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John T. Scott, Jr. on Zero Coupon Bonds

One Way To Bail Out The Farm Credit System

The Farm Credit System (FCS) faces three serious problems:

- A large amount of outstanding bonds incurring interest significantly above current market rates.

- A large administrative structure.

- A large inventory of land has been acquired by FCS through foreclosures and acceptances of deeds in lieu of foreclosures. Mortgage values lost in the takeover far exceed the land values in the market.

The impact on FCS of higher interest bonds sold several years ago would be less if the total value of its loans to farmers were expanding, but it isn't. The administrative structure may have been appropriate for the expansion days of the last decade when the FCS loan volume topped out at \$79.8 billion but not today with a loan portfolio shrinking to \$54.6 billion at the end of 1986, a third smaller. The land inventory has a particularly important effect on FCS's losses because the rents received by FCS from farmers operating FCS land is usually less than half and often less than one third of the prior owner's mortgage payments.

Selling the acquired farmland is an alternative for FCS. However, current land prices are generally less than the mortgages of the previous owner. Further, FCS selling significant amounts of land could erode the value of the collateral of other active FCS loans and collateral of other lenders. Other lenders, for example, in the St. Paul district, are worried about the aggressive selling program of FCS in that area driving down collateral values.

The three serious problems are so large that the Farm Credit System lost \$2.689 billion in 1985. A larger net loss was predicted for 1986 until Congress authorized the Farm Credit Administration to charge current losses as if they occurred in later years rather than showing losses as they occur—some call it "cooking the books." The loss actually reported for 1986 was \$1.9 billion. Surplus available has dwindled to \$1.45 billion. The need for an infusion of capital from the U.S. Government in order to maintain the financial viability of FCS is likely to come this year. This is especially

true if the court decisions stands to disallow transfer of assets by FCA from one district bank to another. At the end of 1985 non earning assets were over 15 percent of all assets. This represents about 11 billion of non accrual loans. The land portion of the portfolio continued to deteriorate through 1986.

Sell Now or Hold On?

Land prices historically have had wide swings. Prices are now 50 percent to 60 percent below their 1980 highs. Some people believe we are at or near the low point in this land price cycle. Thus, FCS faces a dilemma. Selling the land inventory now would cut FCS current account losses for future years, but this action also means that FCS would not benefit from potential land price increases. Selling a large inventory now will further depress prices bringing further capital loss to FCS, as well as depressing the value of land collateral for rural banks and other lenders. Alternatively, keeping land in inventory erodes prospective profitability as farm land rents are less than the scheduled payments associated with the defaulted loans.

Issue Zero Coupon Bonds

One possible approach could relieve some of the financial pressure on the FCS but still preserve an opportunity for benefiting from land price increases. FCS could issue and sell zero coupon bonds, similar to the EE Savings Bonds that the Government now sells.

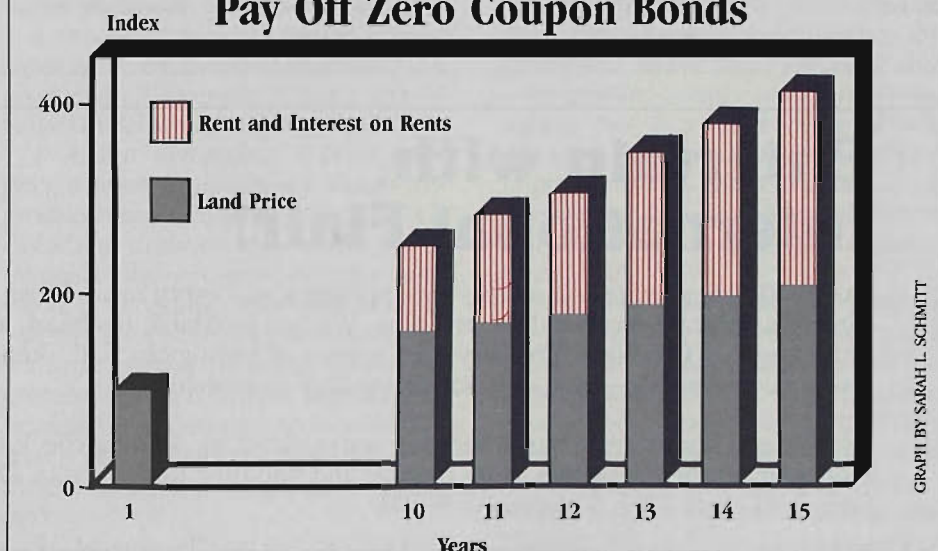
Government EE Bonds have a future maturity value that reflects the original price plus interest for the intervening years. Consequently, interest is not paid annually. Zero coupon bonds may involve a subsidy in that the Government waits to receive the tax on the increase in the bond's value until the bonds mature as opposed to collecting taxes as dividends accumulate to the credit of the bond holder.

