## FINS1613 - Perpetuity Of Broken Dreams Problem (Iterative Checks)

## Tuan Ho

## Feb, 2021

- Periodic monthly rate is monthlyR = 0.0136015752,  $PV_1 = 887.9228505453$ .
- At t = 2,
  - -g = 0.0410000000,
  - $CF_2 = CF_1(1 + 0.0410000000) = 936.90000000000,$
  - $-PVPayment = \frac{CF_2}{(1+0.0136015752)^2} = 911.9240833886,$
  - $PV_0 = \$1799.8469339339$
- At t = 3,
  - -g = 0.0410000000,
  - $-\ CF_3 = CF_2(1+0.0410000000) = 975.3129000000,$
  - $-PVPayment = \frac{CF_3}{(1+0.0136015752)^3} = 936.5740878878,$
  - $-PV_0 = $2736.4210218216$
- At t = 4,
  - -g = 0.0410000000,
  - $-CF_4 = CF_3(1 + 0.0410000000) = 1015.3007289000,$
  - $-PVPayment = \frac{CF_4}{(1+0.0136015752)^4} = 961.8904008362,$
  - $PV_0 = \$3698.3114226578$
- At t = 5,
  - -g = 0.0410000000,
  - $-CF_5 = CF_4(1 + 0.0410000000) = 1056.9280587849,$
  - $-PVPayment = \frac{CF_5}{(1+0.0136015752)^5} = 987.8910330601,$
  - $PV_0 = \$4686.2024557180$
- At t = 6,
  - -g = 0.0410000000,
  - $CF_6 = CF_5(1 + 0.0410000000) = 1100.2621091951,$
  - $-PVPayment = \frac{CF_6}{(1+0.0136015752)^6} = 1014.5944822323,$

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-PV_0 = \$5700.7969379502
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- At t = 7,
  - -g = 0.0410000000,
  - $CF_7 = CF_6(1 + 0.0410000000) = 1145.3728556721,$
  - $-PVPayment = \frac{CF_7}{(1+0.0136015752)^7} = 1042.0197460316,$
  - $-PV_0 = \$6742.8166839818$
- At t = 8,
  - -g = 0.0410000000,
  - $-CF_8 = CF_7(1 + 0.0410000000) = 1192.3331427546,$
  - $-PVPayment = \frac{CF_8}{(1+0.0136015752)^8} = 1070.1863356587,$
  - $-PV_0 = $7813.0030196406$
- At t = 9,
  - -g = 0.0410000000,
  - $-CF_9 = CF_8(1 + 0.0410000000) = 1241.2188016076,$
  - $-PVPayment = \frac{CF_9}{(1+0.0136015752)^9} = 1099.1142897171,$
  - $-PV_0 = \$8912.1173093576$
- At t = 10,
  - -q = 0.0410000000,
  - $-CF_{10} = CF_9(1 + 0.0410000000) = 1292.1087724735,$
  - $-PVPayment = \frac{CF_{10}}{(1+0.0136015752)^{10}} = 1128.8241884687,$
  - $PV_0 = \$10040.9414978263$
- At t = 11,
  - -g = 0.0410000000,
  - $CF_{11} = CF_{10}(1 + 0.0410000000) = 1345.0852321449,$
  - $-PVPayment = \frac{CF_{11}}{(1+0.0136015752)^{11}} = 1159.3371684759,$
  - $-PV_0 = $11200.2786663023$
- At t = 12,
  - -g = 0.0410000000,
  - $-CF_{12} = CF_{11}(1 + 0.0410000000) = 1400.2337266628,$
  - $-PVPayment = \frac{CF_{12}}{(1+0.0136015752)^{12}} = 1190.6749376385,$
  - $-PV_0 = $12390.9536039407$
- At t = 13,
  - g = 0.0410000000,
  - $-CF_{13} = CF_{12}(1 + 0.0410000000) = 1457.6433094560,$
  - $-PVPayment = \frac{CF_{13}}{(1+0.0136015752)^{13}} = 1222.8597906372,$
  - $-PV_0 = \$13613.8133945779$
- At t = 14,

- -g = 0.0410000000,
- $-CF_{14} = CF_{13}(1 + 0.0410000000) = 1517.4066851437,$
- $-PVPayment = \frac{CF_{14}}{(1+0.0136015752)^{14}} = 1255.9146247952,$
- $-PV_0 = $14869.7280193731$
- At t = 15,
  - -g = 0.0410000000,
  - $-CF_{15} = CF_{14}(1 + 0.0410000000) = 1579.6203592346,$
  - $-PVPayment = \frac{CF_{15}}{(1+0.0136015752)^{15}} = 1289.8629563676,$
  - $-PV_0 = \$16159.5909757407$
- At t = 16,
  - -g = 0.0410000000,
  - $-CF_{16} = CF_{15}(1 + 0.0410000000) = 1644.3847939632,$
  - $-PVPayment = \frac{CF_{16}}{(1+0.0136015752)^{16}} = 1324.7289372721,$
  - $-PV_0 = \$17484.3199130129$
- At t = 17,
  - -g = 0.0410000000,
  - $-CF_{17} = CF_{16}(1 + 0.0410000000) = 1711.8045705157,$
  - $-PVPayment = \frac{CF_{17}}{(1+0.0136015752)^{17}} = 1360.5373722711,$
  - $PV_0 = \$18844.8572852839$
- At t = 18,
  - g = 0.0410000000,
  - $-CF_{18} = CF_{17}(1 + 0.0410000000) = 1781.9885579069,$
  - $-PVPayment = \frac{CF_{18}}{(1+0.0136015752)^{18}} = 1397.3137366184,$
  - $-PV_0 = \$20242.1710219023$
- At t = 19,
  - -q = 0.0410000000,
  - $-CF_{19} = CF_{18}(1 + 0.0410000000) = 1855.0500887810,$
  - $-PVPayment = \frac{CF_{19}}{(1+0.0136015752)^{19}} = 1435.0841941837,$
  - $-PV_0 = $21677.2552160860$
- At t = 20,
  - -g = 0.0410000000,
  - $CF_{20} = CF_{19}(1 + 0.0410000000) = 1931.1071424211,$
  - $-PVPayment = \frac{CF_{20}}{(1+0.0136015752)^{20}} = 1473.8756160660,$
  - $-PV_0 = $23151.1308321519$
- At t = 21,
  - -g = 0.0410000000,
  - $-CF_{21} = CF_{20}(1 + 0.0410000000) = 2010.2825352603,$

- $-PVPayment = \frac{CF_{21}}{(1+0.0136015752)^{21}} = 1513.7155997105,$  $-PV_0 = $24664.8464318624$
- At t = 22,
  - -g = 0.0410000000,
  - $-CF_{22} = CF_{21}(1 + 0.0410000000) = 2092.7041192060,$
  - $-PVPayment = \frac{CF_{22}}{(1+0.0136015752)^{22}} = 1554.6324885426,$
  - $PV_0 = \$26219.4789204050$
- At t = 23,
  - -g = 0.0410000000,
  - $-CF_{23} = CF_{22}(1 + 0.0410000000) = 2178.5049880934,$
  - $-PVPayment = \frac{CF_{23}}{(1+0.0136015752)^{23}} = 1596.6553921321,$
  - $PV_0 = \$27816.13\overline{43125371}$
- At t = 24,
  - -g = 0.0410000000,
  - $-CF_{24} = CF_{23}(1 + 0.0410000000) = 2267.8236926053,$
  - $-PVPayment = \frac{CF_{24}}{(1+0.0136015752)^{24}} = 1639.8142069026,$
  - $-PV_0 = \$29455.9485194397$
- At t = 25,
  - -g = 0.0410000000,
  - $-CF_{25} = CF_{24}(1 + 0.0410000000) = 2360.8044640021,$
  - $-PVPayment = \frac{CF_{25}}{(1+0.0136015752)^{25}} = 1684.1396374009,$
  - $-PV_0 = \$31140.0881568405$
- At t = 26,
  - g = 0.0410000000,
  - $CF_{26} = CF_{25}(1 + 0.0410000000) = 2457.5974470262,$
  - $-PVPayment = \frac{CF_{26}}{(1+0.0136015752)^{26}} = 1729.6632181412,$
  - $PV_0 = \$32869.7513749817$
- At t = 27,
  - -g = 0.0410000000,
  - $-CF_{27} = CF_{26}(1 + 0.0410000000) = 2558.3589423542,$
  - $-PVPayment = \frac{CF_{27}}{(1+0.0136015752)^{27}} = 1776.4173360397,$
  - $-PV_0 = \$34646.1687110215$
- At t = 28,
  - -g = 0.0410000000,
  - $-CF_{28} = CF_{27}(1 + 0.0410000000) = 2663.2516589908,$
  - $-PVPayment = \frac{CF_{28}}{(1+0.0136015752)^{28}} = 1824.4352534557,$
  - $-PV_0 = \$36470.6039644772$

- At t = 29,
  - -g = 0.0410000000,
  - $-CF_{29} = CF_{28}(1 + 0.0410000000) = 2772.4449770094,$
  - $-PVPayment = \frac{CF_{29}}{(1+0.0136015752)^{29}} = 1873.7511318554,$
  - $PV_0 = \$38344.3550963326$
- At t = 30,
  - -g = 0.0410000000,
  - $CF_{30} = CF_{29}(1 + 0.0410000000) = 2886.1152210668,$
  - $-PVPayment = \frac{CF_{30}}{(1+0.0136015752)^{30}} = 1924.4000561156,$
  - $-PV_0 = \$40268.7551524482$
- At t = 31,
  - -g = 0.0410000000,
  - $-CF_{31} = CF_{30}(1 + 0.0410000000) = 3004.4459451305,$
  - $-PVPayment = \frac{CF_{31}}{(1+0.0136015752)^{31}} = 1976.4180594840,$
  - $-PV_0 = \$42245.1732119322$
- At t = 32,
  - -g = 0.0410000000,
  - $-CF_{32} = CF_{31}(1 + 0.0410000000) = 3127.6282288809,$
  - $-PVPayment = \frac{CF_{32}}{(1+0.0136015752)^{32}} = 2029.8421492148,$
  - $PV_0 = \$44275.0153611470$
- At t = 33,
  - -g = 0.0410000000,
  - $CF_{33} = CF_{32}(1 + 0.0410000000) = 3255.8609862650,$
  - $-PVPayment = \frac{CF_{33}}{(1+0.0136015752)^{33}} = 2084.7103328961,$
  - $-PV_0 = \$46359.7256940431$
- At t = 34,
  - -g = 0.0410000000,
  - $-CF_{34} = CF_{33}(1 + 0.0410000000) = 3389.3512867018,$
  - $-PVPayment = \frac{CF_{34}}{(1+0.0136015752)^{34}} = 2141.0616454905,$
  - $-PV_0 = $48500.7873395335$
- At t = 35,
  - -g = 0.0410000000,
  - $-CF_{35} = CF_{34}(1 + 0.0410000000) = 3528.3146894566,$
  - $-PVPayment = \frac{CF_{35}}{(1+0.0136015752)^{35}} = 2198.9361771053,$
  - $-PV_0 = $50699.7235166388$
- At t = 36,
  - g = 0.0410000000,

- $-CF_{36} = CF_{35}(1 + 0.0410000000) = 3672.9755917243,$   $-PVPayment = \frac{CF_{36}}{(1 + 0.0136015752)^{36}} = 2258.3751015140,$  $-PV_0 = \$52958.0986181528$
- At t = 37,
  - -g = 0.0410000000,
  - $-CF_{37} = CF_{36}(1 + 0.0410000000) = 3823.5675909850,$
  - $-PVPayment = \frac{CF_{37}}{(1+0.0136015752)^{37}} = 2319.4207054488,$
  - $-PV_0 = \$55277.5193236016$
- At t = 38,
  - -g = 0.19000000000,
  - $-CF_{38} = CF_1(1 + 0.1900000000) = 1071.00000000000,$
  - $-PVPayment = \frac{CF_{38}}{(1+0.0136015752)^{38}} = 640.9629877106,$
  - $-PV_0 = $55918.4823113122$
- At t = 39,
  - -g = 0.0410000000,
  - $-CF_{39} = CF_{38}(1 + 0.0410000000) = 1114.91100000000,$
  - $-PVPayment = \frac{CF_{39}}{(1+0.0136015752)^{39}} = 658.2887068342,$
  - $PV_0 = \$56576.7710181464$
- At t = 40,
  - g = 0.0410000000,
  - $-CF_{40} = CF_{39}(1 + 0.0410000000) = 1160.6223510000,$
  - $-PVPayment = \frac{CF_{40}}{(1+0.0136015752)^{40}} = 676.0827533791,$
  - $PV_0 = \$57252.8537715255$
- At t = 41,
  - -g = 0.0410000000,
  - $CF_{41} = CF_{40}(1 + 0.0410000000) = 1208.2078673910,$
  - $-PVPayment = \frac{CF_{41}}{(1+0.0136015752)^{41}} = 694.3577865931,$
  - $PV_0 = \$57947.2115581186$
- At t = 42,
  - -g = 0.0410000000,
  - $-CF_{42} = CF_{41}(1 + 0.0410000000) = 1257.7443899540,$
  - $-PVPayment = \frac{CF_{42}}{(1+0.0136015752)^{42}} = 713.1268079134,$
  - $-PV_0 = $58660.3383660320$
- At t = 43,
  - -g = 0.0410000000,
  - $CF_{43} = CF_{42}(1 + 0.0410000000) = 1309.3119099421,$
  - $-PVPayment = \frac{CF_{43}}{(1+0.0136015752)^{43}} = 732.4031702156,$

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-PV_0 = $59392.7415362476
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- At t = 44,
  - -g = 0.0410000000,
  - $-CF_{44} = CF_{43}(1 + 0.0410000000) = 1362.9936982498,$
  - $-PVPayment = \frac{CF_{44}}{(1+0.0136015752)^{44}} = 752.2005873142,$
  - $-PV_0 = \$60144.9421235618$
- At t = 45,
  - -g = 0.0410000000,
  - $-CF_{45} = CF_{44}(1 + 0.0410000000) = 1418.8764398780,$
  - $-PVPayment = \frac{CF_{45}}{(1+0.0136015752)^{45}} = 772.5331437181,$
  - $-PV_0 = \$60917.4752672799$
- At t = 46,
  - -g = 0.0410000000,
  - $-CF_{46} = CF_{45}(1 + 0.0410000000) = 1477.0503739130,$
  - $-PVPayment = \frac{CF_{46}}{(1+0.0136015752)^{46}} = 793.4153046515,$
  - $-PV_0 = \$61710.8905719314$
- At t = 47,
  - -q = 0.0410000000,
  - $-CF_{47} = CF_{46}(1 + 0.0410000000) = 1537.6094392434,$
  - $-PVPayment = \frac{CF_{47}}{(1+0.0136015752)^{47}} = 814.8619263448,$
  - $PV_0 = \$62525.7524982762$
- At t = 48,
  - -g = 0.0410000000,
  - $CF_{48} = CF_{47}(1 + 0.0410000000) = 1600.6514262524,$
  - $-PVPayment = \frac{CF_{48}}{(1+0.0136015752)^{48}} = 836.8882666032,$
  - $PV_0 = \$63362.6407648794$
- At t = 49,
  - -g = 0.0410000000,
  - $-CF_{49} = CF_{48}(1 + 0.0410000000) = 1666.2781347288,$
  - $-PVPayment = \frac{CF_{49}}{(1+0.0136015752)^{49}} = 859.5099956626,$
  - $-PV_0 = \$64222.1507605420$
- At t = 50,
  - g = 0.0410000000,
  - $-CF_{50} = CF_{49}(1 + 0.0410000000) = 1734.5955382527,$
  - $-PVPayment = \frac{CF_{50}}{(1+0.0136015752)^{50}} = 882.7432073368,$
  - $-PV_0 = $65104.8939678787$
- At t = 51,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{51} = CF_{50}(1+0.0410000000) = 1805.7139553210, \\ -PVPayment = \frac{CF_{51}}{(1+0.0136015752)^{51}} = 906.6044304680, \end{array}$
- $-PV_0 = \$66011.4983983467$
- At t = 52,
  - -g = 0.0410000000,
  - $-CF_{52} = CF_{51}(1 + 0.0410000000) = 1879.7482274892,$
  - $-PVPayment = \frac{CF_{52}}{(1+0.0136015752)^{52}} = 931.1106406856,$
  - $PV_0 = \$66942.6090390323$
- At t = 53.
  - -g = 0.0410000000,
  - $-CF_{53} = CF_{52}(1 + 0.0410000000) = 1956.8179048162,$
  - $-PVPayment = \frac{CF_{53}}{(1+0.0136015752)^{53}} = 956.2792724832,$
  - $-PV_0 = \$67898.8883115155$
- At t = 54,
  - -g = 0.0410000000,
  - $-CF_{54} = CF_{53}(1 + 0.0410000000) = 2037.0474389137,$
  - $-PVPayment = \frac{CF_{54}}{(1+0.0136015752)^{54}} = 982.1282316219,$
  - $-PV_0 = $68881.0165431374$
- At t = 55,
  - g = 0.0410000000,
  - $-CF_{55} = CF_{54}(1 + 0.0410000000) = 2120.5663839092,$
  - $-PVPayment = \frac{CF_{55}}{(1+0.0136015752)^{55}} = 1008.6759078696,$
  - $-PV_0 = \$69889.6924510070$
- At t = 56,
  - -q = 0.0410000000,
  - $-CF_{56} = CF_{55}(1 + 0.0410000000) = 2207.5096056494,$
  - $-PVPayment = \frac{CF_{56}}{(1+0.0136015752)^{56}} = 1035.9411880833,$
  - $-PV_0 = \$70925.6336390903$
- At t = 57,
  - -g = 0.0410000000,
  - $-CF_{57} = CF_{56}(1 + 0.0410000000) = 2298.0174994811,$
  - $-PVPayment = \frac{CF_{57}}{(1+0.0136015752)^{57}} = 1063.9434696463,$
  - $-PV_0 = \$71989.5771087367$
- At t = 58,
  - -g = 0.0410000000,
  - $-CF_{58} = CF_{57}(1 + 0.0410000000) = 2392.2362169598,$

- $-PVPayment = \frac{CF_{58}}{(1+0.0136015752)^{58}} = 1092.7026742681,$  $-PV_0 = \$73082.2797830047$
- At t = 59,
  - -g = 0.0410000000,
  - $-CF_{59} = CF_{58}(1 + 0.0410000000) = 2490.3179018551,$
  - $-PVPayment = \frac{CF_{59}}{(1+0.0136015752)^{59}} = 1122.2392621569,$
  - $-PV_0 = \$74204.5190451616$
- At t = 60,
  - -g = 0.0410000000,
  - $-CF_{60} = CF_{59}(1 + 0.0410000000) = 2592.4209358312,$
  - $-PVPayment = \frac{CF_{60}}{(1+0.0136015752)^{60}} = 1152.5742465764,$
  - $-PV_0 = \$75357.0932917380$
- At t = 61,
  - g = 0.0410000000,
  - $-CF_{61} = CF_{60}(1 + 0.0410000000) = 2698.7101942003,$
  - $-PVPayment = \frac{CF_{61}}{(1+0.0136015752)^{61}} = 1183.7292087945,$
  - $-PV_0 = \$76540.8225005325$
- At t = 62,
  - -g = 0.0410000000,
  - $-CF_{62} = CF_{61}(1 + 0.0410000000) = 2809.3573121625,$
  - $-PVPayment = \frac{CF_{62}}{(1+0.0136015752)^{62}} = 1215.7263134374,$
  - $-PV_0 = \$77756.5488139699$
- At t = 63,
  - g = 0.0410000000,
  - $CF_{63} = CF_{62}(1 + 0.0410000000) = 2924.5409619611,$
  - $-PVPayment = \frac{CF_{63}}{(1+0.0136015752)^{63}} = 1248.5883242582,$
  - $-PV_0 = $79005.1371382281$
- At t = 64.
  - -g = 0.0410000000,
  - $CF_{64} = CF_{63}(1 + 0.0410000000) = 3044.4471414016,$
  - $-PVPayment = \frac{CF_{64}}{(1+0.0136015752)^{64}} = 1282.3386203313,$
  - $-PV_0 = \$80287.4757585594$
- At t = 65,
  - -g = 0.0410000000,
  - $CF_{65} = CF_{64}(1 + 0.0410000000) = 3169.2694741990,$
  - $-PVPayment = \frac{CF_{65}}{(1+0.0136015752)^{65}} = 1317.0012126857,$
  - $-PV_0 = \$81604.4769712451$

