“TASDIQLAYMAN”

O‘zbekiston Respublikasi
Markaziy banki
raisi o‘rinbosari -
O‘zRVB kuzatuv kengashi raisi

_____ N.M. Achilov

O‘zbekiston Respublikasi Markaziy banki tomonidan xalqaro ekspertlar tavsiyasiga ko‘ra ishlab chiqilgan davlat qimmatli qog‘ozlarning daromadliligini hisoblash formulalari	**Formulas for calculating the yield of government securities developed by the Central Bank of the Republic of Uzbekistan based on the recommendations of international experts**
Diskontli davlat qimmatli qog‘ozlari (DQQ) bo‘yicha nominal daromadlilikni hisoblash formulasi $$Y = \left(\frac{N}{P} - 1\right) * \left(\frac{B}{t_m - t_s}\right) * 100$$ *Y – diskontli DQQning nominal daromadliligi, yillik foizda;* *N – DQQning nominal qiymati;* *P – DQQning sotib olish narxi;* *B – yildagi kunlar soni (hisob-kitob bazasi 365 kun);* *t_m – DQQ so‘ndirilish sanasi;* *t_s – hisob-kitob sanasi.*	**Formula for calculating the nominal yield on discount government securities (GS)** $$Y = \left(\frac{N}{P} - 1\right) * \left(\frac{B}{t_m - t_s}\right) * 100$$ *Y – nominal yield of discount GS;* *N – nominal value of GS;* *P – purchase price of GS;* *B – number of days in a year (calculation base 365 days);* *t_m – maturity date of GS;* *t_s – settlement date.*
Kupon stavkali DQQning “yalpi” narxini hisoblash funksiyasi $$P = \left(\sum_{i=1}^{n} \frac{C}{\left(1 + \frac{YTM}{2}\right)^{\frac{t_i - t_s}{365} * 2}}\right) + \frac{N}{\left(1 + \frac{YTM}{2}\right)^{\frac{t_m - t_s}{365} * 2}}$$ *P – DQQning “yalpi” narxi so‘mda;* *C – DQQ bo‘yicha kuponning so‘mdagi miqdori;* *n – so‘ndirilish muddatigacha qolgan kupon to‘lovlari soni;* *t_i – kupon tulovlari sanasi;* *t_s – hisob-kitob sanasi;* *t_m – DQQ so‘ndirilish sanasi;* *YTM (Act/365) – so‘ndirilish muddatigacha bo‘lgan nominal daromadlilik, yillik foizda;* *N – DQQ nominal qiymati.*	**Function for calculating the dirty price of coupon-bearing GS** $$P = \left(\sum_{i=1}^{n} \frac{C}{\left(1 + \frac{YTM}{2}\right)^{\frac{t_i - t_s}{365} * 2}}\right) + \frac{N}{\left(1 + \frac{YTM}{2}\right)^{\frac{t_m - t_s}{365} * 2}}$$ *P – “dirty” price of GS in soums;* *C – coupon payment amount on GS in soums;* *n – number of remaining coupon payments to maturity;* *t_i – coupon payment date;* *t_s – settlement date;* *t_m – maturity date of GS;* *YTM (Act/365) – nominal yield to maturity, in percent per annum;* *N – nominal value of GS.*

Qat'iy foiz daromadli DQQ bo'yicha jamg'arilgan kupon daromadi (JKD) miqdorini hisoblash formulasi:	**Formula for calculating the amount of accumulated coupon income (ACI) for fixed-interest GS:**
$JKD = N * \frac{F}{100\%} * \frac{t}{365}, \quad t = T_p - T_0$ *N – DQQning nominal qiymati;* *F - belgilangan kupon daromadi stavkasi (yillik % hisobida);* *t - kupon davrida o'tgan kunlar soni;* T_p *- JKD hisoblanadigan sana;* T_0 *– DQQ bozor narxining so'nggi qiymati aniqlangan sana.*	$ACI = N * \frac{F}{100\%} * \frac{t}{365}, \quad t = T_p - T_0$ *N – nominal value of GS;* *F - fixed coupon rate (% per annum);* *t - number of days elapsed in the coupon period;* T_p *- date for which the accumulated coupon income is calculated;* T_0 *- date of determination of the last market price value of GS.*