has always been positive.** Only two quarters out of 56 have produced negative returns.

The intent of this communication is to provide useful information, not investment advice. Each participant in the TWA Pilots' DAP/401(k) Plan is ultimately responsible to make his or her own investment decisions, and may wish to consult with a financial planner.

More Information and Interacting with the Plan: To get account balance information, or to make transfers, call 1-800-828-8100 between 8 am and 5 pm, CST Monday through Friday. 1-708-883-0471 (not toll free) from rotary telephone or outside the U.S. Use company I.D. 6662 followed by the # sign.

Additional comments and suggestions may be sent to:

TWA Pilots' DAP 401(k) Investment Committee
3221 McKelvey Road, Suite 105
Bridgeton, MO 63044-2551



Performance



See printed newsletter for performance

How To Read Performance: The graphic display above shows fund performance as arrows and market performance, represented by the benchmarks, as bars. To-date performance on these charts began July 1, 1993 when all six funds and three model portfolios became available to participants. Component performances within each fund are listed below. You'll also find a table with the value of the funds.

FUND COMPONENT PERFORMANCE

These tables represent component performance from the beginning of the DAP portfolio; July 1, 1993 through Feb. 28, 1994.

Fixed Income Fund

	Weighting	Perf. to Date
Wellington	Liq 10%/Core 40%	Liq 2.39/Core 2.71
PRIMCO GIC	45%	5.62
Cash	5%	2.27

Conservative Equity Fund

Federated Stock Trust	8%	5.44
Morgan Core	23%	10.88
Neuberger/Berman Guardian	23%	9.59
USAA Mutual Income Stock	23%	3.71
Wells Fargo TAA	23%	5.40

Equity Index Fund

Wells Fargo US Equity	100%	6.35
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Growth Stock Fund

Fidelity Contrafund	30%	9.15
Janus Fund	30%	6.38
20th Century Growth	30%	9.95
Vanguard World US Growth	10%	5.84

International Stock Fund

EuroPacific Growth	45%	25.57
Templeton Foreign	45%	24.55
20th Century Intl Equity	10%	26.53
Morgan Stanley Ex-Japan	n/a	n/a
Morgan Stanley Emerging Markets	n/a	n/a

Aggressive Growth Stock Fund

AIM Constellation	18%	16.53
Fidelity OTC	18%	10.21
Fidelity Select	18%	18.00
Monetta	10%	8.98
Thompson Oppty "B"	18%	15.88
20th Century Vista	18%	4.54

Net Value of Funds (Millions) 401(k)

	DAP
Fixed Income Fund	\$23.0
Conservative Equity Fund	18.9
Equity Index Funds	.5
Growth Stock Fund	1.8
International Stock Fund	13.3
Aggressive Growth Stock Fund	19.6
Conservative Portfolio	.2
Moderate Portfolio	4.2

FEATURING THE FIXED INCOME FUND

Why choose Fixed Income Funds?

- To preserve principal for its cash value.
- To add diversification and stability to a portfolio containing stock investments.

Fixed income funds behave differently from stocks. They contain bonds, insurance and bank contracts, mortgage instruments, and money market securities. They trade in different markets than stocks, and go up and down for different reasons. Fixed income investments are actually debt instruments. The investments are actually loans that the issuers repay with interest.

Fixed income funds fall at the conservative end of the investment spectrum. They usually change value less suddenly than stock funds; have less volatility. As a result, they tend to be more stable.

Given stability, wouldn't you minimize risk by investing all your money in fixed income funds?

Fixed income investments tend to generate returns conservative enough to expose long-term investors to another risk—inflation.

Inflation as risk

Inflation takes a piece of every investment return, hitting long-term investments the hardest. Essentially, inflation has gutted the dollar by half every 18 or 19 years.

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Since 1900, according to US Capital History, the broad US bond market has averaged a 4.7% return, while inflation has averaged 3.2%, for a net gain of only 1.5% a year, much less than what most people invest to earn. The broad stock market, on the other hand, has averaged 9.3%, even through the Great Depression.

Fixed income investments work well, however, to shelter assets soon to be cashed. Pilots nearing retirement might consider placing whatever amount they expect to liquidate in the Fixed Income Fund to protect principal.

Additionally, you can mix the Fixed Income Fund with any of the other DAP/401(k) Plan investments to reduce the risk of value fluctuations. The fixed Income Fund will lower returns somewhat but should still significantly outpace inflation. **HU**