- At t = 66,
  - -g = 0.0410000000,
  - $-CF_{66} = CF_{65}(1 + 0.0410000000) = 3299.2095226412,$
  - $-PVPayment = \frac{CF_{66}}{(1+0.0136015752)^{66}} = 1352.6007613866,$
  - $PV_0 = \$82957.0777326317$
- At t = 67,
  - -g = 0.0410000000,
  - $-CF_{67} = CF_{66}(1 + 0.0410000000) = 3434.4771130695,$
  - $-PVPayment = \frac{CF_{67}}{(1+0.0136015752)^{67}} = 1389.1625930798,$
  - $-PV_0 = \$84346.2403257115$
- At t = 68,
  - -g = 0.0410000000,
  - $-CF_{68} = CF_{67}(1 + 0.0410000000) = 3575.2906747053,$
  - $-PVPayment = \frac{CF_{68}}{(1+0.0136015752)^{68}} = 1426.7127190094,$
  - $PV_0 = \$85772.9530447209$
- At t = 69,
  - -g = 0.0410000000,
  - $CF_{69} = CF_{68}(1 + 0.0410000000) = 3721.8775923682,$
  - $-PVPayment = \frac{CF_{69}}{(1+0.0136015752)^{69}} = 1465.2778535236,$
  - $PV_0 = \$87238.2308982445$
- At t = 70.
  - g = 0.0410000000,
  - $-CF_{70} = CF_{69}(1 + 0.0410000000) = 3874.4745736553,$
  - $-PVPayment = \frac{CF_{70}}{(1+0.0136015752)^{70}} = 1504.8854330797,$
  - $-PV_0 = \$88743.1163313242$
- At t = 71,
  - -g = 0.0410000000,
  - $-CF_{71} = CF_{70}(1 + 0.0410000000) = 4033.3280311752,$
  - $-PVPayment = \frac{CF_{71}}{(1+0.0136015752)^{71}} = 1545.5636357633,$
  - $-PV_0 = $90288.6799670875$
- At t = 72,
  - -g = 0.0410000000,
  - $-CF_{72} = CF_{71}(1 + 0.0410000000) = 4198.6944804534,$
  - $-PVPayment = \frac{CF_{72}}{(1+0.0136015752)^{72}} = 1587.3414013354,$
  - $PV_0 = \$91876.0213684229$
- At t = 73,
  - g = 0.0410000000,

- $-CF_{73} = CF_{72}(1 + 0.0410000000) = 4370.8409541520,$   $-PVPayment = \frac{CF_{73}}{(1 + 0.0136015752)^{73}} = 1630.2484518206,$   $-PV_0 = \$93506.2698202435$
- At t = 74,
  - -g = 0.0410000000,
  - $-CF_{74} = CF_{73}(1 + 0.0410000000) = 4550.0454332722,$
  - $-PVPayment = \frac{CF_{74}}{(1+0.0136015752)^{74}} = 1674.3153126528,$
  - $-PV_0 = \$95180.5851328963$
- At t = 75,
  - g = 0.1900000000,
  - $-CF_{75} = CF_{38}(1 + 0.1900000000) = 1274.49000000000,$
  - $-PVPayment = \frac{CF_{75}}{(1+0.0136015752)^{75}} = 462.6905945292,$
  - $-PV_0 = \$95643.2757274255$
- At t = 76,
  - -g = 0.0410000000,
  - $-CF_{76} = CF_{75}(1 + 0.0410000000) = 1326.7440900000,$
  - $-PVPayment = \frac{CF_{76}}{(1+0.0136015752)^{76}} = 475.1974747012,$
  - $PV_0 = \$96118.4732021266$
- At t = 77,
  - -g = 0.0410000000,
  - $-CF_{77} = CF_{76}(1 + 0.0410000000) = 1381.1405976900,$
  - $-PVPayment = \frac{CF_{77}}{(1+0.0136015752)^{77}} = 488.0424253969,$
  - $PV_0 = \$96606.5156275235$
- At t = 78,
  - -g = 0.0410000000,
  - $-CF_{78} = CF_{77}(1 + 0.0410000000) = 1437.7673621953,$
  - $-PVPayment = \frac{CF_{78}}{(1+0.0136015752)^{78}} = 501.2345849209,$
  - $-PV_0 = \$97107.7502124444$
- At t = 79,
  - -g = 0.0410000000,
  - $-CF_{79} = CF_{78}(1 + 0.0410000000) = 1496.7158240453,$
  - $-PVPayment = \frac{CF_{79}}{(1+0.0136015752)^{79}} = 514.7833385929,$
  - $-PV_0 = \$97622.5335510374$
- At t = 80,
  - g = 0.0410000000,
  - $CF_{80} = CF_{79}(1 + 0.0410000000) = 1558.0811728312,$
  - $-PVPayment = \frac{CF_{80}}{(1+0.0136015752)^{80}} = 528.6983254253,$

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-PV_0 = $98151.2318764626
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- At t = 81,
  - -g = 0.0410000000,
  - $-CF_{81} = CF_{80}(1 + 0.0410000000) = 1621.9625009172,$
  - $-PVPayment = \frac{CF_{81}}{(1+0.0136015752)^{81}} = 542.9894449799,$
  - $-PV_0 = \$98694.2213214425$
- At t = 82,
  - -g = 0.0410000000,
  - $-CF_{82} = CF_{81}(1 + 0.0410000000) = 1688.4629634548,$
  - $-PVPayment = \frac{CF_{82}}{(1+0.0136015752)^{82}} = 557.6668644116,$
  - $-PV_0 = $99251.8881858541$
- At t = 83,
  - -g = 0.0410000000,
  - $-CF_{83} = CF_{82}(1 + 0.0410000000) = 1757.6899449565,$
  - $-PVPayment = \frac{CF_{83}}{(1+0.0136015752)^{83}} = 572.7410257011,$
  - $-PV_0 = $99824.6292115552$
- At t = 84,
  - -q = 0.0410000000,
  - $-CF_{84} = CF_{83}(1 + 0.0410000000) = 1829.7552326997,$
  - $-PVPayment = \frac{CF_{84}}{(1+0.0136015752)^{84}} = 588.2226530839,$
  - $-PV_0 = \$100412.8518646390$
- At t = 85,
  - -g = 0.0410000000,
  - $-CF_{85} = CF_{84}(1 + 0.0410000000) = 1904.7751972404,$
  - $-PVPayment = \frac{CF_{85}}{(1+0.0136015752)^{85}} = 604.1227606796,$
  - $-PV_0 = \$101016.9746253187$
- At t = 86,
  - -g = 0.0410000000,
  - $-CF_{86} = CF_{85}(1 + 0.0410000000) = 1982.8709803272,$
  - $-PVPayment = \frac{CF_{86}}{(1+0.0136015752)^{86}} = 620.4526603282,$
  - $-PV_0 = \$101637.4272856468$
- At t = 87,
  - g = 0.0410000000,
  - $-CF_{87} = CF_{86}(1 + 0.0410000000) = 2064.1686905207,$
  - $-PVPayment = \frac{CF_{87}}{(1+0.0136015752)^{87}} = 637.2239696369,$
  - $PV_0 = \$102274.6512552837$
- At t = 88,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{88} = CF_{87}(1+0.0410000000) = 2148.7996068320, \\ -PVPayment = \frac{CF_{88}}{(1+0.0136015752)^{88}} = 654.4486202462, \\ -PV_0 = \$102929.0998755299 \end{array}$
- At t = 89,
  - -g = 0.0410000000,
  - $-CF_{89} = CF_{88}(1 + 0.0410000000) = 2236.9003907121,$
  - $-PVPayment = \frac{CF_{89}}{(1+0.0136015752)^{89}} = 672.1388663175,$
  - $PV_0 = \$103601.2387418474$
- At t = 90.
  - -g = 0.0410000000,
  - $-CF_{90} = CF_{89}(1 + 0.0410000000) = 2328.6133067313,$
  - $-PVPayment = \frac{CF_{90}}{(1+0.0136015752)^{90}} = 690.3072932520,$
  - $-PV_0 = \$104291.5460350994$
- At t = 91,
  - -g = 0.0410000000,
  - $-CF_{91} = CF_{90}(1 + 0.0410000000) = 2424.0864523073,$
  - $-PVPayment = \frac{CF_{91}}{(1+0.0136015752)^{91}} = 708.9668266435,$
  - $PV_0 = \$105000.5128617429$
- At t = 92,
  - g = 0.0410000000,
  - $-CF_{92} = CF_{91}(1 + 0.0410000000) = 2523.4739968519,$
  - $-PVPayment = \frac{CF_{92}}{(1+0.0136015752)^{92}} = 728.1307414746,$
  - $-PV_0 = \$105728.6436032175$
- At t = 93.
  - -q = 0.0410000000,
  - $-CF_{93} = CF_{92}(1 + 0.0410000000) = 2626.9364307228,$
  - $-PVPayment = \frac{CF_{93}}{(1+0.0136015752)^{93}} = 747.8126715610,$
  - $-PV_0 = \$106476.4562747785$
- At t = 94,
  - -g = 0.0410000000,
  - $CF_{94} = CF_{93}(1 + 0.0410000000) = 2734.6408243825,$
  - $-PVPayment = \frac{CF_{94}}{(1+0.0136015752)^{94}} = 768.0266192506,$
  - $PV_0 = \$107244.4828940291$
- At t = 95,
  - -g = 0.0410000000,
  - $-CF_{95} = CF_{94}(1 + 0.0410000000) = 2846.7610981821,$

- $-PVPayment = \frac{CF_{95}}{(1+0.0136015752)^{95}} = 788.7869653857,$  $-PV_0 = \$108033.2698594148$
- At t = 96,
  - -g = 0.0410000000,
  - $-CF_{96} = CF_{95}(1 + 0.0410000000) = 2963.4783032076,$
  - $-PVPayment = \frac{CF_{96}}{(1+0.0136015752)^{96}} = 810.1084795334,$
  - $-PV_0 = $108843.3783389482$
- At t = 97,
  - -g = 0.0410000000,
  - $-CF_{97} = CF_{96}(1 + 0.0410000000) = 3084.9809136391,$
  - $-PVPayment = \frac{CF_{97}}{(1+0.0136015752)^{97}} = 832.0063304939,$
  - $-PV_0 = 109675.3846694421$
- At t = 98,
  - -g = 0.04100000000
  - $-CF_{98} = CF_{97}(1 + 0.0410000000) = 3211.4651310983,$
  - $-PVPayment = \frac{CF_{98}}{(1+0.0136015752)^{98}} = 854.4960970914,$
  - $-PV_0 = $110529.8807665335$
- At t = 99.
  - -g = 0.0410000000,
  - $-CF_{99} = CF_{98}(1 + 0.0410000000) = 3343.1352014734,$
  - $-PVPayment = \frac{CF_{99}}{(1+0.0136015752)^{99}} = 877.5937792576,$
  - $-PV_0 = \$111407.4745457911$
- At t = 100,
  - -g = 0.04100000000,
  - $-CF_{100} = CF_{99}(1 + 0.0410000000) = 3480.2037447338,$
  - $-PVPayment = \frac{CF_{100}}{(1+0.0136015752)^{100}} = 901.3158094147,$
  - $PV_0 = \$112308.7903552058$
- At t = 101,
  - -g = 0.0410000000,
  - $-CF_{101} = CF_{100}(1 + 0.0410000000) = 3622.8920982679,$
  - $-PVPayment = \frac{CF_{101}}{(1+0.0136015752)^{101}} = 925.6790641658,$
  - $-PV_0 = \$113234.4694193716$
- At t = 102,
  - -g = 0.0410000000,
  - $-CF_{102} = CF_{101}(1 + 0.0410000000) = 3771.4306742968,$
  - $-PVPayment = \frac{CF_{102}}{(1+0.0136015752)^{102}} = 950.7008763014,$
  - $-PV_0 = \$114185.1702956731$

- At t = 103,
  - -g = 0.0410000000,
  - $CF_{103} = CF_{102}(1 + 0.0410000000) = 3926.0593319430,$
  - $-PVPayment = \frac{CF_{103}}{(1+0.0136015752)^{103}} = 976.3990471307,$
  - $PV_0 = \$115161.5693428038$
- At t = 104,
  - -g = 0.0410000000,
  - $CF_{104} = CF_{103}(1 + 0.0410000000) = 4087.0277645527,$
  - $-PVPayment = \frac{CF_{104}}{(1+0.0136015752)^{104}} = 1002.7918591456,$
  - $-PV_0 = \$116164.3612019494$
- At t = 105,
  - -g = 0.0410000000,
  - $-CF_{105} = CF_{104}(1 + 0.0410000000) = 4254.5959028993,$
  - $-PVPayment = \frac{CF_{105}}{(1+0.0136015752)^{105}} = 1029.8980890281,$
  - $-PV_0 = \$117194.2592909774$
- At t = 106,
  - -g = 0.0410000000,
  - $-CF_{106} = CF_{105}(1 + 0.0410000000) = 4429.0343349182,$
  - $-PVPayment = \frac{CF_{106}}{(1+0.0136015752)^{106}} = 1057.7370210079,$
  - $PV_0 = \$118251.9963119854$
- At t = 107.
  - g = 0.0410000000,
  - $-CF_{107} = CF_{106}(1 + 0.0410000000) = 4610.6247426498,$
  - $-PVPayment = \frac{CF_{107}}{(1+0.0136015752)^{107}} = 1086.3284605825,$
  - $-PV_0 = $119338.3247725679$
- At t = 108,
  - -g = 0.0410000000,
  - $CF_{108} = CF_{107}(1 + 0.0410000000) = 4799.6603570985,$
  - $-PVPayment = \frac{CF_{108}}{(1+0.0136015752)^{108}} = 1115.6927486068,$
  - $-PV_0 = $120454.0175211747$
- At t = 109,
  - -g = 0.0410000000,
  - $-CF_{109} = CF_{108}(1 + 0.0410000000) = 4996.4464317395,$
  - $-PVPayment = \frac{CF_{109}}{(1+0.0136015752)^{109}} = 1145.8507757648,$
  - $-PV_0 = $121599.8682969395$
- At t = 110,
  - -g = 0.0410000000,

- $-CF_{110} = CF_{109}(1 + 0.0410000000) = 5201.3007354408,$  $-PVPayment = \frac{CF_{110}}{(1+0.0136015752)^{110}} = 1176.8239974315,$
- $PV_0 = \$122776.6922943710$
- At t = 111,
  - -g = 0.0410000000,
  - $CF_{111} = CF_{110}(1 + 0.0410000000) = 5414.5540655939,$
  - $-PVPayment = \frac{CF_{111}}{(1+0.0136015752)^{111}} = 1208.6344489371,$
  - $-PV_0 = \$123985.3267433082$
- At t = 112,
  - -g = 0.19000000000,
  - $-CF_{112} = CF_{75}(1 + 0.1900000000) = 1516.6431000000,$
  - $-PVPayment = \frac{CF_{112}}{(1+0.0136015752)^{112}} = 334.0014796025,$
  - $-PV_0 = $124319.3282229107$
- At t = 113,
  - -g = 0.0410000000,
  - $-CF_{113} = CF_{112}(1 + 0.0410000000) = 1578.8254671000,$
  - $-PVPayment = \frac{CF_{113}}{(1+0.0136015752)^{113}} = 343.0297947056,$
  - $PV_0 = \$124662.3580176163$
- At t = 114,
  - g = 0.0410000000,
  - $-CF_{114} = CF_{113}(1 + 0.0410000000) = 1643.5573112511,$
  - $-PVPayment = \frac{CF_{114}}{(1+0.0136015752)^{114}} = 352.3021520618,$
  - $-PV_0 = \$125014.6601696781$
- At t = 115,
  - -g = 0.0410000000,
  - $-\ CF_{115} = CF_{114}(1 + 0.0410000000) = 1710.9431610124,$
  - $-PVPayment = \frac{CF_{115}}{(1+0.0136015752)^{115}} = 361.8251483194,$
  - $PV_0 = \$125376.4853179975$
- At t = 116,
  - -g = 0.0410000000,
  - $-CF_{116} = CF_{115}(1 + 0.0410000000) = 1781.0918306139,$
  - $-PVPayment = \frac{CF_{116}}{(1+0.0136015752)^{116}} = 371.6055584396,$
  - $-PV_0 = $125748.0908764371$
- At t = 117,
  - -g = 0.0410000000,
  - $-CF_{117} = CF_{116}(1 + 0.0410000000) = 1854.1165956691,$
  - $-PVPayment = \frac{CF_{117}}{(1+0.0136015752)^{117}} = 381.6503405156,$

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-PV_0 = $126129.7412169527
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- At t = 118,
  - g = 0.0410000000,
  - $-CF_{118} = CF_{117}(1 + 0.0410000000) = 1930.1353760915,$
  - $-PVPayment = \frac{CF_{118}}{(1+0.0136015752)^{118}} = 391.9666407232,$
  - $-PV_0 = $126521.7078576759$
- At t = 119,
  - -g = 0.0410000000,
  - $CF_{119} = CF_{118}(1 + 0.0410000000) = 2009.2709265113,$
  - $-PVPayment = \frac{CF_{119}}{(1+0.0136015752)^{119}} = 402.5617984050,$
  - $-PV_0 = \$126924.2696560809$
- At t = 120,
  - -g = 0.0410000000,
  - $-CF_{120} = CF_{119}(1 + 0.0410000000) = 2091.6510344982,$
  - $-PVPayment = \frac{CF_{120}}{(1+0.0136015752)^{120}} = 413.4433512916,$
  - $-PV_0 = \$127337.7130073725$
- At t = 121,
  - -q = 0.0410000000,
  - $-CF_{121} = CF_{120}(1 + 0.0410000000) = 2177.4087269126,$
  - $-PVPayment = \frac{CF_{121}}{(1+0.0136015752)^{121}} = 424.6190408639,$
  - $-PV_0 = 127762.3320482363$
- At t = 122,
  - -g = 0.0410000000,
  - $CF_{122} = CF_{121}(1 + 0.0410000000) = 2266.6824847161,$
  - $-PVPayment = \frac{CF_{122}}{(1+0.0136015752)^{122}} = 436.0968178613,$
  - $-PV_0 = $128198.4288660977$
- At t = 123,
  - -g = 0.0410000000,
  - $-CF_{123} = CF_{122}(1 + 0.0410000000) = 2359.6164665894,$
  - $-PVPayment = \frac{CF_{123}}{(1+0.0136015752)^{123}} = 447.8848479377,$
  - $-PV_0 = $128646.3137140354$
- At t = 124,
  - g = 0.0410000000,
  - $CF_{124} = CF_{123}(1 + 0.0410000000) = 2456.3607417196,$
  - $-PVPayment = \frac{CF_{124}}{(1+0.0136015752)^{124}} = 459.9915174707,$
  - $-PV_0 = \$129106.3052315062$
- At t = 125,

