"PIK AND ROLL" -- IS IT FOR YOU?

By

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Purpose of Paper

The purpose of this paper is to briefly describe how to do a "PIK and ROLL." The situation varies for each county and for each farm. However, it is useful to go through some pertinent definitions and a number of examples given different situations.

Very briefly, a "PIK and ROLL" is to put corn under loan and immediately redeem it with generic PIK Certificates. In some situations it is profitable to use this technique and in others it is not. Several examples of both will be given. For details, always check with your local ASCS office.

Definitions

- Generic PIK Certificate - The ASCS calls them "CCC-6." It is a Payment-In-Kind (PIK) Commodity Certificate. They can be redeemed for any CCC owned commodity, other than tobacco and peanuts. They can also be used to redeem grain under the regular government loan or the Farmer-Owned Reserve (FOR). However, unlike the 1983 PIK, the face value is in cash, so the number of bushels a dollar amount will redeem varies with prices. These certificates are negotiable and are reported as income. They are being used as payments for owed deficiency payments, diversion payments, and Conservation Reserve payments.

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- PCP or Posted County Price - This is the price used to calculate the quantity a PIK Certificate could redeem. The PCP is divided into the face value of a PIK Certificate to determine the number of bushels, if it is a grain or soybean, that the certificate will redeem. The PCP can vary at least daily. Each county has a constant differential from a terminal market. In Michigan, the terminal market is Toledo. Each day the ASCS estimates the Toledo price; the PCP is then the Toledo price minus that county's differential.

$$
\begin{array}{ll}
\$1.52 & \text{Toledo Price} \\
\underline{.24} & \text{County Differential} \\
\$1.28 & \text{Posted County Price (PCP)}
\end{array}
$$

- Quantity redemption value of a PIK Certificate. It can change daily.

$$\frac{\$ \text{ Value of PIK Certificate}}{\text{PCP}} = \begin{array}{c}\text{Number of Bushels}\\ \text{It Will Redeem}\end{array}$$

Example:

A PIK Certificate with a face value of $1,000
A corn PCP of $1.28 per bushel

$$\frac{\$1,000}{\$1.28} = 781.25$$

One could redeem 781.25 bushels of CCC corn, regular loan, or FOR.

- PIK Premium - This is the amount over the face value the PIK certificates are selling at.

Example:

A $1,000 certificate is selling for $1,300. This means the PIK premium is 30%, 1.3 times the face value.

The examples will show why premiums are being paid.

- What will it cost to buy enough PIK Certificates to redeem a given number of bushels? Multiply the number of bushels times the PCP times (1 + the PIK Premium).

  Example:

  > 10,000   Bushels
  > $1.28   PCP
  >   30%   PIK Premium
  >
  > 10,000 * $1.28 Face Value * 1.30 = $16,640

- Breakeven Price of PIK Certificates - How much could you pay for a PIK Certificate in percentage terms of face value and be as well off as the next best alternative? Or, in other words, what's the most you would pay? Examples will calculate the Breakeven Premium where appropriate.

Evaluation of the "PIK and ROLL"

The paper will now go through examples of seven possible situations. At the end of these examples, a "generic" worksheet is attached.

The calculations evaluate the returns from a "PIK and ROLL" and compares it to selling cash or placing under loan and storing for nine months and forfeiture to CCC, if storage is available.

Scenario 1:   No farm storage, no commercial storage. Ten thousand (10,000) bushels eligible for loan.

a. $1.80   County Loan Rate
    $1.28   PCP
    $1.24   Local Cash Price
     30%   Premium on PIK Certificates

$1.80 Loan * 10,000 Bushels	=	+$18,000.00
$1.28 PCP * 10,000 Bushels * 1.30	=	- 16,640.00
$1.24 Cash * 10,000 Bushels	=	+ 12,400.00
		$13,760.00
Minus Any Extra Handling Charges		0.00
NET		$13,760.00
NET PER BUSHEL		$1.38

Alternatives:

"PIK and ROLL"	$1.38/bu.
Sell for Cash	1.24/bu.
Return to "PIK and ROLL"	$ .14/bu.

Breakeven Price for Premium

Loan Value - PCP * (1 + Premium) + Cash Price = Cash Price
$1.80 - $1.28 * (1 + Premium) = 0
$1.80 / $1.28 = 1.406

One can afford to pay up to 1.406 times the face value of the PIK Certificate and come out as well as selling cash. This means a 40.6% premium.

