

# The AFR and the Value of Debt

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*When a promissory note that was established at the prevailing applicable federal rate (AFR) is recapitalized at the current, lower AFR, is there a gift tax consequence?*

## INTRODUCTION

With interest rates at historical lows, estate planners are tempted to recommend that existing promissory notes between a child and a parent be recapitalized at a lower interest rate.

The applicable federal rate (AFR) is usually lower than interest rates that are otherwise available in the marketplace.

The fair market value of a debt security that pays a lower interest rate than what is otherwise available in the marketplace is lower than the face value of the debt security.

## PROMISSORY NOTES AT THE AFR INTEREST RATE

When the original promissory note was issued at the prevailing AFR, the loan is deemed to have provided for adequate interest. At that point in time, there was no gift tax consequence because the note was not a below-market loan.<sup>1</sup>

No amount of the cash given by the lender up to the amount of the face value of the note is considered a gift because there is no foregone interest.

Entering into a promissory note at the AFR is a common financing mechanism that is applied when one family member, the senior generation family member (such as a parent or grandparent), loans cash to another family member (such as a child or grandchild) to make an investment.

The AFR is established monthly by the Treasury Department. The AFR is based on the interest rate that the Treasury Department pays on obligations of the United States.

The AFR is usually lower, and often much lower, than returns available from investment opportunities that are otherwise available to the child in the marketplace. To the extent the child earns more on the investment than the AFR interest that the child must pay to the parent, then the child acquires wealth free from wealth transfer taxes.

## A TYPICAL ESTATE PLANNING OPPORTUNITY

In a typical estate planning situation, the parent establishes a grantor trust which has been designed and administered to avoid the inclusion of the assets of the trust in the parent's gross estate for federal estate tax purposes.

The trust will generally be set up for the benefit of younger generations of the parent's family but nonetheless will be a grantor trust with respect to the parent.

The parent will sell assets to the trust and the trust will issue to the parent a promissory note bearing the AFR interest rate in return for the assets sold to it.

This kind of transaction is referred to as an installment sale to a grantor trust. The effect of grantor trust status is that the grantor (i.e., parent), as opposed to the trust (i.e., child), is primarily responsible for paying any tax on income generated by the assets held by the trust.

The asset sold to the trust may be an equity interest in a family limited partnership (FLP).

Both sides of this kind of investment transaction present the parent with the opportunity to take advantage of conventional estate planning techniques.

In this situation, the fair market value of the FLP equity interest has been arrived at after applying typical valuation adjustments to reflect the noncontrolling, nonmarketable attributes of the FLP equity interest in the hands of an unaffiliated third party. The fair market value of the promissory note has been established by applying the safe harbor provisions available when using the AFR.

The transaction is fair because the fair market value of the property given up is equal to the face value of the promissory note. There is no gift tax consequence.

On one side, the fair market value of the equity interest in the FLP has appropriately reflected the ownership attributes of the investment due to the application of valuation discounts for lack of control and lack of marketability.

On the other side, the interest rate on the promissory note is based on the AFR and that allows the borrower (the “child”) to generate a return that exceeds the AFR that the borrower is obligated to pay on the loan.

To the extent that the assets in the trust appreciate or generate income at a rate greater than the interest rate on the promissory note to the parent,

the trust for the younger generation family members will be able to meet its interest obligation to the parent.

When the rate of interest earned on the assets in the trust is greater than the rate of interest paid on the promissory note by the trust, then income that is transferred to the younger generation is free from income and wealth transfer taxes.

To the extent that the assets in the trust do not generate a return that satisfies the promissory note, then a correction to the situation could be deemed to be a gift from the parent to the younger generation family members.

## THE DECLINING AFR

The declining AFR may present other opportunities for the parent.

An AFR time series graph for the last several years is illustrated in Figure 1.

One opportunity is for the trust to pay off the promissory note plus accrued interest and then borrow again at the current AFR (assuming the lender agrees to a new note at the current AFR). The trust could use cash on hand or could sell assets.