- -g = 0.0410000000, $-CF_{125} = CF_{124}(1 + 0.0410000000) = 2557.0715321301,$
- $-PVPayment = \frac{CF_{125}}{(1+0.0136015752)^{125}} = 472.4254395283,$
- $-PV_0 = $129578.7306710344$
- At t = 126,
  - -g = 0.0410000000,
  - $-CF_{126} = CF_{125}(1 + 0.0410000000) = 2661.9114649474,$
  - $-PVPayment = \frac{CF_{126}}{(1+0.0136015752)^{126}} = 485.1954599960,$
  - $PV_0 = \$130063.9261310305$
- At t = 127,
  - -g = 0.0410000000,
  - $-CF_{127} = CF_{126}(1 + 0.0410000000) = 2771.0498350103,$
  - $-PVPayment = \frac{CF_{127}}{(1+0.0136015752)^{127}} = 498.3106638707,$
  - $-PV_0 = \$130562.2367949012$
- At t = 128,
  - -g = 0.0410000000,
  - $-CF_{128} = CF_{127}(1 + 0.0410000000) = 2884.6628782457,$
  - $-PVPayment = \frac{CF_{128}}{(1+0.0136015752)^{128}} = 511.7803817235,$
  - $-PV_0 = \$131074.0171766247$
- At t = 129,
  - g = 0.0410000000,
  - $-CF_{129} = CF_{128}(1 + 0.0410000000) = 3002.9340562538,$
  - $-PVPayment = \frac{CF_{129}}{(1+0.0136015752)^{129}} = 525.6141963380,$
  - $PV_0 = \$131599.6313729626$
- At t = 130,
  - -q = 0.0410000000,
  - $-CF_{130} = CF_{129}(1 + 0.0410000000) = 3126.0543525602,$
  - $-PVPayment = \frac{CF_{130}}{(1+0.0136015752)^{130}} = 539.8219495277,$
  - $-PV_0 = \$132139.4533224904$
- At t = 131,
  - -g = 0.0410000000,
  - $CF_{131} = CF_{130}(1 + 0.0410000000) = 3254.2225810151,$
  - $-PVPayment = \frac{CF_{131}}{(1+0.0136015752)^{131}} = 554.4137491380,$
  - $PV_0 = \$132693.8670716284$
- At t = 132,
  - -g = 0.0410000000,
  - $-CF_{132} = CF_{131}(1 + 0.0410000000) = 3387.6457068368,$

- $-PVPayment = \frac{CF_{132}}{(1+0.0136015752)^{132}} = 569.3999762370,$  $-PV_0 = $133263.2670478653$
- At t = 133,
  - -g = 0.0410000000,
  - $-CF_{133} = CF_{132}(1 + 0.0410000000) = 3526.5391808171,$
  - $-PVPayment = \frac{CF_{133}}{(1+0.0136015752)^{133}} = 584.7912925008,$
  - $-PV_0 = \$133848.0583403662$
- At t = 134,
  - -g = 0.0410000000,
  - $-CF_{134} = CF_{133}(1 + 0.0410000000) = 3671.1272872306,$
  - $-PVPayment = \frac{CF_{134}}{(1+0.0136015752)^{134}} = 600.5986477992,$
  - $-PV_0 = \$134448.6569881654$
- At t = 135,
  - -g = 0.0410000000,
  - $-CF_{135} = CF_{134}(1 + 0.0410000000) = 3821.6435060070,$
  - $-PVPayment = \frac{CF_{135}}{(1+0.0136015752)^{135}} = 616.8332879848,$
  - $-PV_0 = \$135065.4902761502$
- At t = 136,
  - -g = 0.0410000000,
  - $-CF_{136} = CF_{135}(1 + 0.0410000000) = 3978.3308897533,$
  - $-PVPayment = \frac{CF_{136}}{(1+0.0136015752)^{136}} = 633.5067628947,$
  - $-PV_0 = \$135698.9970390449$
- At t = 137,
  - -g = 0.0410000000,
  - $CF_{137} = CF_{136}(1 + 0.0410000000) = 4141.4424562332,$
  - $-PVPayment = \frac{CF_{137}}{(1+0.0136015752)^{137}} = 650.6309345665,$
  - $-PV_0 = \$136349.6279736114$
- At t = 138,
  - -g = 0.0410000000,
  - $CF_{138} = CF_{137}(1 + 0.0410000000) = 4311.2415969387,$
  - $-PVPayment = \frac{CF_{138}}{(1+0.0136015752)^{138}} = 668.2179856780,$
  - $-PV_0 = \$137017.8459592894$
- At t = 139,
  - -g = 0.0410000000,
  - $-CF_{139} = CF_{138}(1 + 0.0410000000) = 4488.0025024132,$
  - $-PVPayment = \frac{CF_{139}}{(1+0.0136015752)^{139}} = 686.2804282140,$
  - $-PV_0 = \$137704.1263875035$

- At t = 140,
  - -g = 0.0410000000,
  - $CF_{140} = CF_{139}(1 + 0.0410000000) = 4672.0106050122,$
  - $-PVPayment = \frac{CF_{140}}{(1+0.0136015752)^{140}} = 704.8311123678,$
  - $PV_0 = \$138408.9574998713$
- At t = 141,
  - -g = 0.0410000000,
  - $-CF_{141} = CF_{140}(1 + 0.0410000000) = 4863.5630398177,$
  - $-PVPayment = \frac{CF_{141}}{(1+0.0136015752)^{141}} = 723.8832356833,$
  - $-PV_0 = \$139132.8407355545$
- At t = 142,
  - -g = 0.0410000000,
  - $CF_{142} = CF_{141}(1 + 0.0410000000) = 5062.9691244502,$
  - $-PVPayment = \frac{CF_{142}}{(1+0.0136015752)^{142}} = 743.4503524439,$
  - $-PV_0 = \$139876.2910879984$
- At t = 143,
  - -g = 0.0410000000,
  - $-CF_{143} = CF_{142}(1 + 0.0410000000) = 5270.5508585527,$
  - $-PVPayment = \frac{CF_{143}}{(1+0.0136015752)^{143}} = 763.5463833158,$
  - $PV_0 = \$140639.8374713142$
- At t = 144,
  - -g = 0.0410000000,
  - $-CF_{144} = CF_{143}(1 + 0.0410000000) = 5486.6434437533,$
  - $-PVPayment = \frac{CF_{144}}{(1+0.0136015752)^{144}} = 784.1856252515,$
  - $-PV_0 = \$141424.0230965658$
- At t = 145,
  - -g = 0.0410000000,
  - $CF_{145} = CF_{144}(1 + 0.0410000000) = 5711.5958249472,$
  - $-PVPayment = \frac{CF_{145}}{(1+0.0136015752)^{145}} = 805.3827616610,$
  - $-PV_0 = $142229.4058582268$
- At t = 146,
  - -g = 0.0410000000,
  - $-CF_{146} = CF_{145}(1 + 0.0410000000) = 5945.7712537700,$
  - $-PVPayment = \frac{CF_{146}}{(1+0.0136015752)^{146}} = 827.1528728579,$
  - $-PV_0 = $143056.5587310847$
- At t = 147,
  - g = 0.0410000000,

- $\begin{array}{l} CF_{147} = CF_{146}(1+0.0410000000) = 6189.5478751746, \\ PVPayment = \frac{CF_{147}}{(1+0.0136015752)^{147}} = 849.5114467884, \\ PV_0 = \$143906.0701778731 \end{array}$
- $1 V_0 = 0149300.0$ 
  - -g = 0.0410000000,
  - $CF_{148} = CF_{147}(1 + 0.0410000000) = 6443.3193380568,$
  - $-PVPayment = \frac{CF_{148}}{(1+0.0136015752)^{148}} = 872.4743900497,$
  - $-PV_0 = \$144778.5445679228$
- At t = 149,

• At t = 148,

- -g = 0.19000000000,
- $-CF_{149} = CF_{112}(1 + 0.1900000000) = 1804.8052890000,$
- $-PVPayment = \frac{CF_{149}}{(1+0.0136015752)^{149}} = 241.1049407438,$
- $-PV_0 = $145019.6495086666$
- At t = 150,
  - -g = 0.0410000000,
  - $-CF_{150} = CF_{149}(1 + 0.0410000000) = 1878.8023058490,$
  - $-PVPayment = \frac{CF_{150}}{(1+0.0136015752)^{150}} = 247.6221914474,$
  - $PV_0 = \$145267.2717001140$
- At t = 151,
  - -g = 0.04100000000,
  - $-CF_{151} = CF_{150}(1 + 0.0410000000) = 1955.8332003888,$
  - $-PVPayment = \frac{CF_{151}}{(1+0.0136015752)^{151}} = 254.3156084154,$
  - $-PV_0 = \$145521.5873085294$
- At t = 152,
  - -g = 0.0410000000,
  - $CF_{152} = CF_{151}(1 + 0.0410000000) = 2036.0223616047,$
  - $-PVPayment = \frac{CF_{152}}{(1+0.0136015752)^{152}} = 261.1899535565,$
  - $PV_0 = \$145782.7772620858$
- At t = 153,
  - -g = 0.0410000000,
  - $-CF_{153} = CF_{152}(1 + 0.0410000000) = 2119.4992784305,$
  - $-PVPayment = \frac{CF_{153}}{(1+0.0136015752)^{153}} = 268.2501174973,$
  - $-PV_0 = $146051.0273795831$
- At t = 154,
  - -g = 0.0410000000,
  - $-CF_{154} = CF_{153}(1 + 0.0410000000) = 2206.3987488462,$
  - $-PVPayment = \frac{CF_{154}}{(1+0.0136015752)^{154}} = 275.5011230620,$

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-PV_0 = 146326.5285026451
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- At t = 155,
  - g = 0.0410000000,
  - $-CF_{155} = CF_{154}(1 + 0.0410000000) = 2296.8610975489,$
  - $-PVPayment = \frac{CF_{155}}{(1+0.0136015752)^{155}} = 282.9481288454,$
  - $-PV_0 = \$146609.4766314905$
- At t = 156,
  - -g = 0.0410000000,
  - $CF_{156} = CF_{155}(1 + 0.0410000000) = 2391.0324025484,$
  - $-PVPayment = \frac{CF_{156}}{(1+0.0136015752)^{156}} = 290.5964328831,$
  - $-PV_0 = \$146900.0730643735$
- At t = 157,
  - -g = 0.0410000000,
  - $-CF_{157} = CF_{156}(1 + 0.0410000000) = 2489.0647310529,$
  - $-PVPayment = \frac{CF_{157}}{(1+0.0136015752)^{157}} = 298.4514764207,$
  - $-PV_0 = \$147198.5245407942$
- At t = 158,
  - -q = 0.0410000000
  - $-CF_{158} = CF_{157}(1 + 0.0410000000) = 2591.1163850260,$
  - $-PVPayment = \frac{CF_{158}}{(1+0.0136015752)^{158}} = 306.5188477848,$
  - $PV_0 = \$147505.0433885790$
- At t = 159,
  - -g = 0.0410000000,
  - $CF_{159} = CF_{158}(1 + 0.0410000000) = 2697.3521568121,$
  - $-PVPayment = \frac{CF_{159}}{(1+0.0136015752)^{159}} = 314.8042863587,$
  - $-PV_0 = $147819.8476749377$
- At t = 160,
  - -g = 0.0410000000,
  - $-CF_{160} = CF_{159}(1 + 0.0410000000) = 2807.9435952414,$
  - $-PVPayment = \frac{CF_{160}}{(1+0.0136015752)^{160}} = 323.3136866656,$
  - $-PV_0 = \$148143.1613616034$
- At t = 161,
  - g = 0.0410000000,
  - $-CF_{161} = CF_{160}(1 + 0.0410000000) = 2923.0692826463,$
  - $-PVPayment = \frac{CF_{161}}{(1+0.0136015752)^{161}} = 332.0531025624,$
  - $-PV_0 = \$148475.2144641657$
- At t = 162,

- g = 0.0410000000
- $-CF_{162} = CF_{161}(1 + 0.0410000000) = 3042.9151232348,$
- $-PVPayment = \frac{CF_{162}}{(1+0.0136015752)^{162}} = 341.0287515459,$
- $-PV_0 = $148816.2432157116$
- At t = 163,
  - -g = 0.0410000000,
  - $-CF_{163} = CF_{162}(1 + 0.0410000000) = 3167.6746432874,$
  - $-PVPayment = \frac{CF_{163}}{(1+0.0136015752)^{163}} = 350.2470191770,$
  - $-PV_0 = \$149166.4902348886$
- At t = 164,
  - -g = 0.0410000000,
  - $-CF_{164} = CF_{163}(1 + 0.0410000000) = 3297.5493036622,$
  - $-PVPayment = \frac{CF_{164}}{(1+0.0136015752)^{164}} = 359.7144636231,$
  - $-PV_0 = \$149526.2046985117$
- At t = 165,
  - -g = 0.0410000000,
  - $CF_{165} = CF_{164}(1 + 0.0410000000) = 3432.7488251124,$
  - $-PVPayment = \frac{CF_{165}}{(1+0.0136015752)^{165}} = 369.4378203238,$
  - $-PV_0 = \$149895.6425188355$
- At t = 166,
  - g = 0.0410000000,
  - $-CF_{166} = CF_{165}(1 + 0.0410000000) = 3573.4915269420,$
  - $-PVPayment = \frac{CF_{166}}{(1+0.0136015752)^{166}} = 379.4240067828,$
  - $-PV_0 = \$150275.0665256183$
- At t = 167,
  - -q = 0.0410000000,
  - $-CF_{167} = CF_{166}(1 + 0.0410000000) = 3720.0046795466,$
  - $-PVPayment = \frac{CF_{167}}{(1+0.0136015752)^{167}} = 389.6801274892,$
  - $-PV_0 = \$150664.7466531075$
- At t = 168,
  - -g = 0.0410000000,
  - $CF_{168} = CF_{167}(1 + 0.0410000000) = 3872.5248714080,$
  - $-PVPayment = \frac{CF_{168}}{(1+0.0136015752)^{168}} = 400.2134789718,$
  - $PV_0 = \$151064.9601320794$
- At t = 169,
  - -g = 0.0410000000,
  - $-CF_{169} = CF_{168}(1 + 0.0410000000) = 4031.2983911357,$

- $-PVPayment = \frac{CF_{169}}{(1+0.0136015752)^{169}} = 411.0315549904,$  $-PV_0 = $151475.9916870698$
- At t = 170,
  - -g = 0.0410000000,
  - $-CF_{170} = CF_{169}(1 + 0.0410000000) = 4196.5816251723,$
  - $-PVPayment = \frac{CF_{170}}{(1+0.0136015752)^{170}} = 422.1420518667,$
  - $-PV_0 = \$151898.1337389365$
- At t = 171,
  - -g = 0.0410000000,
  - $-CF_{171} = CF_{170}(1 + 0.0410000000) = 4368.6414718044,$
  - $-PVPayment = \frac{CF_{171}}{(1+0.0136015752)^{171}} = 433.5528739596,$
  - $-PV_0 = \$152331.6866128961$
- At t = 172,
  - -g = 0.0410000000,
  - $-CF_{172} = CF_{171}(1 + 0.0410000000) = 4547.7557721483,$
  - $-PVPayment = \frac{CF_{172}}{(1+0.0136015752)^{172}} = 445.2721392892,$
  - $-PV_0 = \$152776.9587521853$
- At t = 173,
  - -g = 0.0410000000,
  - $-CF_{173} = CF_{172}(1 + 0.0410000000) = 4734.2137588064,$
  - $-PVPayment = \frac{CF_{173}}{(1+0.0136015752)^{173}} = 457.3081853119,$
  - $-PV_0 = $153234.2669374972$
- At t = 174,
  - g = 0.0410000000,
  - $CF_{174} = CF_{173}(1 + 0.0410000000) = 4928.3165229175,$
  - $-PVPayment = \frac{CF_{174}}{(1+0.0136015752)^{174}} = 469.6695748517,$
  - $-PV_0 = \$153703.9365123489$
- At t = 175,
  - -g = 0.0410000000,
  - $CF_{175} = CF_{174}(1 + 0.0410000000) = 5130.3775003571,$
  - $-PVPayment = \frac{CF_{175}}{(1+0.0136015752)^{175}} = 482.3651021923,$
  - $-PV_0 = \$154186.3016145412$
- At t = 176,
  - -g = 0.0410000000,
  - $-CF_{176} = CF_{175}(1 + 0.0410000000) = 5340.7229778717,$
  - $-PVPayment = \frac{CF_{176}}{(1+0.0136015752)^{176}} = 495.4037993337,$
  - $-PV_0 = \$154681.7054138749$

- At t = 177,
  - -g = 0.0410000000,
  - $CF_{177} = CF_{176}(1 + 0.0410000000) = 5559.6926199645,$
  - $-PVPayment = \frac{CF_{177}}{(1+0.0136015752)^{177}} = 508.7949424178,$
  - $PV_0 = \$155190.5003562927$
- At t = 178,
  - -g = 0.0410000000,
  - $-CF_{178} = CF_{177}(1 + 0.0410000000) = 5787.6400173830,$
  - $-PVPayment = \frac{CF_{178}}{(1+0.0136015752)^{178}} = 522.5480583276,$
  - $-PV_0 = \$155713.0484146203$
- At t = 179,
  - -g = 0.0410000000,
  - $CF_{179} = CF_{178}(1 + 0.0410000000) = 6024.9332580957,$
  - $-PVPayment = \frac{CF_{179}}{(1+0.0136015752)^{179}} = 536.6729314650,$
  - $-PV_0 = \$156249.7213460853$
- At t = 180,
  - -g = 0.0410000000,
  - $-CF_{180} = CF_{179}(1 + 0.0410000000) = 6271.9555216777,$
  - $-PVPayment = \frac{CF_{180}}{(1+0.0136015752)^{180}} = 551.1796107119,$
  - $PV_0 = \$156800.9009567972$
- At t = 181,
  - g = 0.0410000000,
  - $-CF_{181} = CF_{180}(1 + 0.0410000000) = 6529.1056980664,$
  - $-PVPayment = \frac{CF_{181}}{(1+0.0136015752)^{181}} = 566.0784165789,$
  - $-PV_0 = \$157366.9793733761$
- At t = 182,
  - -g = 0.0410000000,
  - $CF_{182} = CF_{181}(1 + 0.0410000000) = 6796.7990316872,$
  - $-PVPayment = \frac{CF_{182}}{(1+0.0136015752)^{182}} = 581.3799485482,$
  - $-PV_0 = \$157948.3593219243$
- At t = 183,
  - -g = 0.0410000000,
  - $-CF_{183} = CF_{182}(1 + 0.0410000000) = 7075.4677919863,$
  - $-PVPayment = \frac{CF_{183}}{(1+0.0136015752)^{183}} = 597.0950926140,$
  - $-PV_0 = \$158545.4544145383$
- At t = 184,
  - g = 0.0410000000,

- $\begin{array}{l} CF_{184} = CF_{183}(1+0.0410000000) = 7365.5619714578, \\ PVPayment = \frac{CF_{184}}{(1+0.0136015752)^{184}} = 613.2350290270, \\ PV_0 = \$159158.6894435652 \end{array}$
- At t = 185,
  - -g = 0.0410000000,
  - $CF_{185} = CF_{184}(1 + 0.0410000000) = 7667.5500122875,$
  - $-PVPayment = \frac{CF_{185}}{(1+0.0136015752)^{185}} = 629.8112402488,$
  - $-PV_0 = \$159788.5006838141$
- At t = 186,
  - -q = 0.19000000000
  - $-CF_{186} = CF_{149}(1 + 0.1900000000) = 2147.7182939100,$
  - $-PVPayment = \frac{CF_{186}}{(1+0.0136015752)^{186}} = 174.0459129710,$
  - $-PV_0 = \$159962.5465967850$
- At t = 187,
  - -g = 0.0410000000,
  - $-CF_{187} = CF_{186}(1 + 0.0410000000) = 2235.7747439603,$
  - $-PVPayment = \frac{CF_{187}}{(1+0.0136015752)^{187}} = 178.7505069344,$
  - $-\ PV_0 = \$160141.2971037194$
- At t = 188,
  - -g = 0.04100000000,
  - $-CF_{188} = CF_{187}(1 + 0.0410000000) = 2327.4415084627,$
  - $-PVPayment = \frac{CF_{188}}{(1+0.0136015752)^{188}} = 183.5822696660,$
  - $PV_0 = \$160324.8793733853$
- At t = 189,
  - -g = 0.0410000000,
  - $CF_{189} = CF_{188}(1 + 0.0410000000) = 2422.8666103097,$
  - $-PVPayment = \frac{CF_{189}}{(1+0.0136015752)^{189}} = 188.5446386347,$
  - $PV_0 = \$160513.4240120200$
- At t = 190,
  - -g = 0.0410000000,
  - $-CF_{190} = CF_{189}(1 + 0.0410000000) = 2522.2041413323,$
  - $-PVPayment = \frac{CF_{190}}{(1+0.0136015752)^{190}} = 193.6411442269,$
  - $-PV_0 = \$160707.0651562469$
- At t = 191,
  - -g = 0.0410000000,
  - $-CF_{191} = CF_{190}(1 + 0.0410000000) = 2625.6145111270,$
  - $-PVPayment = \frac{CF_{191}}{(1+0.0136015752)^{191}} = 198.8754122579,$