OR

$$1 + \frac{\text{Loan Rate - PCP}}{\text{PCP}} = \text{Premium}$$

$$1 + \frac{(1.80 - 1.28)}{1.28} = 1.406 = 140.6\%$$

b.
$1.84   County Loan Rate
$1.52   PCP
$1.50   Local Cash Price
30%   Premium

$1.84 Loan * 10,000 Bushels	=	+$18,400.00
$1.52 PCP * 10,000 * 1.30 Bushels	=	- 19,760.00
$1.50 Cash * 10,000 Bushels	=	+ 15,000.00
		$13,640.00
Minus Any Extra Handling Charges		0.00
NET		$13,640.00
NET PER BUSHEL		$1.36

Alternatives:

"PIK and ROLL"	$1.36/bu.
Sell for Cash	1.50/bu.
Return to "PIK and ROLL"	$ -.14/bu.

As shown here or with the above Breakeven formula, the closer the PCP is to the loan rate, the less advantage to a "PIK and ROLL" and the lower you can afford to pay for a premium. This means that as prices fall, premiums will go up and vice versa.

Breakeven:

$$\frac{\$1.84 - \$1.52}{\$1.52} = 21\% \text{ Premium}$$

One-hundred twenty-one percent (121%) of face value is the most

that could be paid in this example and be as well off as just selling

for cash.

Scenario 2:   Enough on-farm storage for 20,000 bushels, but have 30,000

bushels eligible for loan.

$1.80	County Loan Rate
$1.28	PCP
$1.24	Local Cash Price
30%	Premium on PIK Certificates
$ .10	On-Farm Storage for 10 Months

Three Alternatives:

1. Put 20,000 in bin and under loan, sell 10,000 in cash market.

2. Put 10,000 in bin and do a "PIK and ROLL," and then put the remaining 20,000 in the bin under loan.

3. Do a "PIK and ROLL" on all 30,000 bushels.

a.
$1.80 Loan Rate * 20,000 Bushels	=	+$36,000.00
$ .10 Storage * 20,000 Bushels	=	- 2,000.00
$1.24 Cash Price * 10,000 Bushels	=	+ 12,400.00
NET		$46,400.00
NET PER BUSHEL		$1.55

b.
$1.80 Loan Rate * 10,000 Bushels	=	+$18,000.00
$1.28 PCP * 10,000 Bushels * 1.30	=	- 16,640.00
$1.24 Cash Price * 10,000 Bushels	=	+ 12,400.00
$1.80 Loan * 20,000 Bushels	=	+ 36,000.00
$ .10 Storage * 20,000 Bushels	=	- 2,000.00
NET		$47,760.00
NET PER BUSHEL		$1.59

c.
$1.80 Loan Rate * 30,000 Bushels	=	+$54,000.00
$1.28 PCP * 30,000 Bushels * 1.30	=	- 49,920.00
$1.24 Cash Price * 30,000 Bushels	=	+ 37,200.00
NET		$41,280.00
NET PER BUSHEL		$1.38

Alternatives:

1. $1.55/bu.   On-Farm and Cash
2. $1.59/bu.   On-Farm and "PIK and ROLL"
3. $1.38/bu.   "PIK and ROLL"

What this shows is on-farm storage under loan is generally better than the "PIK and ROLL," however, use the advantage of on-farm storage to do a "PIK and ROLL" on the excess bushels before tying up the space.

Scenario 3:   Have commercial storage available, but do not want to store for nine months, but do want to make the sales in the next tax year. It is unlikely that the price of corn will go over the loan rate plus interest this year.

$1.80   County Loan Rate
$1.28   PCP
$1.50   January Forward Contract (F.C.)
$ .04   Storage Cost Per Month
 30%   Premium for PIK Certificates

a.   PIK and ROLL and Forward Contract

$1.80 Loan Rate * 10,000 Bushels	=	+$18,000.00
$1.28 PCP * 10,000 Bushels * 1.30	=	- 16,640.00
$1.50 F.C. * 10,000 Bushels	=	+ 15,000.00
$ .04 * 3 Mos. * 10,000 Bushels	=	- 1,200.00
NET		$15,160.00
NET PER BUSHEL		$1.52

b.   Loan and Nine Months Commercial Storage

$1.80 Loan - $.36 storage = $1.44

Alternatives:

1. $1.52
2. $1.44

A lower F.C. would significantly change (1).