**Figure 1**  
AFR Time Series Graph



## Exhibit 1 Example of the Content of a Simple Promissory Note

PRINCIPAL AMOUNT: \$ \_\_\_\_\_

DUE DATE: \_\_\_\_\_, \_\_\_\_\_ of 20\_\_\_\_.

On this \_\_\_\_ day of \_\_\_\_\_ in the year two thousand and \_\_\_\_\_,  
\_\_\_\_\_ (Borrower's name)  
promises to pay to the order of \_\_\_\_\_  
(Payee's name), a resident of  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip : \_\_\_\_\_

OR to the holder of this Promissory Note

the amount of: \_\_\_\_\_ DOLLARS.

Interest at the yearly rate of \_\_\_\_% will be added to the unpaid balance. A late charge of \$\_\_\_\_\_ Dollars will be added to the principal if payment is not made within \_\_\_\_ days of the due date. The Borrower may repay the full amount of the unpaid balance and unpaid interest to date at any time without penalty.

Payable at: \_\_\_\_\_ (city), \_\_\_\_\_ (state)

Witness' name and address:  
\_\_\_\_\_  
\_\_\_\_\_

Witness' signature

Borrower's name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

If the trust sold assets at a price greater than the income tax basis of the asset, then the trust would be responsible for paying the capital gains taxes on that sale. In the case of a grantor and a grantor trust, this tax would be the responsibility of the grantor (i.e., the parent) because both are treated as the same taxpayer.

Alternatively, the parent may simply cancel the old note and accept in exchange a new note bearing interest at the current, lower AFR.

A demand loan<sup>2</sup> that is set at the AFR with the appropriate compounding period is not a below-market loan.

A term loan<sup>3</sup> is not a below-market loan when the amount loaned does not exceed the present value of all payments due under the loan.

Let's consider a term loan set at the current AFR with the appropriate compounding period and that allows prepayment at any time by the borrower without penalty. That term note is deemed to be worth the amount loaned. That is, it is worth its face value.

Therefore, loans set at (or above) the AFR are not below-market loans. There is no gift associated with a loan set at the AFR.

The value of the old note<sup>4</sup> is equal to the amount of unpaid principal plus accrued interest up to the valuation date.

When the borrower repays the lender the full amount of the principal and accrued interest on the valuation date, and takes out a new loan with adequate stated interest, there should be no taxable gift.

This procedure is similar to what typically happens when a home owner refinances his old mortgage with a new lender. The principal amount of new mortgage (presumably at a lower interest rate) is set equal to the remaining balance plus accrued interest of the old mortgage.

Whether there is gift tax due upon the exchange of the old note (issued at the AFR prevailing on the date the old note was issued) for a new note (issued at the current but lower AFR) depends upon how the old note is valued on the date of the exchange.

Among other standard provisions, most simple promissory notes permit the borrower to prepay the note at any time, in whole or in part, without a premium or a penalty (see Exhibit 1).

Accordingly, retiring an old promissory note at the principal amount plus accrued interest has no gift tax consequences.

And, a new promissory note at the current AFR with the appropriate compounding period should have no gift tax consequences when it is issued by a trust for the benefit of the younger generation to the senior member of the family.

## FAIR MARKET VALUE OF A SIMPLE PROMISSORY NOTE

For gift and estate tax purposes, fair market value is defined as the price at which the property would change hands between a willing buyer and a willing

seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of relevant facts.

A simple promissory note is the promise to repay a loan whenever the holder of the note demands repayment. Because it is a written document, to the lender, this kind of a loan is of a slightly higher quality than a verbal IOU.

The simple promissory demand note issued at the current AFR with the appropriate compounding period may not be worth its face value when the simple promissory note is analyzed in the fair market value context—the price that a hypothetical willing buyer would pay to a hypothetical willing seller.

## Attributes of the Demand Loan

Let's assume the borrower is financially able to repay the simple promissory note upon demand. In that case, the fair market value of the note is equal to its face value regardless of the interest rate on the loan. On any date that the interest rate on the note is less than the level that adequately compensates the lender for the risks taken, the lender would demand and receive immediate repayment.