- $-PV_0 = 160905.9405685048$
- At t = 192,
  - -g = 0.0410000000,
  - $-CF_{192} = CF_{191}(1 + 0.0410000000) = 2733.2647060832,$
  - $-PVPayment = \frac{CF_{192}}{(1+0.0136015752)^{192}} = 204.2511665518,$
  - $-PV_0 = \$161110.1917350566$
- At t = 193,
  - -g = 0.0410000000,
  - $CF_{193} = CF_{192}(1 + 0.0410000000) = 2845.3285590326,$
  - $-PVPayment = \frac{CF_{193}}{(1+0.0136015752)^{193}} = 209.7722315902,$
  - $-PV_0 = \$161319.9639666467$
- At t = 194,
  - -g = 0.0410000000,
  - $-CF_{194} = CF_{193}(1 + 0.0410000000) = 2961.9870299529,$
  - $-PVPayment = \frac{CF_{194}}{(1+0.0136015752)^{194}} = 215.4425352335,$
  - $PV_0 = \$161535.4065018802$
- At t = 195,
  - -q = 0.0410000000
  - $-CF_{195} = CF_{194}(1 + 0.0410000000) = 3083.4284981810,$
  - $-PVPayment = \frac{CF_{195}}{(1+0.0136015752)^{195}} = 221.2661115153,$
  - $PV_0 = \$161756.6726133956$
- At t = 196,
  - -g = 0.0410000000,
  - $CF_{196} = CF_{195}(1 + 0.0410000000) = 3209.8490666064,$
  - $-PVPayment = \frac{CF_{196}}{(1+0.0136015752)^{196}} = 227.2471035120,$
  - $-PV_0 = \$161983.9197169076$
- At t = 197,
  - -g = 0.0410000000,
  - $-CF_{197} = CF_{196}(1 + 0.0410000000) = 3341.4528783373,$
  - $-PVPayment = \frac{CF_{197}}{(1+0.0136015752)^{197}} = 233.3897662907,$
  - $-PV_0 = \$162217.3094831983$
- At t = 198,
  - -g = 0.0410000000,
  - $-CF_{198} = CF_{197}(1 + 0.0410000000) = 3478.4524463491,$
  - $-PVPayment = \frac{CF_{198}}{(1+0.0136015752)^{198}} = 239.6984699360,$
  - $PV_0 = \$162457.0079531343$
- At t = 199,

- -g = 0.0410000000,
- $-CF_{199} = CF_{198}(1 + 0.0410000000) = 3621.0689966494,$
- $-PVPayment = \frac{CF_{199}}{(1+0.0136015752)^{199}} = 246.1777026594,$
- $-PV_0 = \$162703.1856557937$
- At t = 200,
  - -g = 0.0410000000,
  - $-CF_{200} = CF_{199}(1 + 0.0410000000) = 3769.5328255120,$
  - $-PVPayment = \frac{CF_{200}}{(1+0.0136015752)^{200}} = 252.8320739922,$
  - $-PV_0 = \$162956.0177297859$
- At t = 201,
  - -g = 0.0410000000,
  - $-CF_{201} = CF_{200}(1 + 0.0410000000) = 3924.0836713580,$
  - $-PVPayment = \frac{CF_{201}}{(1+0.0136015752)^{201}} = 259.6663180647,$
  - $-PV_0 = \$163215.6840478506$
- At t = 202,
  - -g = 0.0410000000,
  - $CF_{202} = CF_{201}(1 + 0.0410000000) = 4084.9711018837,$
  - $-PVPayment = \frac{CF_{202}}{(1+0.0136015752)^{202}} = 266.6852969744,$
  - $PV_0 = \$163482.3693448250$
- At t = 203,
  - g = 0.0410000000,
  - $-CF_{203} = CF_{202}(1 + 0.0410000000) = 4252.4549170610,$
  - $-PVPayment = \frac{CF_{203}}{(1+0.0136015752)^{203}} = 273.8940042451,$
  - $-PV_0 = \$163756.2633490702$
- At t = 204,
  - -q = 0.0410000000,
  - $-CF_{204} = CF_{203}(1 + 0.0410000000) = 4426.8055686605,$
  - $-PVPayment = \frac{CF_{204}}{(1+0.0136015752)^{204}} = 281.2975683794,$
  - $-PV_0 = \$164037.5609174496$
- At t = 205,
  - -g = 0.0410000000,
  - $CF_{205} = CF_{204}(1 + 0.0410000000) = 4608.3045969755,$
  - $-PVPayment = \frac{CF_{205}}{(1+0.0136015752)^{205}} = 288.9012565070,$
  - $PV_0 = \$164326.4621739566$
- At t = 206,
  - -g = 0.0410000000,
  - $-CF_{206} = CF_{205}(1 + 0.0410000000) = 4797.2450854515,$

- $-PVPayment = \frac{CF_{206}}{(1+0.0136015752)^{206}} = 296.7104781324,$
- $-PV_0 = \$164623.1726520890$
- At t = 207,
  - -g = 0.0410000000,
  - $-CF_{207} = CF_{206}(1 + 0.0410000000) = 4993.9321339550,$
  - $-PVPayment = \frac{CF_{207}}{(1+0.0136015752)^{207}} = 304.7307889830,$
  - $-PV_0 = \$164927.9034410721$
- At t = 208,
  - -g = 0.0410000000,
  - $-CF_{208} = CF_{207}(1 + 0.0410000000) = 5198.6833514472,$
  - $-PVPayment = \frac{CF_{208}}{(1+0.0136015752)^{208}} = 312.9678949618,$
  - $-PV_0 = \$165240.8713360339$
- At t = 209,
  - -g = 0.0410000000,
  - $-CF_{209} = CF_{208}(1 + 0.0410000000) = 5411.8293688565,$
  - $-PVPayment = \frac{CF_{209}}{(1+0.0136015752)^{209}} = 321.4276562067,$
  - $-PV_0 = \$165562.2989922405$
- At t = 210,
  - -g = 0.0410000000,
  - $CF_{210} = CF_{209}(1 + 0.0410000000) = 5633.7143729796,$
  - $-PVPayment = \frac{CF_{210}}{(1+0.0136015752)^{210}} = 330.1160912595,$
  - $-PV_0 = \$165892.4150835001$
- At t = 211,
  - g = 0.0410000000,
  - $-CF_{211} = CF_{210}(1 + 0.0410000000) = 5864.6966622718,$
  - $-PVPayment = \frac{CF_{211}}{(1+0.0136015752)^{211}} = 339.0393813481,$
  - $-PV_0 = \$166231.4544648481$
- At t = 212,
  - -g = 0.0410000000,
  - $CF_{212} = CF_{211}(1 + 0.0410000000) = 6105.1492254250,$
  - $-PVPayment = \frac{CF_{212}}{(1+0.0136015752)^{212}} = 348.2038747833,$
  - $-PV_0 = \$166579.6583396314$
- At t = 213,
  - -g = 0.0410000000,
  - $-CF_{213} = CF_{212}(1 + 0.0410000000) = 6355.4603436674,$
  - $-PVPayment = \frac{CF_{213}}{(1+0.0136015752)^{213}} = 357.6160914759,$
  - $-PV_0 = \$166937.2744311072$

- At t = 214,
  - -g = 0.0410000000,
  - $CF_{214} = CF_{213}(1 + 0.0410000000) = 6616.0342177577,$
  - $-PVPayment = \frac{CF_{214}}{(1+0.0136015752)^{214}} = 367.2827275747,$
  - $PV_0 = \$167304.5571586819$
- At t = 215,
  - -g = 0.0410000000,
  - $-CF_{215} = CF_{214}(1 + 0.0410000000) = 6887.2916206858,$
  - $-PVPayment = \frac{CF_{215}}{(1+0.0136015752)^{215}} = 377.2106602306,$
  - $-PV_0 = \$167681.7678189125$
- At t = 216,
  - -g = 0.0410000000,
  - $CF_{216} = CF_{215}(1 + 0.0410000000) = 7169.6705771339,$
  - $-PVPayment = \frac{CF_{216}}{(1+0.0136015752)^{216}} = 387.4069524891,$
  - $-PV_0 = \$168069.1747714016$
- At t = 217,
  - -g = 0.0410000000,
  - $-CF_{217} = CF_{216}(1 + 0.0410000000) = 7463.6270707964,$
  - $-PVPayment = \frac{CF_{217}}{(1+0.0136015752)^{217}} = 397.8788583153,$
  - $-PV_0 = \$168467.0536297169$
- At t = 218,
  - -g = 0.0410000000,
  - $-CF_{218} = CF_{217}(1 + 0.0410000000) = 7769.6357806991,$
  - $-PVPayment = \frac{CF_{218}}{(1+0.0136015752)^{218}} = 408.6338277544,$
  - $-PV_0 = \$168875.6874574713$
- At t = 219,
  - -g = 0.0410000000,
  - $CF_{219} = CF_{218}(1 + 0.0410000000) = 8088.1908477077,$
  - $-PVPayment = \frac{CF_{219}}{(1+0.0136015752)^{219}} = 419.6795122320,$
  - $-PV_0 = \$169295.3669697033$
- At t = 220,
  - g = 0.0410000000,
  - $-CF_{220} = CF_{219}(1 + 0.0410000000) = 8419.8066724637,$
  - $-PVPayment = \frac{CF_{220}}{(1+0.0136015752)^{220}} = 431.0237699977,$
  - $-PV_0 = \$169726.3907397010$
- At t = 221,
  - -g = 0.0410000000,

- $CF_{221} = CF_{220}(1 + 0.0410000000) = 8765.0187460348,$  $- PVPayment = \frac{CF_{221}}{(1 + 0.0136015752)^{221}} = 442.6746717156,$  $- PV_0 = \$170169.0654114166$
- - g = 0.0410000000,
  - $-CF_{222} = CF_{221}(1 + 0.0410000000) = 9124.3845146222,$
  - $-PVPayment = \frac{CF_{222}}{(1+0.0136015752)^{222}} = 454.6405062058,$
  - $-PV_0 = \$170623.7059176224$
- At t = 223,

• At t = 222,

- g = 0.1900000000
- $-CF_{223} = CF_{186}(1 + 0.1900000000) = 2555.7847697529,$
- $-PVPayment = \frac{CF_{223}}{(1+0.0136015752)^{223}} = 125.6381546079,$
- $-PV_0 = \$170749.3440722303$
- At t = 224,
  - -g = 0.0410000000,
  - $-CF_{224} = CF_{223}(1 + 0.0410000000) = 2660.5719453128,$
  - $-PVPayment = \frac{CF_{224}}{(1+0.0136015752)^{224}} = 129.0342498890,$
  - $PV_0 = \$170878.3783221193$
- At t = 225,
  - g = 0.0410000000,
  - $-CF_{225} = CF_{224}(1 + 0.0410000000) = 2769.6553950706,$
  - $-PVPayment = \frac{CF_{225}}{(1+0.0136015752)^{225}} = 132.5221442195,$
  - $-PV_0 = \$171010.9004663389$
- At t = 226,
  - -g = 0.0410000000,
  - $-\ CF_{226} = CF_{225}(1+0.0410000000) = 2883.2112662685,$
  - $-PVPayment = \frac{CF_{226}}{(1+0.0136015752)^{226}} = 136.1043189979,$
  - $PV_0 = \$171147.0047853367$
- At t = 227,
  - -g = 0.0410000000,
  - $-CF_{227} = CF_{226}(1 + 0.0410000000) = 3001.4229281855,$
  - $-PVPayment = \frac{CF_{227}}{(1+0.0136015752)^{227}} = 139.7833226965,$
  - $-PV_0 = \$171286.7881080332$
- At t = 228,
  - -g = 0.0410000000,
  - $CF_{228} = CF_{227}(1 + 0.0410000000) = 3124.4812682411,$
  - $-PVPayment = \frac{CF_{228}}{(1+0.0136015752)^{228}} = 143.5617726751,$

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-PV_0 = \$171430.3498807083
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- At t = 229,
  - g = 0.0410000000,
  - $-CF_{229} = CF_{228}(1 + 0.0410000000) = 3252.5850002390,$
  - $-PVPayment = \frac{CF_{229}}{(1+0.0136015752)^{229}} = 147.4423570426,$
  - $-PV_0 = \$171577.7922377509$
- At t = 230,
  - -g = 0.0410000000,
  - $CF_{230} = CF_{229}(1 + 0.0410000000) = 3385.9409852488,$
  - $-PVPayment = \frac{CF_{230}}{(1+0.0136015752)^{230}} = 151.4278365696,$
  - $-PV_0 = \$171729.2200743205$
- At t = 231,
  - -g = 0.0410000000,
  - $-CF_{231} = CF_{230}(1 + 0.0410000000) = 3524.7645656440,$
  - $-PVPayment = \frac{CF_{231}}{(1+0.0136015752)^{231}} = 155.5210466522,$
  - $-PV_0 = \$171884.7411209727$
- At t = 232,
  - -q = 0.0410000000
  - $-CF_{232} = CF_{231}(1 + 0.0410000000) = 3669.2799128354,$
  - $-PVPayment = \frac{CF_{232}}{(1+0.0136015752)^{232}} = 159.7248993298,$
  - $PV_0 = \$172044.4660203024$
- At t = 233,
  - -g = 0.0410000000,
  - $CF_{233} = CF_{232}(1 + 0.0410000000) = 3819.7203892616,$
  - $-PVPayment = \frac{CF_{233}}{(1+0.0136015752)^{233}} = 164.0423853561,$
  - $-PV_0 = $172208.5084056586$
- At t = 234,
  - -g = 0.0410000000,
  - $-CF_{234} = CF_{233}(1 + 0.0410000000) = 3976.3289252214,$
  - $-PVPayment = \frac{CF_{234}}{(1+0.0136015752)^{234}} = 168.4765763274,$
  - $-PV_0 = \$172376.9849819860$
- At t = 235,
  - -g = 0.0410000000,
  - $-CF_{235} = CF_{234}(1 + 0.0410000000) = 4139.3584111554,$
  - $-PVPayment = \frac{CF_{235}}{(1+0.0136015752)^{235}} = 173.0306268675,$
  - $PV_0 = \$172550.0156088535$
- At t = 236,

- -g = 0.04100000000,
- $-CF_{236} = CF_{235}(1 + 0.0410000000) = 4309.0721060128,$
- $-PVPayment = \frac{CF_{236}}{(1+0.0136015752)^{236}} = 177.7077768721,$
- $-PV_0 = \$172727.7233857256$
- At t = 237,
  - -g = 0.0410000000,
  - $-CF_{237} = CF_{236}(1 + 0.0410000000) = 4485.7440623593,$
  - $-PVPayment = \frac{CF_{237}}{(1+0.0136015752)^{237}} = 182.5113538137,$
  - $PV_0 = \$172910.2347395393$
- At t = 238,
  - -g = 0.0410000000,
  - $-CF_{238} = CF_{237}(1 + 0.0410000000) = 4669.6595689161,$
  - $-PVPayment = \frac{CF_{238}}{(1+0.0136015752)^{238}} = 187.4447751089,$
  - $-PV_0 = \$173097.6795146482$
- At t = 239,
  - -g = 0.0410000000,
  - $-CF_{239} = CF_{238}(1 + 0.0410000000) = 4861.1156112416,$
  - $-PVPayment = \frac{CF_{239}}{(1+0.0136015752)^{239}} = 192.5115505499,$
  - $-PV_0 = \$173290.1910651981$
- At t = 240,
  - g = 0.0410000000,
  - $-CF_{240} = CF_{239}(1 + 0.0410000000) = 5060.4213513025,$
  - $-PVPayment = \frac{CF_{240}}{(1+0.0136015752)^{240}} = 197.7152848011,$
  - $PV_0 = \$173487.9063499992$
- At t = 241,
  - -q = 0.0410000000,
  - $-CF_{241} = CF_{240}(1 + 0.0410000000) = 5267.8986267059,$
  - $-PVPayment = \frac{CF_{241}}{(1+0.0136015752)^{241}} = 203.0596799637,$
  - $-PV_0 = \$173690.9660299630$
- At t = 242,
  - -g = 0.0410000000,
  - $CF_{242} = CF_{241}(1 + 0.0410000000) = 5483.8824704009,$
  - $-PVPayment = \frac{CF_{242}}{(1+0.0136015752)^{242}} = 208.5485382096,$
  - $-PV_0 = \$173899.5145681725$
- At t = 243,
  - -g = 0.0410000000,
  - $-CF_{243} = CF_{242}(1 + 0.0410000000) = 5708.7216516873,$

- $-PVPayment = \frac{CF_{243}}{(1+0.0136015752)^{243}} = 214.1857644862,$
- $-PV_0 = \$174113.7003326587$
- At t = 244,
  - -g = 0.0410000000,
  - $-CF_{244} = CF_{243}(1 + 0.0410000000) = 5942.7792394065,$
  - $-PVPayment = \frac{CF_{244}}{(1+0.0136015752)^{244}} = 219.9753692948,$
  - $-PV_0 = \$174333.6757019535$
- At t = 245,
  - -g = 0.0410000000,
  - $-CF_{245} = CF_{244}(1 + 0.0410000000) = 6186.4331882222,$
  - $-PVPayment = \frac{CF_{245}}{(1+0.0136015752)^{245}} = 225.9214715434,$
  - $-PV_0 = \$174559.5971734969$
- At t = 246,
  - -g = 0.0410000000,
  - $CF_{246} = CF_{245}(1 + 0.0410000000) = 6440.0769489393,$
  - $-PVPayment = \frac{CF_{246}}{(1+0.0136015752)^{246}} = 232.0283014774,$
  - $-PV_0 = \$174791.6254749743$
- At t = 247,
  - -g = 0.0410000000,
  - $CF_{247} = CF_{246}(1 + 0.0410000000) = 6704.1201038458,$
  - $-PVPayment = \frac{CF_{247}}{(1+0.0136015752)^{247}} = 238.3002036890,$
  - $-PV_0 = \$175029.9256786633$
- At t = 248,
  - g = 0.0410000000,
  - $CF_{248} = CF_{247}(1 + 0.0410000000) = 6978.9890281035,$
  - $-PVPayment = \frac{CF_{248}}{(1+0.0136015752)^{248}} = 244.7416402078,$
  - $-PV_0 = \$175274.6673188711$
- At t = 249,
  - -g = 0.0410000000,
  - $CF_{249} = CF_{248}(1 + 0.0410000000) = 7265.1275782557,$
  - $-PVPayment = \frac{CF_{249}}{(1+0.0136015752)^{249}} = 251.3571936756,$
  - $-PV_0 = \$175526.0245125467$
- At t = 250,
  - -g = 0.0410000000,
  - $CF_{250} = CF_{249}(1 + 0.0410000000) = 7562.9978089642,$
  - $-PVPayment = \frac{CF_{250}}{(1+0.0136015752)^{250}} = 258.1515706066,$
  - $-PV_0 = \$175784.1760831533$

- At t = 251,
  - -g = 0.0410000000,
  - $-CF_{251} = CF_{250}(1 + 0.0410000000) = 7873.0807191317,$
  - $-PVPayment = \frac{CF_{251}}{(1+0.0136015752)^{251}} = 265.1296047356,$
  - $-PV_0 = \$176049.3056878888$
- At t = 252,
  - g = 0.0410000000,
  - $-CF_{252} = CF_{251}(1 + 0.0410000000) = 8195.8770286161,$
  - $-PVPayment = \frac{CF_{252}}{(1+0.0136015752)^{252}} = 272.2962604569,$
  - $-PV_0 = \$176321.6019483457$
- At t = 253,
  - -g = 0.0410000000,
  - $CF_{253} = CF_{252}(1 + 0.0410000000) = 8531.9079867894,$
  - $-PVPayment = \frac{CF_{253}}{(1+0.0136015752)^{253}} = 279.6566363562,$
  - $-PV_0 = \$176601.2585847019$
- At t = 254,
  - -g = 0.0410000000,
  - $-CF_{254} = CF_{253}(1 + 0.0410000000) = 8881.7162142477,$
  - $-PVPayment = \frac{CF_{254}}{(1+0.0136015752)^{254}} = 287.2159688379,$
  - $-PV_0 = \$176888.4745535398$
- At t = 255,
  - g = 0.0410000000,
  - $-CF_{255} = CF_{254}(1 + 0.0410000000) = 9245.8665790319,$
  - $-PVPayment = \frac{CF_{255}}{(1+0.0136015752)^{255}} = 294.9796358504,$
  - $-PV_0 = \$177183.4541893901$
- At t = 256,
  - -g = 0.0410000000,
  - $CF_{256} = CF_{255}(1 + 0.0410000000) = 9624.9471087722,$
  - $-PVPayment = \frac{CF_{256}}{(1+0.0136015752)^{256}} = 302.9531607121,$
  - $-PV_0 = \$177486.4073501022$
- At t = 257,
  - -g = 0.0410000000,
  - $-CF_{257} = CF_{256}(1 + 0.0410000000) = 10019.5699402319,$
  - $-PVPayment = \frac{CF_{257}}{(1+0.0136015752)^{257}} = 311.1422160409,$
  - $PV_0 = \$177797.5495661431$
- At t = 258,
  - -g = 0.0410000000,

