

Bus Ad 239B–Spring 2003
Problem Set 12
Due Thursday May 1

Most bonds are coupon bonds: they pay interest at a rate c on a regular basis, say annually. A coupon bond can be viewed as a collection of zero-coupon bonds, with one zero-coupon bond for each scheduled interest payment, and a final, larger, zero-coupon bond at the maturity date. In the Vasicek Model, as presented in Sections 7.2 and 7.4 of Nielsen, determine the pricing and yield curve of coupon bonds. It will be simpler if you assume the coupon bond pays interest continuously; in other words, a bond with a face value of \$1 (and thus which pays \$1 at its maturity date t) pays interest of $\$c dt$ between time s and time $s + dt$.