If the borrower is not able to repay the simple promissory note upon demand but is able to make the payments of interest and principal described in the note, then the fair market value of the note is equal to its face value. That conclusion is true if the interest rate on the loan is equal to the rate that adequately compensates the lender for the risk of the loan.

Lenders recognize that there are at least two important risks to consider when analyzing the value of a loan:

1. The changing price levels during the term of the loan
2. The creditworthiness of the borrower

The price of a typical fixed rate loan moves in the opposite direction of the change in interest rates during the term of the loan. As the interest rates increase (decrease), the price of a fixed rate loan will decrease (increase).

If the interest rate paid on alternative investments by market participants for investments of equivalent risk increases above the rate payable on the simple promissory note, then, because of changing price levels, the lender would either (1) demand immediate payment or (2) suffer a reduction in the fair market value of the note.

Changes to the spread demanded by investors in the marketplace for levels of risk during the term of the loan can affect the fair market value of a note. This statement is true regardless of the ability of the borrower to pay.

The credit risk of a loan refers to the risk that the issuer will be unable to make timely principal and interest payments on the loan. The creditworthiness of the borrower at the time the loan commences is of immediate concern to the lender. The creditworthiness of the borrower is also of concern to the lender during the term of the loan.

When considering the creditworthiness of the borrower, the lender will analyze the value of any assets of the borrower that the lender would have access to if there is a default on the loan payments.

The yield rates for debt securities are presented in Figure 2 on the following page. The yield rates have declined considerably during the last five years (see Exhibit 2).

## Attributes of the Term Loan

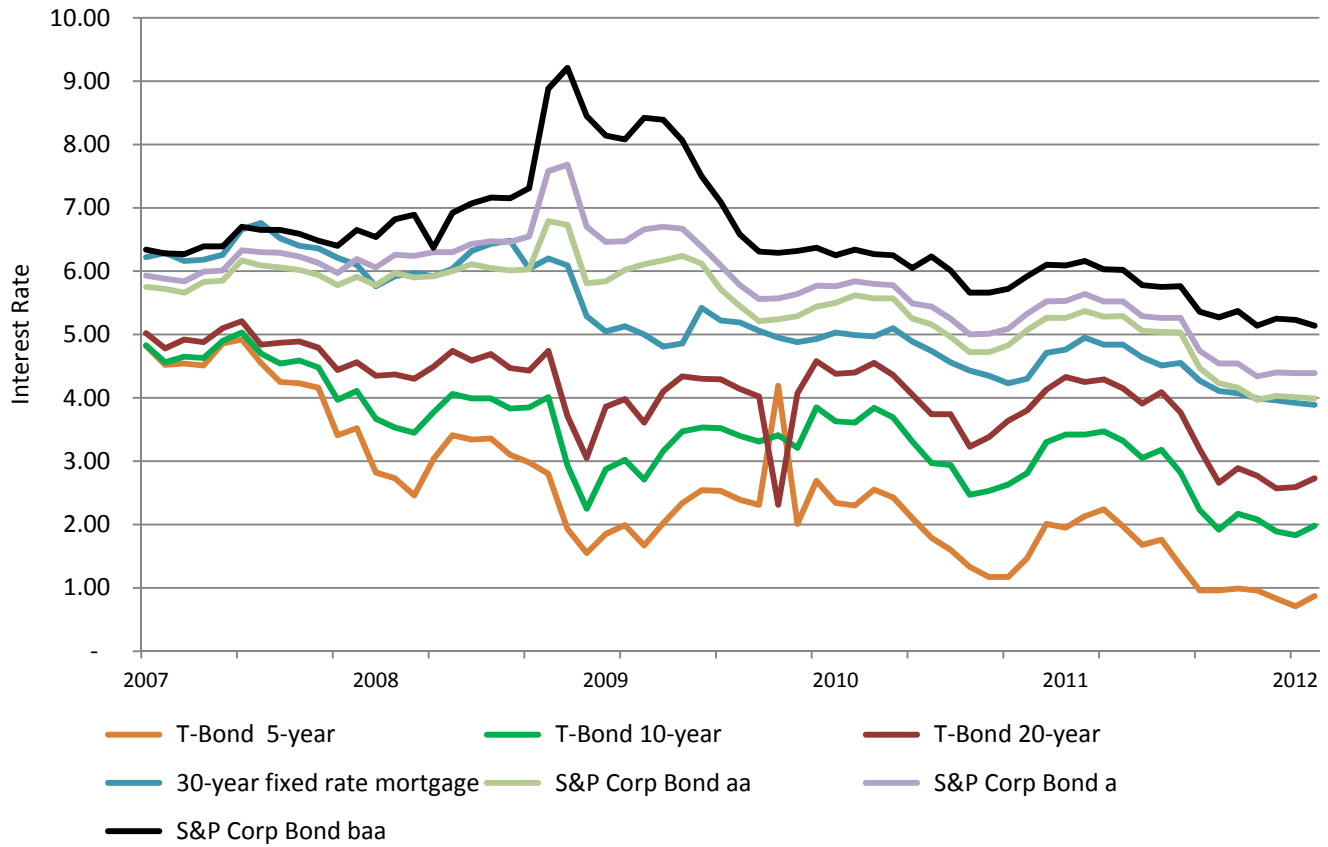
A simple term loan allows the borrower to keep the borrowed funds for the entire period of time that the lender and the borrower initially agreed to, as long as the borrower continues to make the agreed upon payments on a timely basis.