- $\begin{array}{l} \ CF_{258} = CF_{257}(1+0.0410000000) = 10430.3723077814, \\ \ PVPayment = \frac{CF_{258}}{(1+0.0136015752)^{258}} = 319.5526277901, \\ \ PV_0 = \$178117.1021939332 \end{array}$
- At t = 259,
  - -g = 0.0410000000,
  - $-CF_{259} = CF_{258}(1 + 0.0410000000) = 10858.0175724004,$
  - $-PVPayment = \frac{CF_{259}}{(1+0.0136015752)^{259}} = 328.1903793927,$
  - $-PV_0 = \$178445.2925733259$
- At t = 260,
  - g = 0.1900000000
  - $-CF_{260} = CF_{223}(1 + 0.1900000000) = 3041.3838760060,$
  - $-PVPayment = \frac{CF_{260}}{(1+0.0136015752)^{260}} = 90.6941485946,$
  - $-PV_0 = \$178535.9867219205$
- At t = 261,
  - -g = 0.0410000000,
  - $-CF_{261} = CF_{260}(1 + 0.0410000000) = 3166.0806149222,$
  - $-PVPayment = \frac{CF_{261}}{(1+0.0136015752)^{261}} = 93.1456807031,$
  - $PV_0 = \$178629.1324026236$
- At t = 262,
  - g = 0.0410000000,
  - $CF_{262} = CF_{261}(1 + 0.0410000000) = 3295.8899201340,$
  - $-PVPayment = \frac{CF_{262}}{(1+0.0136015752)^{262}} = 95.6634795969,$
  - $-PV_0 = \$178724.7958822205$
- At t = 263,
  - -g = 0.0410000000,
  - $CF_{263} = CF_{262}(1 + 0.0410000000) = 3431.0214068595,$
  - $-PVPayment = \frac{CF_{263}}{(1+0.0136015752)^{263}} = 98.2493365179,$
  - $-PV_0 = \$178823.0452187384$
- At t = 264,
  - -g = 0.0410000000,
  - $-CF_{264} = CF_{263}(1 + 0.0410000000) = 3571.6932845407,$
  - $-PVPayment = \frac{CF_{264}}{(1+0.0136015752)^{264}} = 100.9050911266,$
  - $-PV_0 = $178923.9503098650$
- At t = 265,
  - -g = 0.0410000000,
  - $-CF_{265} = CF_{264}(1 + 0.0410000000) = 3718.1327092069,$
  - $-PVPayment = \frac{CF_{265}}{(1+0.0136015752)^{265}} = 103.6326328108,$

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-PV_0 = $179027.5829426758
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- At t = 266,
  - g = 0.0410000000,
  - $-CF_{266} = CF_{265}(1 + 0.0410000000) = 3870.5761502844,$
  - $-PVPayment = \frac{CF_{266}}{(1+0.0136015752)^{266}} = 106.4339020300,$
  - $-PV_0 = \$179134.0168447058$
- At t = 267,
  - -g = 0.0410000000,
  - $-CF_{267} = CF_{266}(1 + 0.0410000000) = 4029.2697724460,$
  - $-PVPayment = \frac{CF_{267}}{(1+0.0136015752)^{267}} = 109.3108916958,$
  - $-PV_0 = \$179243.3277364016$
- At t = 268,
  - g = 0.0410000000,
  - $-CF_{268} = CF_{267}(1 + 0.0410000000) = 4194.4698331163,$
  - $-PVPayment = \frac{CF_{268}}{(1+0.0136015752)^{268}} = 112.2656485897,$
  - $-PV_0 = \$179355.5933849913$
- At t = 269,
  - -q = 0.0410000000
  - $-CF_{269} = CF_{268}(1 + 0.0410000000) = 4366.4430962741,$
  - $-PVPayment = \frac{CF_{269}}{(1+0.0136015752)^{269}} = 115.3002748193,$
  - $-PV_0 = \$179470.8936598106$
- At t = 270,
  - -g = 0.0410000000,
  - $CF_{270} = CF_{269}(1 + 0.0410000000) = 4545.4672632213,$
  - $-PVPayment = \frac{CF_{270}}{(1+0.0136015752)^{270}} = 118.4169293137,$
  - $-PV_0 = \$179589.3105891242$
- At t = 271,
  - -g = 0.0410000000,
  - $-CF_{271} = CF_{270}(1 + 0.0410000000) = 4731.8314210134,$
  - $-PVPayment = \frac{CF_{271}}{(1+0.0136015752)^{271}} = 121.6178293596,$
  - $-PV_0 = \$179710.9284184838$
- At t = 272,
  - -g = 0.0410000000,
  - $-CF_{272} = CF_{271}(1 + 0.0410000000) = 4925.8365092750,$
  - $-PVPayment = \frac{CF_{272}}{(1+0.0136015752)^{272}} = 124.9052521785,$
  - $-PV_0 = \$179835.8336706623$
- At t = 273,

- -g = 0.0410000000,
- $-CF_{273} = CF_{272}(1 + 0.0410000000) = 5127.7958061552,$
- $-PVPayment = \frac{CF_{273}}{(1+0.0136015752)^{273}} = 128.2815365472,$
- $-PV_0 = \$179964.1152072095$
- At t = 274,
  - g = 0.0410000000,
  - $-CF_{274} = CF_{273}(1 + 0.0410000000) = 5338.0354342076,$
  - $-PVPayment = \frac{CF_{274}}{(1+0.0136015752)^{274}} = 131.7490844612,$
  - $PV_0 = \$180095.8642916707$
- At t = 275,
  - -g = 0.0410000000,
  - $-CF_{275} = CF_{274}(1 + 0.0410000000) = 5556.8948870101,$
  - $-PVPayment = \frac{CF_{275}}{(1+0.0136015752)^{275}} = 135.3103628438,$
  - $-PV_0 = $180231.1746545145$
- At t = 276,
  - -g = 0.0410000000,
  - $-CF_{276} = CF_{275}(1 + 0.0410000000) = 5784.7275773775,$
  - $-PVPayment = \frac{CF_{276}}{(1+0.0136015752)^{276}} = 138.9679053011,$
  - $PV_0 = \$180370.1425598156$
- At t = 277,
  - g = 0.0410000000,
  - $-CF_{277} = CF_{276}(1 + 0.0410000000) = 6021.9014080500,$
  - $-PVPayment = \frac{CF_{277}}{(1+0.0136015752)^{277}} = 142.7243139247,$
  - $-PV_0 = $180512.8668737404$
- At t = 278,
  - -q = 0.0410000000,
  - $-CF_{278} = CF_{277}(1 + 0.0410000000) = 6268.7993657801,$
  - $-PVPayment = \frac{CF_{278}}{(1+0.0136015752)^{278}} = 146.5822611426,$
  - $-PV_0 = $180659.4491348829$
- At t = 279,
  - -g = 0.0410000000,
  - $-CF_{279} = CF_{278}(1 + 0.0410000000) = 6525.8201397770,$
  - $-PVPayment = \frac{CF_{279}}{(1+0.0136015752)^{279}} = 150.5444916204,$
  - $-PV_0 = $180809.9936265034$
- At t = 280,
  - -g = 0.0410000000,
  - $-CF_{280} = CF_{279}(1 + 0.0410000000) = 6793.3787655079,$

- $-PVPayment = \frac{CF_{280}}{(1+0.0136015752)^{280}} = 154.6138242144,$  $-PV_0 = $180964.6074507177$
- At t = 281,
  - -g = 0.0410000000,
  - $-CF_{281} = CF_{280}(1 + 0.0410000000) = 7071.9072948937,$
  - $-PVPayment = \frac{CF_{281}}{(1+0.0136015752)^{281}} = 158.7931539765,$
  - $-PV_0 = $181123.4006046943$
- At t = 282,
  - -g = 0.0410000000,
  - $-CF_{282} = CF_{281}(1 + 0.0410000000) = 7361.8554939844,$
  - $-PVPayment = \frac{CF_{282}}{(1+0.0136015752)^{282}} = 163.0854542143,$
  - $-PV_0 = \$181286.4860589086$
- At t = 283,
  - -g = 0.0410000000,
  - $CF_{283} = CF_{282}(1 + 0.0410000000) = 7663.6915692377,$
  - $-PVPayment = \frac{CF_{283}}{(1+0.0136015752)^{283}} = 167.4937786059,$
  - $-PV_0 = $181453.9798375145$
- At t = 284,
  - -g = 0.0410000000,
  - $-CF_{284} = CF_{283}(1 + 0.0410000000) = 7977.9029235765,$
  - $-PVPayment = \frac{CF_{284}}{(1+0.0136015752)^{284}} = 172.0212633730,$
  - $-PV_0 = $181626.0011008875$
- At t = 285,
  - -g = 0.0410000000,
  - $CF_{285} = CF_{284}(1 + 0.0410000000) = 8304.9969434431,$
  - $-PVPayment = \frac{CF_{285}}{(1+0.0136015752)^{285}} = 176.6711295113,$
  - $PV_0 = \$181802.6722303988$
- At t = 286,
  - -g = 0.0410000000,
  - $-\ CF_{286} = CF_{285}(1 + 0.0410000000) = 8645.5018181243,$
  - $-PVPayment = \frac{CF_{286}}{(1+0.0136015752)^{286}} = 181.4466850830,$
  - $-PV_0 = \$181984.1189154818$
- At t = 287,
  - -g = 0.0410000000,
  - $-CF_{287} = CF_{286}(1 + 0.0410000000) = 8999.9673926674,$
  - $-PVPayment = \frac{CF_{287}}{(1+0.0136015752)^{287}} = 186.3513275692,$
  - $-PV_0 = $182170.4702430510$

- At t = 288,
  - -g = 0.0410000000,
  - $CF_{288} = CF_{287}(1 + 0.0410000000) = 9368.9660557667,$
  - $-PVPayment = \frac{CF_{288}}{(1+0.0136015752)^{288}} = 191.3885462881,$
  - $PV_0 = \$182361.8587893391$
- At t = 289,
  - -g = 0.0410000000,
  - $-CF_{289} = CF_{288}(1 + 0.0410000000) = 9753.0936640532,$
  - $-PVPayment = \frac{CF_{289}}{(1+0.0136015752)^{289}} = 196.5619248763,$
  - $-PV_0 = \$182558.4207142154$
- At t = 290,
  - -g = 0.0410000000,
  - $-CF_{290} = CF_{289}(1 + 0.0410000000) = 10152.9705042793,$
  - $-PVPayment = \frac{CF_{290}}{(1+0.0136015752)^{290}} = 201.8751438392,$
  - $-PV_0 = \$182760.2958580546$
- At t = 291,
  - -g = 0.0410000000,
  - $-CF_{291} = CF_{290}(1 + 0.0410000000) = 10569.2422949548,$
  - $-PVPayment = \frac{CF_{291}}{(1+0.0136015752)^{291}} = 207.3319831689,$
  - $-PV_0 = \$182967.6278412235$
- At t = 292,
  - g = 0.0410000000,
  - $-CF_{292} = CF_{291}(1 + 0.0410000000) = 11002.5812290479,$
  - $-PVPayment = \frac{CF_{292}}{(1+0.0136015752)^{292}} = 212.9363250335,$
  - $-PV_0 = $183180.5641662570$
- At t = 293,
  - -g = 0.0410000000,
  - $CF_{293} = CF_{292}(1 + 0.0410000000) = 11453.6870594389,$
  - $-PVPayment = \frac{CF_{293}}{(1+0.0136015752)^{293}} = 218.6921565394,$
  - $-PV_0 = $183399.2563227964$
- At t = 294,
  - -g = 0.0410000000,
  - $-CF_{294} = CF_{293}(1 + 0.0410000000) = 11923.2882288759,$
  - $-PVPayment = \frac{CF_{294}}{(1+0.0136015752)^{294}} = 224.6035725671,$
  - $-PV_0 = $183623.8598953636$
- At t = 295,
  - -g = 0.0410000000,

- $-PV_0 = \$183854.5346740488$
- At t = 296,
  - -g = 0.0410000000,
  - $CF_{296} = CF_{295}(1 + 0.0410000000) = 12921.0409111565,$
  - $-PVPayment = \frac{CF_{296}}{(1+0.0136015752)^{296}} = 236.9100941419,$
  - $-PV_0 = \$184091.4447681907$
- At t = 297,
  - g = 0.1900000000
  - $-CF_{297} = CF_{260}(1 + 0.1900000000) = 3619.2468124471,$
  - $-PVPayment = \frac{CF_{297}}{(1+0.0136015752)^{297}} = 65.4691929770,$
  - $-PV_0 = $184156.9139611677$
- At t = 298,
  - -g = 0.0410000000,
  - $-CF_{298} = CF_{297}(1 + 0.0410000000) = 3767.6359317574,$
  - $-PVPayment = \frac{CF_{298}}{(1+0.0136015752)^{298}} = 67.2388752684,$
  - $PV_0 = \$184224.1528364361$
- At t = 299,
  - g = 0.0410000000,
  - $-CF_{299} = CF_{298}(1 + 0.0410000000) = 3922.1090049595,$
  - $-PVPayment = \frac{CF_{299}}{(1+0.0136015752)^{299}} = 69.0563934238,$
  - $PV_0 = \$184293.2092298599$
- At t = 300,
  - -g = 0.0410000000,
  - $-\ CF_{300} = CF_{299}(1 + 0.0410000000) = 4082.9154741628,$
  - $-PVPayment = \frac{CF_{300}}{(1+0.0136015752)^{300}} = 70.9230404831,$
  - $PV_0 = \$184364.1322703430$
- At t = 301,
  - -g = 0.0410000000,
  - $-CF_{301} = CF_{300}(1 + 0.0410000000) = 4250.3150086035,$
  - $-PVPayment = \frac{CF_{301}}{(1+0.0136015752)^{301}} = 72.8401444382,$
  - $-PV_0 = $184436.9724147813$
- At t = 302,
  - -q = 0.0410000000,
  - $-CF_{302} = CF_{301}(1 + 0.0410000000) = 4424.5779239562,$
  - $-PVPayment = \frac{CF_{302}}{(1+0.0136015752)^{302}} = 74.8090691775,$

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-PV_0 = \$184511.7814839587
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- At t = 303,
  - g = 0.0410000000,
  - $-CF_{303} = CF_{302}(1 + 0.0410000000) = 4605.9856188384,$
  - $-PVPayment = \frac{CF_{303}}{(1+0.0136015752)^{303}} = 76.8312154563,$
  - $-PV_0 = $184588.6126994151$
- At t = 304,
  - -g = 0.0410000000,
  - $-CF_{304} = CF_{303}(1 + 0.0410000000) = 4794.8310292108,$
  - $-PVPayment = \frac{CF_{304}}{(1+0.0136015752)^{304}} = 78.9080218936,$
  - $-PV_0 = \$184667.5207213087$
- At t = 305,
  - -g = 0.0410000000,
  - $-CF_{305} = CF_{304}(1 + 0.0410000000) = 4991.4191014084,$
  - $-PVPayment = \frac{CF_{305}}{(1+0.0136015752)^{305}} = 81.0409659951,$
  - $PV_0 = \$184748.5616873038$
- At t = 306,
  - -q = 0.0410000000
  - $-CF_{306} = CF_{305}(1 + 0.0410000000) = 5196.0672845662,$
  - $-PVPayment = \frac{CF_{306}}{(1+0.0136015752)^{306}} = 83.2315652048,$
  - $-PV_0 = $184831.7932525086$
- At t = 307,
  - -g = 0.0410000000,
  - $CF_{307} = CF_{306}(1 + 0.0410000000) = 5409.1060432334,$
  - $-PVPayment = \frac{CF_{307}}{(1+0.0136015752)^{307}} = 85.4813779844,$
  - $-PV_0 = $184917.2746304930$
- At t = 308,
  - -g = 0.0410000000,
  - $-CF_{308} = CF_{307}(1 + 0.0410000000) = 5630.8793910060,$
  - $-PVPayment = \frac{CF_{308}}{(1+0.0136015752)^{308}} = 87.7920049217,$
  - $-PV_0 = $185005.0666354147$
- At t = 309,
  - -g = 0.0410000000,
  - $-CF_{309} = CF_{308}(1 + 0.0410000000) = 5861.7454460372,$
  - $-PVPayment = \frac{CF_{309}}{(1+0.0136015752)^{309}} = 90.1650898701,$
  - $-PV_0 = \$185095.2317252847$
- At t = 310,

- -g = 0.0410000000,
- $CF_{310} = CF_{309}(1 + 0.0410000000) = 6102.0770093247,$
- $-PVPayment = \frac{CF_{310}}{(1+0.0136015752)^{310}} = 92.6023211171,$
- $-PV_0 = \$185187.8340464018$
- At t = 311,
  - -g = 0.0410000000,
  - $-CF_{311} = CF_{310}(1 + 0.0410000000) = 6352.2621667071,$
  - $-PVPayment = \frac{CF_{311}}{(1+0.0136015752)^{311}} = 95.1054325863,$
  - $-PV_0 = \$185282.9394789881$
- At t = 312,
  - -g = 0.0410000000,
  - $-CF_{312} = CF_{311}(1 + 0.0410000000) = 6612.7049155420,$
  - $-PVPayment = \frac{CF_{312}}{(1+0.0136015752)^{312}} = 97.6762050704,$
  - $-PV_0 = \$185380.6156840585$
- At t = 313,
  - -g = 0.0410000000,
  - $-CF_{313} = CF_{312}(1 + 0.0410000000) = 6883.8258170793,$
  - $-PVPayment = \frac{CF_{313}}{(1+0.0136015752)^{313}} = 100.3164674983,$
  - $-PV_0 = \$185480.9321515568$
- At t = 314,
  - g = 0.0410000000,
  - $-CF_{314} = CF_{313}(1 + 0.0410000000) = 7166.0626755795,$
  - $-PVPayment = \frac{CF_{314}}{(1+0.0136015752)^{314}} = 103.0280982362,$
  - $-PV_0 = \$185583.9602497930$
- At t = 315,
  - -q = 0.0410000000,
  - $-CF_{315} = CF_{314}(1 + 0.0410000000) = 7459.8712452783,$
  - $-PVPayment = \frac{CF_{315}}{(1+0.0136015752)^{315}} = 105.8130264241,$
  - $-PV_0 = $185689.7732762171$
- At t = 316,
  - -g = 0.0410000000,
  - $-CF_{316} = CF_{315}(1 + 0.0410000000) = 7765.7259663347,$
  - $-PVPayment = \frac{CF_{316}}{(1+0.0136015752)^{316}} = 108.6732333481,$
  - $PV_0 = \$185798.4465095652$
- At t = 317,
  - -q = 0.0410000000,
  - $-CF_{317} = CF_{316}(1 + 0.0410000000) = 8084.1207309544,$