Scenario 4:   Have farm storage for 10,000 bushels of corn. At present,
you have it filled with 10,000 bushels that have just now
been under the nine-month loan for nine months. You are
now in the midst of harvesting this year's 10,000 bushels.

$1.80   County Loan Rate
$1.28   PCP
$1.24   Local Cash Price
$ .10   On-Farm Storage for 10 Months
$.265   Yearly F.O.R.
 30%   Premium for PIK Certificates

Alternatives:

1.   Forfiet the 10,000 bushels under nine-month loan and put new
     corn under nine-month loan.

2.   Put the old crop corn into the F.O.R. and use "PIK and ROLL"
     for the new crop.

a.   Nothing additional for old crop.

$1.80 Loan Rate * 10,000 Bushels	=	+$18,000.00
$ .10 Storage * 10,000 Bushels	=	- 1,000.00
NET		$17,000.00
NET PER BUSHEL		$1.70

$.265 Storage * 10,000 Bushels	=	+$ 2,650.00
$ .10 Storage * 10,000 Bushels	=	- 1,000.00
$1.80 Loan * 10,000 Bushels	=	+ 18,000.00
$1.28 PCP * 10,000 Bushels * 1.30	=	- 16,640.00
$1.24 Cash Price * 10,000 Bushels	=	+ 12,400.00
NET		$15,410.00
NET PER BUSHEL		$1.54

In this scenario the first alternative comes out better. However,
the purpose of this example is to show the calculations, if the
premium was 17.5 percent or less, the second alternative would
have come out better. If the premiums come down or you can F.C.
for a higher net price in January, the second alternative may be the
best. The key is that the net return from F.O.R. storage and "PIK
and ROLL" has to be greater than the net return from the

differences between the cash price and net return from the nine-month loan. **The point is, you need to do the math for your individual situation.**

Scenario 5: You have on-farm storage for your 10,000 bushels of corn you have harvested and need for feed. And you want to use your own corn for feed. Use the "PIK and ROLL."

$1.80 County Loan Rate
$1.28 PCP
30% Premium

$1.80 Loan Rate * 10,000 Bushels   =   +$18,000.00
$1.28 PCP * 10,000 Bushels * 1.30   =   - 16,640.00
                                NET   +$ 1,360.00

In this example, you get to use your own feed and pocket $1,360.00 besides. However, an even better return may be to leave your corn under loan and purchase your corn for feed.

Scenario 6: Put substitution grain under loan and use the "PIK and ROLL" to take advantage of larger differentials in other counties.

THE ALTERNATIVE WAS ELIMINATED AS OF OCTOBER 31, 1986, BY THE USDA.

You can still put your corn under loan using the substitution rules, but you cannot redeem it with PIK Certificates.

Scenario 7: Should you sell the PIK Certificates that you receive or use them to redeem corn you put under loan?

$1,000 PIK Certificate (Face Value)
$1.80 County Loan Rate
$1.28 PCP
$1.24 Local Cash Price
30% Premium
$ .10 On-Farm Storage for 10 Months
$ .36 Off-Farm Storage for 9 Months

How many bushels will the $1,000 PIK Certificate redeem?

$1,000 ÷ $1.28 PCP = 781.25 Bushels

On-Farm

a. Use nine-month loan and sell PIK Certificates

$1.80 Loan Rate * 781.25 Bushels	=	+ $1,406.25
$ .10 Storage * 781.25	=	- 78.13
$1,000 * $.30 (30% Premium)	=	+ 300.00
NET		+ $1,628.12

(Notice I did not include the $1,000 face value of the Certificate

that was part of a deficiency payment.)

b. Use PIK and ROLL for 781.25 bushels

$1.80 Loan Rate * 781.25 Bushels	=	+ $1,406.25
$1.24 Cash * 781.25	=	+ 968.75
Subtract $1,000 that was a Deficiency Payment	=	- 1,000.00
NET		+ $1,375.00

Obviously, in this case with on-farm storage the better option was

to put corn under loan and sell the Certificate.

Off-Farm:

a. Use nine-month loan and sell PIK Certificate

$1.80 Loan * 781.25 Bushels	=	+ $1,406.25
$ .36 Storage * 781.25 Bushels	=	- 281.25
$1,000 * $ .30 (30% Premium)	=	+ 300.00
NET		+ $1,425.00

b. Use PIK and ROLL for 781.25 Bushels

$1.80 Loan Rate * 781.25 Bushels	=	+ $1,406.25
$1.24 Cash * 781.25 Bushels	=	+ 968.75
Subtract Face Value	=	- 1,000.00
NET		+ $1,375.00

In this case, it is a very close call. If the premium was 25% or less,

the PIK and ROLL would have been better given the PCP was the

same.