The lender may not demand immediate repayment of the amount borrowed at any time (i.e., "call" the note) as the lender is allowed to do under a demand note.

**Exhibit 2**  
**Changes in Interest Rates During the Last Five Years**

Type of Instrument	2007 March	2012 Feb	Rate Change
AFR short-term	4.95	0.19	(4.76)
AFR mid-term	4.75	1.12	(3.63)
AFR long-term	4.90	2.55	(2.35)
30-year fixed rate mortgage	6.16	3.89	(2.27)
T-Bond 5-year	4.54	0.87	(3.67)
T-Bond 10-year	4.65	1.98	(2.67)
T-Bond 20-year	4.92	2.73	(2.19)
S&P Corp Bond aa	5.66	3.99	(1.67)
S&P Corp Bond a	5.84	4.39	(1.45)
S&P Corp Bond baa	6.27	5.14	(1.13)

**Figure 2**  
Yield Rates for Debt Securities



While a promissory term note may permit the borrower to prepay the entire amount of principal and interest in whole or in part at any time without premium or penalty, a similar provision may not exist for the lender.

In other words, the lender may not be permitted to demand immediate payment of the principal and interest in whole or in part from the borrower. If, during the term of the loan, the adequate risk-adjusted rate of interest rises, the fair market value of the fixed interest loan will decrease.

To the lender, the fair market value of a simple promissory note is equal to the present value of the future payments (discounted to the valuation date at an appropriate risk-adjusted present value discount rate).

When the debt security is issued with an interest payment that fully reflects the risks of owning that debt for the term of the debt, then the fair market value of the debt is equal to its principal amount (or its “face value”).

The higher the risk or uncertainty associated with the future payments, the higher the required

yield rate (i.e., appropriate present value discount rate) will be. If the risk of owning the debt increases (or decreases) after the debt has been issued at a fixed interest rate at face value, the present value of the debt will decrease (increase).

The present value of the future payments is a function of:

1. the amount of the future payments,
2. the timing of the future payments, and
3. the present value discount rate or yield to maturity applied to the future payments.

To estimate the fair market value of a debt security that pays a lower interest rate than what is otherwise available in the marketplace, the valuation analyst compares the present value annuity factor (PVAF) for the two interest rates.

$$PV = A \left[ \frac{1 - \frac{1}{(1+i)^N}}{i} \right]$$

where:  $A$  = amount of the annuity (\$)
   
 $i$  = required yield
   
 $N$  = Number of Periods

The present values of an ordinary annuity factor (PVAF) of \$1 per month for 4 years at the following interest rates are:

	Rate	PVAF
AFR medium for March 2007	4.49%	43.86
AFR medium for February 2012	1.12%	46.92
S&P Corporate Bond rated baa February 2012	5.14%	43.30

The fair market value of a note that pays interest at a rate lower than the rate required by market participants for accepting the same level of risk is lower than its face value.