- $-PVPayment = \frac{CF_{317}}{(1+0.0136015752)^{317}} = 111.6107538498,$  $-PV_0 = $185910.0572634150$
- At t = 318,
  - -g = 0.0410000000,
  - $-CF_{318} = CF_{317}(1 + 0.0410000000) = 8415.5696809235,$
  - $-PVPayment = \frac{CF_{318}}{(1+0.0136015752)^{318}} = 114.6276777743,$
  - $-PV_0 = $186024.6849411893$
- At t = 319,
  - -g = 0.0410000000,
  - $-CF_{319} = CF_{318}(1 + 0.0410000000) = 8760.6080378414,$
  - $-PVPayment = \frac{CF_{319}}{(1+0.0136015752)^{319}} = 117.7261514569,$
  - $-PV_0 = \$186142.4110926462$
- At t = 320,
  - -g = 0.0410000000,
  - $-CF_{320} = CF_{319}(1 + 0.0410000000) = 9119.7929673929,$
  - $-PVPayment = \frac{CF_{320}}{(1+0.0136015752)^{320}} = 120.9083792497,$
  - $-PV_0 = $186263.3194718959$
- At t = 321,
  - -g = 0.0410000000,
  - $-CF_{321} = CF_{320}(1 + 0.0410000000) = 9493.7044790560,$
  - $-PVPayment = \frac{CF_{321}}{(1+0.0136015752)^{321}} = 124.1766250903,$
  - $-PV_0 = $186387.4960969863$
- At t = 322,
  - g = 0.0410000000,
  - $CF_{322} = CF_{321}(1 + 0.0410000000) = 9882.9463626973,$
  - $-PVPayment = \frac{CF_{322}}{(1+0.0136015752)^{322}} = 127.5332141123,$
  - $-PV_0 = \$186515.0293110985$
- At t = 323,
  - -g = 0.0410000000,
  - $CF_{323} = CF_{322}(1 + 0.0410000000) = 10288.1471635679,$
  - $-PVPayment = \frac{CF_{323}}{(1+0.0136015752)^{323}} = 130.9805342993,$
  - $-PV_0 = \$186646.0098453978$
- At t = 324,
  - -g = 0.0410000000,
  - $CF_{324} = CF_{323}(1 + 0.0410000000) = 10709.9611972742,$
  - $-PVPayment = \frac{CF_{324}}{(1+0.0136015752)^{324}} = 134.5210381840,$
  - $-PV_0 = \$186780.5308835818$

- At t = 325,
  - -g = 0.0410000000,
  - $CF_{325} = CF_{324}(1 + 0.0410000000) = 11149.0696063624,$
  - $-PVPayment = \frac{CF_{325}}{(1+0.0136015752)^{325}} = 138.1572445929,$
  - $-PV_0 = \$186918.6881281747$
- At t = 326,
  - -g = 0.0410000000,
  - $-CF_{326} = CF_{325}(1 + 0.0410000000) = 11606.1814602233,$
  - $-PVPayment = \frac{CF_{326}}{(1+0.0136015752)^{326}} = 141.8917404384,$
  - $-PV_0 = \$187060.5798686130$
- At t = 327,
  - -g = 0.0410000000,
  - $-CF_{327} = CF_{326}(1 + 0.0410000000) = 12082.0349000924,$
  - $-PVPayment = \frac{CF_{327}}{(1+0.0136015752)^{327}} = 145.7271825590,$
  - $PV_0 = \$187206.3070511720$
- At t = 328,
  - -g = 0.0410000000,
  - $-CF_{328} = CF_{327}(1 + 0.0410000000) = 12577.3983309962,$
  - $-PVPayment = \frac{CF_{328}}{(1+0.0136015752)^{328}} = 149.6662996096,$
  - $PV_0 = \$187355.9733507815$
- At t = 329,
  - g = 0.0410000000,
  - $-CF_{329} = CF_{328}(1 + 0.0410000000) = 13093.0716625671,$
  - $-PVPayment = \frac{CF_{329}}{(1+0.0136015752)^{329}} = 153.7118940027,$
  - $-PV_0 = \$187509.6852447842$
- At t = 330,
  - -g = 0.0410000000,
  - $-CF_{330} = CF_{329}(1 + 0.0410000000) = 13629.8876007323,$
  - $-PVPayment = \frac{CF_{330}}{(1+0.0136015752)^{330}} = 157.8668439024,$
  - $-PV_0 = $187667.5520886866$
- At t = 331,
  - -g = 0.0410000000,
  - $-CF_{331} = CF_{330}(1 + 0.0410000000) = 14188.7129923623,$
  - $-PVPayment = \frac{CF_{331}}{(1+0.0136015752)^{331}} = 162.1341052713,$
  - $-PV_0 = $187829.6861939579$
- At t = 332,
  - -g = 0.0410000000,

- $-CF_{332} = CF_{331}(1 + 0.0410000000) = 14770.4502250492,$  $-PVPayment = \frac{CF_{332}}{(1+0.0136015752)^{332}} = 166.5167139744,$
- $-PV_0 = \$187996.2029079323$
- At t = 333,
  - -g = 0.0410000000,
  - $-CF_{333} = CF_{332}(1 + 0.0410000000) = 15376.0386842762,$
  - $PV Payment = \frac{CF_{333}}{(1+0.0136015752)^{333}} = 171.0177879381,$
  - $-PV_0 = \$188167.2206958704$
- At t = 334,
  - g = 0.1900000000
  - $-CF_{334} = CF_{297}(1 + 0.1900000000) = 4306.9037068120,$
  - $-PVPayment = \frac{CF_{334}}{(1+0.0136015752)^{334}} = 47.2601076859,$
  - $-PV_0 = $188214.4808035564$
- At t = 335,
  - -g = 0.0410000000,
  - $-CF_{335} = CF_{334}(1 + 0.0410000000) = 4483.4867587913,$
  - $-PVPayment = \frac{CF_{335}}{(1+0.0136015752)^{335}} = 48.5375844938,$
  - $PV_0 = \$188263.0183880502$
- At t = 336,
  - g = 0.0410000000,
  - $-CF_{336} = CF_{335}(1 + 0.0410000000) = 4667.3097159018,$
  - $-PVPayment = \frac{CF_{336}}{(1+0.0136015752)^{336}} = 49.8495924756,$
  - $-PV_0 = \$188312.8679805257$
- At t = 337,
  - -g = 0.0410000000,
  - $CF_{337} = CF_{336}(1 + 0.0410000000) = 4858.6694142537,$
  - $-PVPayment = \frac{CF_{337}}{(1+0.0136015752)^{337}} = 51.1970650352,$
  - $PV_0 = \$188364.0650455609$
- At t = 338,
  - -g = 0.0410000000,
  - $-CF_{338} = CF_{337}(1 + 0.0410000000) = 5057.8748602381,$
  - $-PVPayment = \frac{CF_{338}}{(1+0.0136015752)^{338}} = 52.5809608073,$
  - $-PV_0 = $188416.6460063682$
- At t = 339,
  - -g = 0.0410000000,
  - $-CF_{339} = CF_{338}(1 + 0.0410000000) = 5265.2477295079,$
  - $-PVPayment = \frac{CF_{339}}{(1+0.0136015752)^{339}} = 54.0022643391,$

- $-PV_0 = $188470.6482707072$
- At t = 340,
  - g = 0.0410000000,
  - $-CF_{340} = CF_{339}(1 + 0.0410000000) = 5481.1228864177,$
  - $-PVPayment = \frac{CF_{340}}{(1+0.0136015752)^{340}} = 55.4619867909,$
  - $-PV_0 = $188526.1102574982$
- At t = 341,
  - -g = 0.0410000000,
  - $-CF_{341} = CF_{340}(1 + 0.0410000000) = 5705.8489247609,$
  - $-PVPayment = \frac{CF_{341}}{(1+0.0136015752)^{341}} = 56.9611666556,$
  - $-PV_0 = \$188583.0714241538$
- At t = 342,
  - -g = 0.0410000000,
  - $-CF_{342} = CF_{341}(1 + 0.0410000000) = 5939.7887306760,$
  - $-PVPayment = \frac{CF_{342}}{(1+0.0136015752)^{342}} = 58.5008704971,$
  - $PV_0 = \$188641.5722946509$
- At t = 343,
  - -q = 0.0410000000
  - $-CF_{343} = CF_{342}(1 + 0.0410000000) = 6183.3200686338,$
  - $-PVPayment = \frac{CF_{343}}{(1+0.0136015752)^{343}} = 60.0821937095,$
  - $-PV_0 = $188701.6544883603$
- At t = 344,
  - -g = 0.0410000000,
  - $CF_{344} = CF_{343}(1 + 0.0410000000) = 6436.8361914477,$
  - $-PVPayment = \frac{CF_{344}}{(1+0.0136015752)^{344}} = 61.7062612960,$
  - $-PV_0 = $188763.3607496564$
- At t = 345,
  - -g = 0.0410000000,
  - $CF_{345} = CF_{344}(1 + 0.0410000000) = 6700.7464752971,$
  - $-PVPayment = \frac{CF_{345}}{(1+0.0136015752)^{345}} = 63.3742286699,$
  - $-PV_0 = $188826.7349783263$
- At t = 346,
  - g = 0.0410000000,
  - $-CF_{346} = CF_{345}(1 + 0.0410000000) = 6975.4770807843,$
  - $-PVPayment = \frac{CF_{346}}{(1+0.0136015752)^{346}} = 65.0872824760,$
  - $-PV_0 = $188891.8222608023$
- At t = 347,

- -g = 0.0410000000,-  $CF_{347} = CF_{346}(1 + 0.0410000000) = 7261.4716410964,$
- $-PVPayment = \frac{CF_{347}}{(1+0.0136015752)^{347}} = 66.8466414348,$
- $-PV_0 = \$188958.6689022371$
- At t = 348,
  - g = 0.0410000000,
  - $-CF_{348} = CF_{347}(1 + 0.0410000000) = 7559.1919783814,$
  - $-PVPayment = \frac{CF_{348}}{(1+0.0136015752)^{348}} = 68.6535572101,$
  - $PV_0 = \$189027.3224594471$
- At t = 349,
  - g = 0.0410000000,
  - $-CF_{349} = CF_{348}(1 + 0.0410000000) = 7869.1188494950,$
  - $-PVPayment = \frac{CF_{349}}{(1+0.0136015752)^{349}} = 70.5093152988,$
  - $-PV_0 = $189097.8317747460$
- At t = 350,
  - -g = 0.0410000000,
  - $-CF_{350} = CF_{349}(1 + 0.0410000000) = 8191.7527223243,$
  - $-PVPayment = \frac{CF_{350}}{(1+0.0136015752)^{350}} = 72.4152359462,$
  - $-PV_0 = \$189170.2470106921$
- At t = 351,
  - g = 0.0410000000,
  - $-CF_{351} = CF_{350}(1 + 0.0410000000) = 8527.6145839396,$
  - $-PVPayment = \frac{CF_{351}}{(1+0.0136015752)^{351}} = 74.3726750844,$
  - $-PV_0 = \$189244.6196857765$
- At t = 352,
  - -q = 0.0410000000,
  - $-CF_{352} = CF_{351}(1 + 0.0410000000) = 8877.2467818811,$
  - $-PVPayment = \frac{CF_{352}}{(1+0.0136015752)^{352}} = 76.3830252976,$
  - $-PV_0 = $189321.0027110741$
- At t = 353,
  - -g = 0.0410000000,
  - $-CF_{353} = CF_{352}(1 + 0.0410000000) = 9241.2138999383,$
  - $-PVPayment = \frac{CF_{353}}{(1+0.0136015752)^{353}} = 78.4477168125,$
  - $PV_0 = \$189399.4504278866$
- At t = 354,
  - -q = 0.0410000000,
  - $-CF_{354} = CF_{353}(1 + 0.0410000000) = 9620.1036698357,$

- $-PVPayment = \frac{CF_{354}}{(1+0.0136015752)^{354}} = 80.5682185161,$  $-PV_0 = $189480.0186464028$
- At t = 355,
  - -g = 0.0410000000,
  - $-CF_{355} = CF_{354}(1 + 0.0410000000) = 10014.5279202990,$
  - $-PVPayment = \frac{CF_{355}}{(1+0.0136015752)^{355}} = 82.7460390004,$
  - $-PV_0 = $189562.7646854031$
- At t = 356,
  - -g = 0.0410000000,
  - $-CF_{356} = CF_{355}(1 + 0.0410000000) = 10425.1235650313,$
  - $-PVPayment = \frac{CF_{356}}{(1+0.0136015752)^{356}} = 84.9827276358,$
  - $-PV_0 = \$189647.7474130389$
- At t = 357,
  - -g = 0.0410000000,
  - $-CF_{357} = CF_{356}(1 + 0.0410000000) = 10852.5536311975,$
  - $-PVPayment = \frac{CF_{357}}{(1+0.0136015752)^{357}} = 87.2798756734,$
  - $-PV_0 = $189735.0272887123$
- At t = 358,
  - -g = 0.0410000000,
  - $-CF_{358} = CF_{357}(1 + 0.0410000000) = 11297.5083300766,$
  - $-PVPayment = \frac{CF_{358}}{(1+0.0136015752)^{358}} = 89.6391173770,$
  - $-PV_0 = $189824.6664060892$
- At t = 359,
  - -g = 0.0410000000,
  - $CF_{359} = CF_{358}(1 + 0.0410000000) = 11760.7061716098,$
  - $-PVPayment = \frac{CF_{359}}{(1+0.0136015752)^{359}} = 92.0621311858,$
  - $PV_0 = \$189916.7285372750$
- At t = 360,
  - -g = 0.0410000000,
  - $CF_{360} = CF_{359}(1 + 0.0410000000) = 12242.8951246458,$
  - $-PVPayment = \frac{CF_{360}}{(1+0.0136015752)^{360}} = 94.5506409085,$
  - $-PV_0 = $190011.2791781836$
- At t = 361,
  - -g = 0.0410000000,
  - $CF_{361} = CF_{360}(1 + 0.0410000000) = 12744.8538247563,$
  - $-PVPayment = \frac{CF_{361}}{(1+0.0136015752)^{361}} = 97.1064169498,$
  - $-PV_0 = $190108.3855951334$

- At t = 362,
  - -g = 0.0410000000,
  - $CF_{362} = CF_{361}(1 + 0.0410000000) = 13267.3928315713,$
  - $-PVPayment = \frac{CF_{362}}{(1+0.0136015752)^{362}} = 99.7312775696,$
  - $-PV_0 = \$190208.1168727030$
- At t = 363,
  - -g = 0.0410000000,
  - $-CF_{363} = CF_{362}(1 + 0.0410000000) = 13811.3559376657,$
  - $-PVPayment = \frac{CF_{363}}{(1+0.0136015752)^{363}} = 102.4270901768,$
  - $-PV_0 = \$190310.5439628798$
- At t = 364,
  - -g = 0.0410000000,
  - $-CF_{364} = CF_{363}(1 + 0.0410000000) = 14377.6215311100,$
  - $-PVPayment = \frac{CF_{364}}{(1+0.0136015752)^{364}} = 105.1957726578,$
  - $-PV_0 = \$190415.7397355376$
- At t = 365,
  - -g = 0.0410000000,
  - $-CF_{365} = CF_{364}(1 + 0.0410000000) = 14967.1040138855,$
  - $-PVPayment = \frac{CF_{365}}{(1+0.0136015752)^{365}} = 108.0392947410,$
  - $-PV_0 = \$190523.7790302786$
- At t = 366,
  - g = 0.0410000000,
  - $-CF_{366} = CF_{365}(1 + 0.0410000000) = 15580.7552784548,$
  - $-PVPayment = \frac{CF_{366}}{(1+0.0136015752)^{366}} = 110.9596793980,$
  - $-PV_0 = $190634.7387096765$
- At t = 367,
  - -g = 0.0410000000,
  - $-CF_{367} = CF_{366}(1 + 0.0410000000) = 16219.5662448714,$
  - $-PVPayment = \frac{CF_{367}}{(1+0.0136015752)^{367}} = 113.9590042828,$
  - $-PV_0 = $190748.6977139594$
- At t = 368,
  - -g = 0.0410000000,
  - $-CF_{368} = CF_{367}(1 + 0.0410000000) = 16884.5684609112,$
  - $-PVPayment = \frac{CF_{368}}{(1+0.0136015752)^{368}} = 117.0394032102,$
  - $PV_0 = \$190865.7371171695$
- At t = 369,
  - g = 0.0410000000,

- $CF_{369} = CF_{368}(1 + 0.0410000000) = 17576.8357678085,$  $- PVPayment = \frac{CF_{369}}{(1 + 0.0136015752)^{369}} = 120.2030676733,$
- $PV_0 = \$190985.9401848428$
- At t = 370,
  - -g = 0.0410000000,
  - $-CF_{370} = CF_{369}(1 + 0.0410000000) = 18297.4860342887,$
  - $-PVPayment = \frac{CF_{370}}{(1+0.0136015752)^{370}} = 123.4522484033,$
  - $PV_0 = \$191109.3924332461$
- At t = 371,
  - g = 0.1900000000
  - $-CF_{371} = CF_{334}(1 + 0.1900000000) = 5125.2154111063,$
  - $-PVPayment = \frac{CF_{371}}{(1+0.0136015752)^{371}} = 34.1155538494,$
  - $-PV_0 = \$191143.5079870955$
- At t = 372,
  - -g = 0.0410000000,
  - $-CF_{372} = CF_{371}(1 + 0.0410000000) = 5335.3492429617,$
  - $-PVPayment = \frac{CF_{372}}{(1+0.0136015752)^{372}} = 35.0377233273,$
  - $PV_0 = \$191178.5457104229$
- At t = 373,
  - -g = 0.04100000000,
  - $-CF_{373} = CF_{372}(1 + 0.0410000000) = 5554.0985619231,$
  - $-PVPayment = \frac{CF_{373}}{(1+0.0136015752)^{373}} = 35.9848197506,$
  - $-PV_0 = \$191214.5305301734$
- At t = 374,
  - -g = 0.0410000000,
  - $CF_{374} = CF_{373}(1 + 0.0410000000) = 5781.8166029619,$
  - $-PVPayment = \frac{CF_{374}}{(1+0.0136015752)^{374}} = 36.9575169135,$
  - $PV_0 = \$191251.4880470870$
- At t = 375,
  - -g = 0.0410000000,
  - $-CF_{375} = CF_{374}(1 + 0.0410000000) = 6018.8710836834,$
  - $-PVPayment = \frac{CF_{375}}{(1+0.0136015752)^{375}} = 37.9565068238,$
  - $-PV_0 = $191289.4445539108$
- At t = 376,
  - -g = 0.0410000000,
  - $CF_{376} = CF_{375}(1 + 0.0410000000) = 6265.6447981144,$
  - $-PVPayment = \frac{CF_{376}}{(1+0.0136015752)^{376}} = 38.9825001943,$