3 Issuing Strategies

At least three strategies could be used in issuing the bonds: (1) FCS could guarantee the bonds with all its assets, in the same way other FCS bonds are guaranteed (2) FCS could issue mortgage bonds, specific to property or a group of properties held by FCS, without further guarantee (3) FCS could issue equity bonds which, if not paid off by maturity by FCS, would revert to equity shares in a group of assets, in this case a set of farmland properties held by FCS.

With the first strategy the price that people would pay for FCS zero coupon bonds would reflect their assessments of the future profitability of FCS and the financial protection given to it by the U.S. Government, the interest rates involved, farm operators' ability to pay rents on FCS owned land, congressional and executive willingness to rescue FCS if it needed additional resources to pay the bondholders at maturity, and potential for land value increase. ■

Land Price Increases and Rents Needed to Pay Off Zero Coupon Bonds



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With the second strategy the FCS would rent out its owned land and put the rent in escrow for the bond holder. If the rent and land value increase was not enough to pay off the identified zero coupon bonds at maturity, then the land would be the collateral. The land would be forfeited and sold with any losses accruing to the bond holder.

With the third strategy FCS acquired land also would be the collateral for the zero coupon bonds. Unlike the first two strategies, however, if rents and land price increase is not enough to pay off the bonds at maturity, the purchaser of the zero coupon bonds becomes a part owner of the land to which the bonds are linked. At maturity, or earlier for that matter, the holder of the bonds could transfer the bonds to other people in the bond market. If the bonds are not paid off at maturity a share holding corporation in the land would replace the bonds and the shares could be marketed at a time the shareholder thought best.

How FCS Benefits

Using any one of a mix of the three strategies offers several advantages to FCS. However, none of them would recoup prior FCS losses. Zero coupon bonds could facilitate transferring FCS land received from defaulted loans to private ownership. This is how it would work:

FCS would sell zero coupon bonds on its acquired land based on the value of its land inventory. That would take land off the current depressed market.

Then FCS would rent out the land and collect and save the rents to help pay off the bonds. FCS would be an intermediary in finding a purchaser of land as bond maturity approached. The price of the land FCS accepted plus the rents and interest on rents collected over the life of the bonds would go toward the bond pay off.

Thus, losses from the earlier loan default would be "locked in" except if land sold by FCS along with rents brought more than the bond payoff.

A significant benefit to FCS would be the removal of the land from FCS inventory and the current account hemorrhage on the difference between rents collected and foregone mortgage payments on FCS acquired land.

Other benefits include a reduction in supply of land in the market, which is causing further market price declines and deterioration of the collateral of other lenders. If the bonds were callable prior to maturity, more orderly selling later would likely not depress prices—especially on an up market.

A Zero Coupon Scenario

The specifics for issue of zero coupon bonds could vary. Here is one combination.

FCS in 1987 sells zero coupon bonds with a 2002 maturity for a "pool of land now in FCS inventory." The maturity value of the individual bonds would be \$1,000. There would be no obligation for FCS to pay the bond holders anything until 2002, at which time FCS would be obligated to pay the bond holder \$1,000.

Sufficient bonds could be sold so the proceeds of the sale would be equal to the current appraised value of the land. The sales proceeds would be an infusion of money for FCS.

The land would "secure" the bonds—that is, if FCS went bankrupt, the land securing the bonds would be transferred to the bond holders.

Between 1987 and 2002, FCS would rent the land to farm operators. Rents received would be placed in escrow for payment to the bond holders in 2002. FCS would have the right to call the bonds in 1997 or in subsequent years and would presumably do so if the accu-

mulated rents and market values of a land pool rose above the face values of the zero coupon bonds associated with the pool.

Alternatively, if land values didn't rise that much, the FCS obligation to the bond holders would be discharged by transferring the land pools to the respective bond holders. These bond holders would then be organized into corporations. Naturally the specific provisions will affect the price that purchasers of the bonds would be willing to pay for the bonds.

Importance of Land Price Increases

This proposal will work only if FCS and potential bond purchasers expect land prices to rise. If in fact they do rise, then the bonds would be paid off. The reason this is the case is that expected rents as a percent of current land prices are significantly less than the rate of return that potential purchasers of bonds will require. Simply put—accumulated rents will not be sufficient to pay off the bond holders at maturity of the bonds. Thus, this approach would only work if land prices increased.

For example, suppose bond purchasers "demanded" a 10-percent return. Then for every \$100 they invested in 1987 in zero coupon bonds they would demand \$418 in 2002. Now if FCS were able to obtain rents of 7 percent of the current land value and if land values did not change, rents for the 15 years plus accumulated interest on the rents of 10 percent per year would total \$222.

In order to pay off the zero coupon bonds land prices would have to approximately double from 1987 to 2002. This would be an annual compound rate of about 4½ percent. General inflation alone could carry the price up by that much, especially since we're starting at a relatively low price level on farmland. **C**