The fair market value of an entity (e.g., a trust) that holds nothing more than a note that pays interest at the AFR is worth less than the face value of the note.

Wealth can be transferred free from wealth transfer taxes by taking advantage of:

1. the ability to recapitalize a promissory note at the current AFR without a gift tax consequence and
2. the fact that the AFR is lower than the rates of return available in the marketplace.

## A SIMPLIFIED ILLUSTRATIVE EXAMPLE

In this example, an OLD simple, nine-year promissory note was established in March 2007 at the prevailing medium AFR of 4.49 percent.

In March 2012, the simple, promissory note is recapitalized into a NEW simple, four-year promissory note at the current medium AFR of 1.12 percent. In other words, the remaining balance of the OLD note is the face value of the NEW note.

During its remaining four-year term, the NEW note will cost 7.5 percent<sup>5</sup> less than the OLD note implies. This is because of the reduction in the periodic interest expense.

If the risk-adjusted required yield of the NEW note was equal to the yield on S&P baa corporate bonds of 5.14 percent, then the fair market value of the NEW note is 9.5 percent<sup>6</sup> lower than the face value of the NEW note.



If a grandparent agreed to recapitalize an OLD simple, nine-year promissory note that was established in March 2007 at the current AFR, then the child would have to pay 7.5 percent less in periodic interest expense on the NEW note.

Let's assume the child transferred the NEW note into a trust for the benefit of the grandchild at the current fair market value of the note based upon the current S&P baa corporate bond rate of 5.14 percent. In that case, the child would pay 9.5 percent less than the face value of the NEW note.

In this example, the OLD note, which yields 4.49 percent, is recapitalized in a two-step transaction that results in a value that is based upon a yield of 5.14 percent. This results in a wealth transfer of 16 percent of the OLD note without any transfer tax payable.

Of course this isn't a risk-free transaction. To the extent that the assets in the trust do not generate a return that satisfies the promissory note, then a correction to the situation could be deemed to be a gift from the parent to the younger generation family members.

## SUMMARY AND CONCLUSION

When money is borrowed by a child from the parent and the child pays interest on the loan at the AFR, there is no gift tax consequence. Also, there is no gift tax consequence when such a loan is refinanced at a lower AFR.

The AFR is lower than rates expected by investors for similarly risky loans.

*Continued on page 94*

## AFR AND VALUE OF DEBT

*Continued from page 17*

The fair market value of loans that carry interest at the AFR is usually lower than the face value of the loan.

By taking advantage of current interest rates, wealth can be transferred free from wealth transfer taxes.

### Notes:

1. Internal Revenue Code Section 7872(e)(1): The term "below-market loan" means any loan if (A) in the case of a demand loan, interest is payable on the loan at a rate less than the applicable federal rate, or (B) in the case of a term loan, the amount loaned exceeds the present value of all payments due under the loan.
2. Section 7872(f)(5): The term "demand loan" means any loan which is payable in full at any time on the demand of the lender. Such term also includes (for purposes other than determining the applicable federal rate under paragraph (2)) any loan if the benefits of the interest arrangements of such loan are not transferable and are conditioned on the future performance of substantial services by an individual. To the extent provided in regulations, such term also includes any loan with an indefinite maturity.
3. Section 7872(f)(6): The term "term loan" means any loan which is not a demand loan.
4. Treasury Regulations Section 25.2512-4: The fair market value of notes, secured or unsecured, is presumed to be the amount of unpaid principal, plus accrued interest to the date of the gift, unless the donor establishes a lower value. Unless returned at face value, plus accrued interest, it must be shown by satisfactory evidence that the note is worth less than the unpaid amount (because of the interest rate, or date of maturity, or other cause), or that the note is uncollectible in part (by reason of the insolvency of the party or parties liable, or for other cause), and that the property, if any, pledged or mortgaged as security is insufficient to satisfy it.
5. Equals  $1 \text{ minus } (43.86 \text{ divided by } 46.92)$ .
6. Equals  $1 \text{ minus } (43.30 \text{ divided by } 46.92)$ .

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