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-PV_0 = $191328.4270541051
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- At t = 377,
  - -g = 0.0410000000,
  - $-CF_{377} = CF_{376}(1 + 0.0410000000) = 6522.5362348371,$
  - $-PVPayment = \frac{CF_{377}}{(1+0.0136015752)^{377}} = 40.0362269493,$
  - $-PV_0 = $191368.4632810544$
- At t = 378,
  - -g = 0.0410000000,
  - $-CF_{378} = CF_{377}(1 + 0.0410000000) = 6789.9602204654,$
  - $-PVPayment = \frac{CF_{378}}{(1+0.0136015752)^{378}} = 41.1184367433,$
  - $-PV_0 = \$191409.5817177976$
- At t = 379,
  - -g = 0.0410000000,
  - $-CF_{379} = CF_{378}(1 + 0.0410000000) = 7068.3485895045,$
  - $-PVPayment = \frac{CF_{379}}{(1+0.0136015752)^{379}} = 42.2298994946,$
  - $-PV_0 = $191451.8116172923$
- At t = 380,
  - -q = 0.0410000000
  - $-CF_{380} = CF_{379}(1 + 0.0410000000) = 7358.1508816742,$
  - $-PVPayment = \frac{CF_{380}}{(1+0.0136015752)^{380}} = 43.3714059330,$
  - $-PV_0 = \$191495.1830232253$
- At t = 381,
  - -g = 0.0410000000,
  - $-CF_{381} = CF_{380}(1 + 0.0410000000) = 7659.8350678228,$
  - $-PVPayment = \frac{CF_{381}}{(1+0.0136015752)^{381}} = 44.5437681624,$
  - $-PV_0 = $191539.7267913877$
- At t = 382,
  - -g = 0.0410000000,
  - $-CF_{382} = CF_{381}(1 + 0.0410000000) = 7973.8883056036,$
  - $-PVPayment = \frac{CF_{382}}{(1+0.0136015752)^{382}} = 45.7478202382,$
  - $-PV_0 = \$191585.4746116259$
- At t = 383,
  - g = 0.0410000000,
  - $-CF_{383} = CF_{382}(1 + 0.0410000000) = 8300.8177261333,$
  - $-PVPayment = \frac{CF_{383}}{(1+0.0136015752)^{383}} = 46.9844187613,$
  - $-PV_0 = $191632.4590303872$
- At t = 384,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{384} = CF_{383}(1+0.0410000000) = 8641.1512529048, \\ -PVPayment = \frac{CF_{384}}{(1+0.0136015752)^{384}} = 48.2544434870, \end{array}$
- $-PV_0 = \$191680.7134738742$
- At t = 385,
  - g = 0.0410000000,
  - $-CF_{385} = CF_{384}(1 + 0.0410000000) = 8995.4384542739,$
  - $-PVPayment = \frac{CF_{385}}{(1+0.0136015752)^{385}} = 49.5587979511,$
  - $-PV_0 = \$191730.2722718252$
- At t = 386,
  - -g = 0.0410000000,
  - $CF_{386} = CF_{385}(1 + 0.0410000000) = 9364.2514308991,$
  - $-PVPayment = \frac{CF_{386}}{(1+0.0136015752)^{386}} = 50.8984101126,$
  - $-PV_0 = $191781.1706819378$
- At t = 387,
  - -g = 0.0410000000,
  - $-CF_{387} = CF_{386}(1 + 0.0410000000) = 9748.1857395659,$
  - $-PVPayment = \frac{CF_{387}}{(1+0.0136015752)^{387}} = 52.2742330140,$
  - $-PV_0 = $191833.4449149518$
- At t = 388,
  - g = 0.0410000000,
  - $-CF_{388} = CF_{387}(1 + 0.0410000000) = 10147.8613548881,$
  - $-PVPayment = \frac{CF_{388}}{(1+0.0136015752)^{388}} = 53.6872454593,$
  - $-PV_0 = \$191887.1321604110$
- At t = 389,
  - -q = 0.0410000000,
  - $-CF_{389} = CF_{388}(1 + 0.0410000000) = 10563.9236704386,$
  - $-PVPayment = \frac{CF_{389}}{(1+0.0136015752)^{389}} = 55.1384527102,$
  - $-PV_0 = $191942.2706131212$
- At t = 390,
  - -g = 0.0410000000,
  - $CF_{390} = CF_{389}(1 + 0.0410000000) = 10997.0445409265,$
  - $-PVPayment = \frac{CF_{390}}{(1+0.0136015752)^{390}} = 56.6288872016,$
  - $-PV_0 = $191998.8995003228$
- At t = 391,
  - -q = 0.0410000000,
  - $-CF_{391} = CF_{390}(1 + 0.0410000000) = 11447.9233671045,$

- $-PVPayment = \frac{CF_{391}}{(1+0.0136015752)^{391}} = 58.1596092756,$  $-PV_0 = $192057.0591095984$
- At t = 392,
  - -g = 0.0410000000,
  - $-CF_{392} = CF_{391}(1 + 0.0410000000) = 11917.2882251558,$
  - $-PVPayment = \frac{CF_{392}}{(1+0.0136015752)^{392}} = 59.7317079365,$
  - $-PV_0 = $192116.7908175349$
- At t = 393,
  - -g = 0.0410000000,
  - $-CF_{393} = CF_{392}(1 + 0.0410000000) = 12405.8970423872,$
  - $-PVPayment = \frac{CF_{393}}{(1+0.0136015752)^{393}} = 61.3463016249,$
  - $-PV_0 = \$192178.1371191599$
- At t = 394,
  - -g = 0.0410000000,
  - $-CF_{394} = CF_{393}(1 + 0.0410000000) = 12914.5388211251,$
  - $-PVPayment = \frac{CF_{394}}{(1+0.0136015752)^{394}} = 63.0045390140,$
  - $-PV_0 = $192241.1416581739$
- At t = 395,
  - -g = 0.0410000000,
  - $-CF_{395} = CF_{394}(1 + 0.0410000000) = 13444.0349127912,$
  - $-PVPayment = \frac{CF_{395}}{(1+0.0136015752)^{395}} = 64.7075998263,$
  - $-PV_0 = $192305.8492580001$
- At t = 396,
  - g = 0.0410000000,
  - $-CF_{396} = CF_{395}(1 + 0.0410000000) = 13995.2403442156,$
  - $-PVPayment = \frac{CF_{396}}{(1+0.0136015752)^{396}} = 66.4566956730,$
  - $PV_0 = \$192372.3059536732$
- At t = 397,
  - -g = 0.0410000000,
  - $CF_{397} = CF_{396}(1 + 0.0410000000) = 14569.0451983285,$
  - $-PVPayment = \frac{CF_{397}}{(1+0.0136015752)^{397}} = 68.2530709165,$
  - $-PV_0 = \$192440.5590245897$
- At t = 398,
  - -g = 0.0410000000,
  - $-CF_{398} = CF_{397}(1 + 0.0410000000) = 15166.3760514599,$
  - $-PVPayment = \frac{CF_{398}}{(1+0.0136015752)^{398}} = 70.0980035549,$
  - $-PV_0 = $192510.6570281446$

- At t = 399,
  - -g = 0.0410000000,
  - $CF_{399} = CF_{398}(1 + 0.0410000000) = 15788.1974695698,$
  - $-PVPayment = \frac{CF_{399}}{(1+0.0136015752)^{399}} = 71.9928061317,$
  - $PV_0 = \$192582.6498342763$
- At t = 400,
  - -g = 0.0410000000,
  - $-CF_{400} = CF_{399}(1 + 0.0410000000) = 16435.5135658222,$
  - $-PVPayment = \frac{CF_{400}}{(1+0.0136015752)^{400}} = 73.9388266693,$
  - $-PV_0 = \$192656.5886609457$
- At t = 401,
  - -g = 0.0410000000,
  - $-CF_{401} = CF_{400}(1 + 0.0410000000) = 17109.3696220209,$
  - $-PVPayment = \frac{CF_{401}}{(1+0.0136015752)^{401}} = 75.9374496285,$
  - $-PV_0 = \$192732.5261105741$
- At t = 402,
  - -g = 0.0410000000,
  - $-CF_{402} = CF_{401}(1 + 0.0410000000) = 17810.8537765237,$
  - $-PVPayment = \frac{CF_{402}}{(1+0.0136015752)^{402}} = 77.9900968928,$
  - $-PV_0 = \$192810.5162074669$
- At t = 403,
  - g = 0.0410000000,
  - $-CF_{403} = CF_{402}(1 + 0.0410000000) = 18541.0987813612,$
  - $-PVPayment = \frac{CF_{403}}{(1+0.0136015752)^{403}} = 80.0982287804,$
  - $-PV_0 = $192890.6144362473$
- At t = 404,
  - -g = 0.0410000000,
  - $CF_{404} = CF_{403}(1 + 0.0410000000) = 19301.2838313970,$
  - $-PVPayment = \frac{CF_{404}}{(1+0.0136015752)^{404}} = 82.2633450832,$
  - $-PV_0 = $192972.8777813305$
- At t = 405,
  - -g = 0.0410000000,
  - $-CF_{405} = CF_{404}(1 + 0.0410000000) = 20092.6364684843,$
  - $-PVPayment = \frac{CF_{405}}{(1+0.0136015752)^{405}} = 84.4869861333,$
  - $-PV_0 = $193057.3647674638$
- At t = 406,
  - g = 0.0410000000,

- $\begin{array}{l} CF_{406} = CF_{405}(1+0.0410000000) = 20916.4345636921, \\ PVPayment = \frac{CF_{406}}{(1+0.0136015752)^{406}} = 86.7707338994, \\ PV_0 = \$193144.1355013632 \end{array}$
- At t = 407,
  - -g = 0.0410000000,
  - $-CF_{407} = CF_{406}(1 + 0.0410000000) = 21774.0083808035,$
  - $-PVPayment = \frac{CF_{407}}{(1+0.0136015752)^{407}} = 89.1162131120,$
  - $-PV_0 = \$193233.2517144751$
- At t = 408,
  - g = 0.19000000000
  - $-CF_{408} = CF_{371}(1 + 0.1900000000) = 6099.0063392165,$
  - $-PVPayment = \frac{CF_{408}}{(1+0.0136015752)^{408}} = 24.6269226085,$
  - $-PV_0 = $193257.8786370837$
- At t = 409,
  - -g = 0.0410000000,
  - $-CF_{409} = CF_{408}(1 + 0.0410000000) = 6349.0655991244,$
  - $-PVPayment = \frac{CF_{409}}{(1+0.0136015752)^{409}} = 25.2926071366,$
  - $PV_0 = \$193283.1712442203$
- At t = 410,
  - g = 0.0410000000,
  - $-CF_{410} = CF_{409}(1 + 0.0410000000) = 6609.3772886885,$
  - $-PVPayment = \frac{CF_{410}}{(1+0.0136015752)^{410}} = 25.9762856259,$
  - $PV_0 = \$193309.1475298462$
- At t = 411,
  - -g = 0.0410000000,
  - $CF_{411} = CF_{410}(1 + 0.0410000000) = 6880.3617575247,$
  - $-PVPayment = \frac{CF_{411}}{(1+0.0136015752)^{411}} = 26.6784444670,$
  - $-PV_0 = \$193335.8259743132$
- At t = 412,
  - -g = 0.0410000000,
  - $-CF_{412} = CF_{411}(1 + 0.0410000000) = 7162.4565895832,$
  - $-PVPayment = \frac{CF_{412}}{(1+0.0136015752)^{412}} = 27.3995831979,$
  - $-PV_0 = \$193363.2255575111$
- At t = 413,
  - -g = 0.0410000000,
  - $CF_{413} = CF_{412}(1 + 0.0410000000) = 7456.1173097561,$
  - $-PVPayment = \frac{CF_{413}}{(1+0.0136015752)^{413}} = 28.1402148595,$

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-PV_0 = $193391.3657723706
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- At t = 414,
  - g = 0.0410000000,
  - $-CF_{414} = CF_{413}(1 + 0.0410000000) = 7761.8181194561,$
  - $-PVPayment = \frac{CF_{414}}{(1+0.0136015752)^{414}} = 28.9008663605,$
  - $-PV_0 = $193420.2666387311$
- At t = 415,
  - -g = 0.0410000000,
  - $CF_{415} = CF_{414}(1 + 0.0410000000) = 8080.0526623538,$
  - $-PVPayment = \frac{CF_{415}}{(1+0.0136015752)^{415}} = 29.6820788527,$
  - $-PV_0 = \$193449.9487175838$
- At t = 416,
  - -g = 0.0410000000,
  - $-CF_{416} = CF_{415}(1 + 0.0410000000) = 8411.3348215103,$
  - $-PVPayment = \frac{CF_{416}}{(1+0.0136015752)^{416}} = 30.4844081151,$
  - $-PV_0 = $193480.4331256989$
- At t = 417,
  - -q = 0.0410000000
  - $-CF_{417} = CF_{416}(1 + 0.0410000000) = 8756.1995491923,$
  - $-PVPayment = \frac{CF_{417}}{(1+0.0136015752)^{417}} = 31.3084249504,$
  - $-PV_0 = \$193511.7415506493$
- At t = 418,
  - -g = 0.0410000000,
  - $CF_{418} = CF_{417}(1 + 0.0410000000) = 9115.2037307092,$
  - $-PVPayment = \frac{CF_{418}}{(1+0.0136015752)^{418}} = 32.1547155901,$
  - $-PV_0 = $193543.8962662394$
- At t = 419,
  - -g = 0.0410000000,
  - $-CF_{419} = CF_{418}(1 + 0.0410000000) = 9488.9270836682,$
  - $-PVPayment = \frac{CF_{419}}{(1+0.0136015752)^{419}} = 33.0238821122,$
  - $-PV_0 = \$193576.9201483516$
- At t = 420,
  - g = 0.0410000000,
  - $-CF_{420} = CF_{419}(1 + 0.0410000000) = 9877.9730940986,$
  - $-PVPayment = \frac{CF_{420}}{(1+0.0136015752)^{420}} = 33.9165428692,$
  - $-PV_0 = $193610.8366912208$
- At t = 421,

- -g = 0.0410000000,  $-CF_{421} = CF_{420}(1 + 0.0410000000) = 10282.9699909567,$  $-PVPayment = \frac{CF_{421}}{(1+0.0136015752)^{421}} = 34.8333329284,$
- $-PV_0 = \$193645.6700241492$
- At t = 422,
  - -g = 0.0410000000,
  - $-CF_{422} = CF_{421}(1 + 0.0410000000) = 10704.5717605859,$
  - $-PVPayment = \frac{CF_{422}}{(1+0.0136015752)^{422}} = 35.7749045230,$
  - $PV_0 = \$193681.4449286722$
- At t = 423,
  - -g = 0.0410000000,
  - $-CF_{423} = CF_{422}(1 + 0.0410000000) = 11143.4592027699,$
  - $-PVPayment = \frac{CF_{423}}{(1+0.0136015752)^{423}} = 36.7419275171,$
  - $-PV_0 = $193718.1868561893$
- At t = 424,
  - -g = 0.0410000000,
  - $-CF_{424} = CF_{423}(1 + 0.0410000000) = 11600.3410300835,$
  - $-PVPayment = \frac{CF_{424}}{(1+0.0136015752)^{424}} = 37.7350898812,$
  - $-PV_0 = \$193755.9219460705$
- At t = 425,
  - g = 0.0410000000,
  - $-CF_{425} = CF_{424}(1 + 0.0410000000) = 12075.9550123169,$
  - $-PVPayment = \frac{CF_{425}}{(1+0.0136015752)^{425}} = 38.7550981827,$
  - $-PV_0 = \$193794.6770442532$
- At t = 426,
  - -q = 0.0410000000,
  - $-CF_{426} = CF_{425}(1 + 0.0410000000) = 12571.0691678219,$
  - $-PVPayment = \frac{CF_{426}}{(1+0.0136015752)^{426}} = 39.8026780876,$
  - $-PV_0 = $193834.4797223408$
- At t = 427,
  - -g = 0.0410000000,
  - $CF_{427} = CF_{426}(1 + 0.0410000000) = 13086.4830037026,$
  - $-PVPayment = \frac{CF_{427}}{(1+0.0136015752)^{427}} = 40.8785748775,$
  - $PV_0 = \$193875.3582972183$
- At t = 428,
  - -g = 0.0410000000,
  - $-CF_{428} = CF_{427}(1 + 0.0410000000) = 13623.0288068544,$

- $-PVPayment = \frac{CF_{428}}{(1+0.0136015752)^{428}} = 41.9835539794,$  $-PV_0 = $193917.3418511976$
- At t = 429,
  - -g = 0.0410000000,
  - $-CF_{429} = CF_{428}(1 + 0.0410000000) = 14181.5729879354,$
  - $-PVPayment = \frac{CF_{429}}{(1+0.0136015752)^{429}} = 43.1184015104,$
  - $-PV_0 = $193960.4602527080$
- At t = 430,
  - -g = 0.0410000000,
  - $CF_{430} = CF_{429}(1 + 0.0410000000) = 14763.0174804408,$
  - $-PVPayment = \frac{CF_{430}}{(1+0.0136015752)^{430}} = 44.2839248369,$
  - $-PV_0 = \$194004.7441775449$
- At t = 431,
  - -g = 0.0410000000,
  - $CF_{431} = CF_{430}(1 + 0.0410000000) = 15368.3011971388,$
  - $-PVPayment = \frac{CF_{431}}{(1+0.0136015752)^{431}} = 45.4809531492,$
  - $-PV_0 = $194050.2251306941$
- At t = 432,
  - -g = 0.0410000000,
  - $-CF_{432} = CF_{431}(1 + 0.0410000000) = 15998.4015462215,$
  - $-PVPayment = \frac{CF_{432}}{(1+0.0136015752)^{432}} = 46.7103380510,$
  - $-PV_0 = $194096.9354687451$
- At t = 433,
  - -g = 0.0410000000,
  - $CF_{433} = CF_{432}(1 + 0.0410000000) = 16654.3360096166,$
  - $-PVPayment = \frac{CF_{433}}{(1+0.0136015752)^{433}} = 47.9729541658,$
  - $-PV_0 = \$194144.9084229109$
- At t = 434,
  - -g = 0.0410000000,
  - $CF_{434} = CF_{433}(1 + 0.0410000000) = 17337.1637860109,$
  - $-PVPayment = \frac{CF_{434}}{(1+0.0136015752)^{434}} = 49.2696997585,$
  - $-PV_0 = $194194.1781226694$
- At t = 435,
  - -g = 0.0410000000,
  - $-\ CF_{435} = CF_{434}(1 + 0.0410000000) = 18047.9875012373,$
  - $-PVPayment = \frac{CF_{435}}{(1+0.0136015752)^{435}} = 50.6014973750,$
  - $-PV_0 = $194244.7796200445$

- At t = 436,
  - -g = 0.0410000000,
  - $CF_{436} = CF_{435}(1 + 0.0410000000) = 18787.9549887881,$
  - $-PVPayment = \frac{CF_{436}}{(1+0.0136015752)^{436}} = 51.9692944984,$
  - $PV_0 = \$194296.7489145429$
- At t = 437,
  - -g = 0.0410000000,
  - $-CF_{437} = CF_{436}(1 + 0.0410000000) = 19558.2611433284,$
  - $-PVPayment = \frac{CF_{437}}{(1+0.0136015752)^{437}} = 53.3740642227,$
  - $-PV_0 = \$194350.1229787655$
- At t = 438,
  - -g = 0.0410000000,
  - $CF_{438} = CF_{437}(1 + 0.0410000000) = 20360.1498502048,$
  - $-PVPayment = \frac{CF_{438}}{(1+0.0136015752)^{438}} = 54.8168059456,$
  - $-PV_0 = \$194404.9397847111$
- At t = 439,
  - -g = 0.0410000000,
  - $-CF_{439} = CF_{438}(1 + 0.0410000000) = 21194.9159940632,$
  - $-PVPayment = \frac{CF_{439}}{(1+0.0136015752)^{439}} = 56.2985460792,$
  - $-PV_0 = \$194461.2383307904$
- At t = 440,
  - g = 0.0410000000,
  - $-CF_{440} = CF_{439}(1 + 0.0410000000) = 22063.9075498198,$
  - $-PVPayment = \frac{CF_{440}}{(1+0.0136015752)^{440}} = 57.8203387804,$
  - $-PV_0 = $194519.0586695708$
- At t = 441,
  - -g = 0.0410000000,
  - $CF_{441} = CF_{440}(1 + 0.0410000000) = 22968.5277593624,$
  - $-PVPayment = \frac{CF_{441}}{(1+0.0136015752)^{441}} = 59.3832667007,$
  - $-PV_0 = $194578.4419362715$
- At t = 442,
  - -g = 0.0410000000,
  - $-CF_{442} = CF_{441}(1 + 0.0410000000) = 23910.2373974963,$
  - $-PVPayment = \frac{CF_{442}}{(1+0.0136015752)^{442}} = 60.9884417564,$
  - $PV_0 = \$194639.4303780279$
- At t = 443,
  - g = 0.0410000000,