WORDS OF CAUTION

-- Loan rate, PCP, and cash prices vary between counties.

-- No PIK and ROLL on substitution bushels.

-- PCP, PIK Premium, and cash prices vary daily. This means the number of bushels a Certificate will redeem varies daily.

-- Account for any additional storage, handling, or service expenses incurred by executing a "PIK and ROLL" when calculating net price.

-- Once you have redeemed your loan you are speculating on that cash grain until you sell it.

-- As PCP approaches loan rate, the value of Certificates probably will decrease.

-- The ASCS Offices will be busy this fall, make sure they can handle transaction as fast as you need.

-- Check with your elevator manager on extra costs that might be incurred.

-- Consider tax consequences.

-- **Please** check with your ASCS Office on all transactions considered and their rules.

EXAMPLE

**Worksheet To Calculate Return
To "PIK And ROLL"**

Needed Information:

County Loan Rate	$ __1__ . __82__
PCP	__1__ . __30__
Local Cash Price	__1__ . __35__
Storage Cost to Maturity	. __27__
Additional Service Costs	__0__ . __05__
Number of Bushels Involved	__1,000__
Market Cost of Certificates	__25__ % ÷ 100 = __.25__

Calculations:

$ __1__ . __82__	Loan * __1,000__ Bushels	= $ __1820__
$ __1__ . __30__	PCP * __1,000__ Bushels * __1.25__ Certificate Cost	= $ __-1,625__
$ __.00__	Storage * __1,000__ Bushels	= $ __0__
$ __1__ . __35__	Cash Price * __1,000__ Bushels	= $ __1,350__
$ __0__ . __05__	Service Fee * __1,000__ Bushels	= $ __- 50__
	NET TO PIK AND ROLL	= $ ~~1,500~~ __1,495__
	NET÷__1,000__ Bu. = Net/Bu.	= $ __1.50__

Compare the net from PIK and ROLL to:

Loan   -   Storage

$ __1__ . __82__ - $ __0__ . __27__ = 1.55

         Cash Price   = 1.35

Maximum premium on PIK Certificates you can afford to pay:

$$1 + \frac{\text{Loan Rate - PCP - X}}{\text{PCP}} = \frac{\text{Maximum}}{\text{Bid Price}}$$

Where X = Loan Rate - Storage to Maturity + Service Fee - Cash Price

If X < 0 (i.e., cash > Loan - Storage) then X = 0

$$1 + \frac{(\$ \underline{1} . \underline{82} - \underline{1} . \underline{30} - \underline{.25})}{\$ \underline{1} . \underline{30}} = 1.21$$

Worksheet To Calculate Return
To "PIK And ROLL"

Needed Information:

County Loan Rate	$ _____ . _____
PCP	_____ . _____
Local Cash Price	_____ . _____
Storage Cost to Maturity	. _____
Additional Service Costs	_____ . _____
Number of Bushels Involved	_____
Market Cost of Certificates	_____ % ÷ 100 = _____

Calculations:

$ _____ . _____   Loan * _____ Bushels   **(+)** = $ _____

$ _____ . _____   PCP * _____ Bushels *   **(−)** = $ _____
                      _____ Certificate Cost

$ _____ . _____   Storage * _____ Bushels   **(−)** = $ _____

$ _____ . _____   Cash Price * _____ Bushels   **(+)** = $ _____

$ _____ . _____   Service Fee * _____ Bushels **(−)** = $ _____

NET TO PIK AND ROLL   = $ _____

NET ÷ _____ Bu. = Net/Bu.   = $ _____

Compare the net from PIK and ROLL to:

Loan   −   Storage

$ _____ . _____ − $ _____ . _____ =

Cash Price   =

Maximum premium on PIK Certificates you can afford to pay:

$$1 + \frac{\text{Loan Rate} - \text{PCP} - X}{\text{PCP}} = \text{Maximum Bid Price}$$

Where X = Loan Rate - Storage to Maturity + Service Fee - Cash Price

If X < 0 (i.e., cash > Loan - Storage) then X = 0

$$1 + \frac{(\$ \_\_\_ . \_\_\_\_ - \_\_\_ . \_\_\_\_ - . \_\_\_\_\_)}{\$ \_\_\_ . \_\_\_} = _____$$