## EXAM FM QUESTIONS OF THE WEEK

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## Week of September 18/06

Calendar Year of Investment	Investment Year Rates in %			Portfolio Rates in %
y	$i_1^y$	$i_2^y$	$i_3^y$	$i^{y+3}$
2001	6.00	6.50	7.0	6.00
2002	5.00	5.00	5.50	5.50
2003	4.50	5.00	5.00	4.00
2004	3.00	4.00	$i_3^{2004}$	
2005	3.00	4.00	4.50	
2006	4.00	4.50	5.00	

You are given the following table of interest rates:

Find the investment year rate  $i_3^{2004}$  in 2006 that will result in the same 3-year average return over the 3 year period from the start of 2004 to the end of 2006 for both the investment year method for an investment made at the start of 2004 and the portfolio yield method.

## The solution can be found below.

## Week of September 18/06 - Solution

Investment year method 3-year compound return =  $(1.03)(1.04)(1+i_3^{2004})$  .

Portfolio yield method 3-year compound return = (1.06)(1.055)(1.04) = 1.163032.

Then  $(1.03)(1.04)(1+i_3^{2004}) = 1.163032 \rightarrow i_3^{2004} = .0857$ .