- $-CF_{443} = CF_{442}(1 + 0.0410000000) = 24890.5571307936,$   $-PVPayment = \frac{CF_{443}}{(1+0.0136015752)^{443}} = 62.6370059199,$ PM 210.4750.202020203
- $PV_0 = \$194702.0673839478$
- At t = 444,
  - -g = 0.0410000000,
  - $-CF_{444} = CF_{443}(1 + 0.0410000000) = 25911.0699731562,$
  - $-PVPayment = \frac{CF_{444}}{(1+0.0136015752)^{444}} = 64.3301320319,$
  - $PV_0 = \$194766.3975159797$
- At t = 445,
  - -g = 0.19000000000,
  - $-CF_{445} = CF_{408}(1 + 0.1900000000) = 7257.8175436676,$
  - $-PVPayment = \frac{CF_{445}}{(1+0.0136015752)^{445}} = 17.7773844694,$
  - $-PV_0 = $194784.1749004490$
- At t = 446,
  - -g = 0.0410000000,
  - $-CF_{446} = CF_{445}(1 + 0.0410000000) = 7555.3880629580,$
  - $-PVPayment = \frac{CF_{446}}{(1+0.0136015752)^{446}} = 18.2579207499,$
  - $PV_0 = \$194802.4328211989$
- At t = 447,
  - g = 0.0410000000,
  - $-CF_{447} = CF_{446}(1 + 0.0410000000) = 7865.1589735393,$
  - $-PVPayment = \frac{CF_{447}}{(1+0.0136015752)^{447}} = 18.7514462931,$
  - $PV_0 = \$194821.1842674920$
- At t = 448,
  - -g = 0.0410000000,
  - $-\ CF_{448} = CF_{447}(1+0.0410000000) = 8187.6304914544,$
  - $-PVPayment = \frac{CF_{448}}{(1+0.0136015752)^{448}} = 19.2583122087,$
  - $-PV_0 = $194840.4425797008$
- At t = 449,
  - -g = 0.0410000000,
  - $-CF_{449} = CF_{448}(1 + 0.0410000000) = 8523.3233416040,$
  - $-PVPayment = \frac{CF_{449}}{(1+0.0136015752)^{449}} = 19.7788790972,$
  - $-PV_0 = $194860.2214587979$
- At t = 450,
  - -g = 0.0410000000,
  - $CF_{450} = CF_{449}(1 + 0.0410000000) = 8872.7795986098,$
  - $-PVPayment = \frac{CF_{450}}{(1+0.0136015752)^{450}} = 20.3135173062,$

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-PV_0 = $194880.5349761041
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- At t = 451,
  - -g = 0.0410000000,
  - $-CF_{451} = CF_{450}(1 + 0.0410000000) = 9236.5635621528,$
  - $-PVPayment = \frac{CF_{451}}{(1+0.0136015752)^{451}} = 20.8626071944,$
  - $-PV_0 = $194901.3975832985$
- At t = 452,
  - -g = 0.0410000000,
  - $CF_{452} = CF_{451}(1 + 0.0410000000) = 9615.2626682011,$
  - $-PVPayment = \frac{CF_{452}}{(1+0.0136015752)^{452}} = 21.4265394017,$
  - $-PV_0 = $194922.8241227002$
- At t = 453,
  - -g = 0.0410000000,
  - $-CF_{453} = CF_{452}(1 + 0.0410000000) = 10009.4884375973,$
  - $-PVPayment = \frac{CF_{453}}{(1+0.0136015752)^{453}} = 22.0057151272,$
  - $-PV_0 = $194944.8298378274$
- At t = 454,
  - -q = 0.0410000000
  - $-CF_{454} = CF_{453}(1 + 0.0410000000) = 10419.8774635388,$
  - $-PVPayment = \frac{CF_{454}}{(1+0.0136015752)^{454}} = 22.6005464150,$
  - $-PV_0 = $194967.4303842425$
- At t = 455,
  - -g = 0.0410000000,
  - $CF_{455} = CF_{454}(1 + 0.0410000000) = 10847.0924395439,$
  - $-PVPayment = \frac{CF_{455}}{(1+0.0136015752)^{455}} = 23.2114564469,$
  - $-PV_0 = $194990.6418406894$
- At t = 456,
  - -g = 0.0410000000,
  - $-CF_{456} = CF_{455}(1 + 0.0410000000) = 11291.8232295652,$
  - $-PVPayment = \frac{CF_{456}}{(1+0.0136015752)^{456}} = 23.8388798435,$
  - $-PV_0 = $195014.4807205329$
- At t = 457,
  - g = 0.0410000000,
  - $-CF_{457} = CF_{456}(1 + 0.0410000000) = 11754.7879819774,$
  - $-PVPayment = \frac{CF_{457}}{(1+0.0136015752)^{457}} = 24.4832629737,$
  - $-PV_0 = \$195038.9639835066$
- At t = 458,

- -g = 0.0410000000,  $-CF_{458} = CF_{457}(1 + 0.0410000000) = 12236.7342892384,$   $-PVPayment = \frac{CF_{458}}{(1+0.0136015752)^{458}} = 25.1450642722,$
- $-PV_0 = \$195064.1090477787$
- At t = 459,
  - -g = 0.0410000000,
  - $-CF_{459} = CF_{458}(1 + 0.0410000000) = 12738.4403950972,$
  - $-PVPayment = \frac{CF_{459}}{(1+0.0136015752)^{459}} = 25.8247545652,$
  - $PV_0 = \$195089.9338023439$
- At t = 460,
  - -g = 0.0410000000,
  - $CF_{460} = CF_{459}(1 + 0.0410000000) = 13260.7164512962,$
  - $-PVPayment = \frac{CF_{460}}{(1+0.0136015752)^{460}} = 26.5228174059,$
  - $-PV_0 = $195116.4566197498$
- At t = 461,
  - -g = 0.0410000000,
  - $-CF_{461} = CF_{460}(1 + 0.0410000000) = 13804.4058257993,$
  - $-PVPayment = \frac{CF_{461}}{(1+0.0136015752)^{461}} = 27.2397494185,$
  - $-PV_0 = \$195143.6963691683$
- At t = 462,
  - g = 0.0410000000,
  - $-CF_{462} = CF_{461}(1 + 0.0410000000) = 14370.3864646571,$
  - $-PVPayment = \frac{CF_{462}}{(1+0.0136015752)^{462}} = 27.9760606509,$
  - $-PV_0 = \$195171.6724298192$
- At t = 463.
  - -q = 0.0410000000,
  - $-CF_{463} = CF_{462}(1 + 0.0410000000) = 14959.5723097080,$
  - $-PVPayment = \frac{CF_{463}}{(1+0.0136015752)^{463}} = 28.7322749383,$
  - $-PV_0 = $195200.4047047576$
- At t = 464,
  - -g = 0.0410000000,
  - $CF_{464} = CF_{463}(1 + 0.0410000000) = 15572.9147744061,$
  - $-PVPayment = \frac{CF_{464}}{(1+0.0136015752)^{464}} = 29.5089302756,$
  - $PV_0 = \$195229.9136350332$
- At t = 465,
  - -q = 0.0410000000,
  - $-CF_{465} = CF_{464}(1 + 0.0410000000) = 16211.4042801567,$

- $-PVPayment = \frac{CF_{465}}{(1+0.0136015752)^{465}} = 30.3065791998,$  $-PV_0 = $195260.2202142329$
- At t = 466,
  - -g = 0.0410000000,
  - $-CF_{466} = CF_{465}(1 + 0.0410000000) = 16876.0718556432,$
  - $-PVPayment = \frac{CF_{466}}{(1+0.0136015752)^{466}} = 31.1257891836,$
  - $-PV_0 = $195291.3460034165$
- At t = 467,
  - -g = 0.0410000000,
  - $-CF_{467} = CF_{466}(1 + 0.0410000000) = 17567.9908017245,$
  - $-PVPayment = \frac{CF_{467}}{(1+0.0136015752)^{467}} = 31.9671430390,$
  - $-PV_0 = \$195323.3131464556$
- At t = 468,
  - -g = 0.0410000000,
  - $-CF_{468} = CF_{467}(1 + 0.0410000000) = 18288.2784245952,$
  - $-PVPayment = \frac{CF_{468}}{(1+0.0136015752)^{468}} = 32.8312393318,$
  - $-PV_0 = \$195356.1443857874$
- At t = 469,
  - -g = 0.0410000000,
  - $-CF_{469} = CF_{468}(1 + 0.0410000000) = 19038.0978400036,$
  - $-PVPayment = \frac{CF_{469}}{(1+0.0136015752)^{469}} = 33.7186928074,$
  - $-PV_0 = $195389.8630785947$
- At t = 470,
  - -g = 0.0410000000,
  - $-CF_{470} = CF_{469}(1 + 0.0410000000) = 19818.6598514438,$
  - $-PVPayment = \frac{CF_{470}}{(1+0.0136015752)^{470}} = 34.6301348282,$
  - $-PV_0 = \$195424.4932134229$
- At t = 471,
  - -g = 0.0410000000,
  - $CF_{471} = CF_{470}(1 + 0.0410000000) = 20631.2249053530,$
  - $-PVPayment = \frac{CF_{471}}{(1+0.0136015752)^{471}} = 35.5662138230,$
  - $-PV_0 = \$195460.0594272459$
- At t = 472,
  - -g = 0.0410000000,
  - $-CF_{472} = CF_{471}(1 + 0.0410000000) = 21477.1051264724,$
  - $-PVPayment = \frac{CF_{472}}{(1+0.0136015752)^{472}} = 36.5275957480,$
  - $-PV_0 = \$195496.5870229939$

- At t = 473,
  - -g = 0.0410000000,
  - $CF_{473} = CF_{472}(1 + 0.0410000000) = 22357.6664366578,$
  - $-PVPayment = \frac{CF_{473}}{(1+0.0136015752)^{473}} = 37.5149645608,$
  - $-PV_0 = \$195534.1019875547$
- At t = 474,
  - -g = 0.0410000000,
  - $-CF_{474} = CF_{473}(1 + 0.0410000000) = 23274.3307605608,$
  - $-PVPayment = \frac{CF_{474}}{(1+0.0136015752)^{474}} = 38.5290227067,$
  - $-PV_0 = \$195572.6310102614$
- At t = 475,
  - -g = 0.0410000000,
  - $CF_{475} = CF_{474}(1 + 0.0410000000) = 24228.5783217438,$
  - $-PVPayment = \frac{CF_{475}}{(1+0.0136015752)^{475}} = 39.5704916188,$
  - $-PV_0 = \$195612.2015018802$
- At t = 476,
  - -g = 0.0410000000,
  - $-CF_{476} = CF_{475}(1 + 0.0410000000) = 25221.9500329353,$
  - $-PVPayment = \frac{CF_{476}}{(1+0.0136015752)^{476}} = 40.6401122311,$
  - $-PV_0 = \$195652.8416141112$
- At t = 477,
  - g = 0.0410000000,
  - $-CF_{477} = CF_{476}(1 + 0.0410000000) = 26256.0499842856,$
  - $-PVPayment = \frac{CF_{477}}{(1+0.0136015752)^{477}} = 41.7386455055,$
  - $-PV_0 = $195694.5802596167$
- At t = 478,
  - -g = 0.0410000000,
  - $CF_{478} = CF_{477}(1 + 0.0410000000) = 27332.5480336413,$
  - $-PVPayment = \frac{CF_{478}}{(1+0.0136015752)^{478}} = 42.8668729734,$
  - $-PV_0 = $195737.4471325901$
- At t = 479,
  - g = 0.0410000000,
  - $-CF_{479} = CF_{478}(1 + 0.0410000000) = 28453.1825030206,$
  - $-PVPayment = \frac{CF_{479}}{(1+0.0136015752)^{479}} = 44.0255972915,$
  - $-PV_0 = $195781.4727298816$
- At t = 480,
  - g = 0.0410000000,

- $-CF_{480} = CF_{479}(1 + 0.0410000000) = 29619.7629856444,$  $-PVPayment = \frac{CF_{480}}{(1+0.0136015752)^{480}} = 45.2156428129,$  $- PV_0 = \$195826.6883726945$
- At t = 481,
  - -g = 0.0410000000,
  - $-CF_{481} = CF_{480}(1 + 0.0410000000) = 30834.1732680559,$
  - $PV Payment = \frac{CF_{481}}{(1+0.0136015752)^{481}} = 46.4378561737,$
  - $PV_0 = \$195873.1262288681$
- At t = 482,
  - g = 0.1900000000
  - $-CF_{482} = CF_{445}(1 + 0.1900000000) = 8636.8028769645,$
  - $-PVPayment = \frac{CF_{482}}{(1+0.0136015752)^{482}} = 12.8329228786,$
  - $-PV_0 = $195885.9591517467$
- At t = 483,
  - -g = 0.0410000000,
  - $-CF_{483} = CF_{482}(1 + 0.0410000000) = 8990.9117949200,$
  - $-PVPayment = \frac{CF_{483}}{(1+0.0136015752)^{483}} = 13.1798065857,$
  - $PV_0 = \$195899.1389583324$
- At t = 484,
  - g = 0.0410000000,
  - $CF_{484} = CF_{483}(1 + 0.0410000000) = 9359.5391785118,$
  - $-PVPayment = \frac{CF_{484}}{(1+0.0136015752)^{484}} = 13.5360668244,$
  - $PV_0 = \$195912.6750251568$
- At t = 485,
  - -g = 0.0410000000,
  - $-CF_{485} = CF_{484}(1 + 0.0410000000) = 9743.2802848307,$
  - $-PVPayment = \frac{CF_{485}}{(1+0.0136015752)^{485}} = 13.9019570495,$
  - $PV_0 = \$195926.5769822063$
- At t = 486,
  - -g = 0.0410000000,
  - $-CF_{486} = CF_{485}(1 + 0.0410000000) = 10142.7547765088,$
  - $-PVPayment = \frac{CF_{486}}{(1+0.0136015752)^{486}} = 14.2777375668,$
  - $-PV_0 = $195940.8547197732$
- At t = 487,
  - -q = 0.0410000000,
  - $-CF_{487} = CF_{486}(1 + 0.0410000000) = 10558.6077223457,$
  - $-PVPayment = \frac{CF_{487}}{(1+0.0136015752)^{487}} = 14.6636757186,$

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-PV_0 = \$195955.5183954918
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- At t = 488,
  - g = 0.0410000000,
  - $CF_{488} = CF_{487}(1 + 0.0410000000) = 10991.5106389618,$
  - $-PVPayment = \frac{CF_{488}}{(1+0.0136015752)^{488}} = 15.0600460733,$
  - $-PV_0 = $195970.5784415651$
- At t = 489,
  - -g = 0.0410000000,
  - $-CF_{489} = CF_{488}(1 + 0.0410000000) = 11442.1625751593,$
  - $-PVPayment = \frac{CF_{489}}{(1+0.0136015752)^{489}} = 15.4671306215,$
  - $-PV_0 = $195986.0455721866$
- At t = 490,
  - -g = 0.0410000000,
  - $-CF_{490} = CF_{489}(1 + 0.0410000000) = 11911.2912407408,$
  - $-PVPayment = \frac{CF_{490}}{(1+0.0136015752)^{490}} = 15.8852189760,$
  - $-PV_0 = \$196001.9307911625$
- At t = 491,
  - -q = 0.0410000000
  - $-CF_{491} = CF_{490}(1 + 0.0410000000) = 12399.6541816112,$
  - $-PVPayment = \frac{CF_{491}}{(1+0.0136015752)^{491}} = 16.3146085780,$
  - $-PV_0 = \$196018.2453997405$
- At t = 492,
  - -g = 0.0410000000,
  - $-CF_{492} = CF_{491}(1 + 0.0410000000) = 12908.0400030572,$
  - $-PVPayment = \frac{CF_{492}}{(1+0.0136015752)^{492}} = 16.7556049089,$
  - $-PV_0 = $196035.0010046494$
- At t = 493,
  - -g = 0.0410000000,
  - $CF_{493} = CF_{492}(1 + 0.0410000000) = 13437.2696431826,$
  - $-PVPayment = \frac{CF_{493}}{(1+0.0136015752)^{493}} = 17.2085217075,$
  - $-PV_0 = \$196052.2095263568$
- At t = 494,
  - g = 0.0410000000,
  - $-CF_{494} = CF_{493}(1 + 0.0410000000) = 13988.1976985531,$
  - $-PVPayment = \frac{CF_{494}}{(1+0.0136015752)^{494}} = 17.6736811930,$
  - $-PV_0 = $196069.8832075499$
- At t = 495,

- -g = 0.0410000000,
- $-CF_{495} = CF_{494}(1 + 0.0410000000) = 14561.7138041937,$
- $-PVPayment = \frac{CF_{495}}{(1+0.0136015752)^{495}} = 18.1514142948,$
- $-PV_0 = \$196088.0346218447$
- At t = 496,
  - g = 0.0410000000,
  - $-CF_{496} = CF_{495}(1 + 0.0410000000) = 15158.7440701657,$
  - $-PVPayment = \frac{CF_{496}}{(1+0.0136015752)^{496}} = 18.6420608872,$
  - $PV_0 = \$196106.6766827318$
- At t = 497,
  - -g = 0.0410000000,
  - $-CF_{497} = CF_{496}(1 + 0.0410000000) = 15780.2525770425,$
  - $-PVPayment = \frac{CF_{497}}{(1+0.0136015752)^{497}} = 19.1459700317,$
  - $-PV_0 = $196125.8226527635$
- At t = 498,
  - -g = 0.0410000000,
  - $CF_{498} = CF_{497}(1 + 0.0410000000) = 16427.2429327012,$
  - $-PVPayment = \frac{CF_{498}}{(1+0.0136015752)^{498}} = 19.6635002253,$
  - $PV_0 = \$196145.4861529889$
- At t = 499,
  - g = 0.0410000000,
  - $-CF_{499} = CF_{498}(1 + 0.0410000000) = 17100.7598929420,$
  - $-PVPayment = \frac{CF_{499}}{(1+0.0136015752)^{499}} = 20.1950196553,$
  - $-PV_0 = \$196165.6811726442$
- At t = 500,
  - -q = 0.0410000000,
  - $-CF_{500} = CF_{499}(1 + 0.0410000000) = 17801.8910485526,$
  - $-PVPayment = \frac{CF_{500}}{(1+0.0136015752)^{500}} = 20.7409064615,$
  - $-PV_0 = $196186.4220791057$
- At t = 501,
  - -g = 0.0410000000,
  - $-CF_{501} = CF_{500}(1 + 0.0410000000) = 18531.7685815432,$
  - $-PVPayment = \frac{CF_{501}}{(1+0.0136015752)^{501}} = 21.3015490050,$
  - $PV_0 = \$196207.7236281107$
- At t = 502,
  - -g = 0.0410000000,
  - $-CF_{502} = CF_{501}(1 + 0.0410000000) = 19291.5710933865,$

- $-PVPayment = \frac{CF_{502}}{(1+0.0136015752)^{502}} = 21.8773461447,$  $-PV_0 = \$196229.6009742554$
- At t = 503,
  - -g = 0.0410000000,
  - $-CF_{503} = CF_{502}(1 + 0.0410000000) = 20082.5255082153,$
  - $-PVPayment = \frac{CF_{503}}{(1+0.0136015752)^{503}} = 22.4687075208,$
  - $-PV_0 = $196252.0696817763$
- At t = 504,
  - -g = 0.0410000000,
  - $-CF_{504} = CF_{503}(1 + 0.0410000000) = 20905.9090540522,$
  - $-PVPayment = \frac{CF_{504}}{(1+0.0136015752)^{504}} = 23.0760538467,$
  - $PV_0 = \$196275.1457356230$
- At t = 505,
  - -g = 0.0410000000,
  - $CF_{505} = CF_{504}(1 + 0.0410000000) = 21763.0513252683,$
  - $-PVPayment = \frac{CF_{505}}{(1+0.0136015752)^{505}} = 23.6998172076,$
  - $-PV_0 = $196298.8455528305$
- At t = 506,
  - -g = 0.0410000000,
  - $CF_{506} = CF_{505}(1 + 0.0410000000) = 22655.3364296043,$
  - $-PVPayment = \frac{CF_{506}}{(1+0.0136015752)^{506}} = 24.3404413686,$
  - $-PV_0 = $196323.1859941991$
- At t = 507,
  - g = 0.0410000000,
  - $CF_{507} = CF_{506}(1 + 0.0410000000) = 23584.2052232181,$
  - $-PVPayment = \frac{CF_{507}}{(1+0.0136015752)^{507}} = 24.9983820899,$
  - $-PV_0 = $196348.1843762890$
- At t = 508.
  - -g = 0.0410000000,
  - $-CF_{508} = CF_{507}(1 + 0.0410000000) = 24551.1576373700,$
  - $-PVPayment = \frac{CF_{508}}{(1+0.0136015752)^{508}} = 25.6741074515,$
  - $-PV_0 = $196373.8584837405$
- At t = 509,
  - -g = 0.0410000000,
  - $CF_{509} = CF_{508}(1 + 0.0410000000) = 25557.7551005022,$
  - $-PVPayment = \frac{CF_{509}}{(1+0.0136015752)^{509}} = 26.3680981857,$
  - $-PV_0 = \$196400.2265819262$

- At t = 510,
  - -g = 0.0410000000,
  - $-CF_{510} = CF_{509}(1 + 0.0410000000) = 26605.6230596228,$
  - $-PVPayment = \frac{CF_{510}}{(1+0.0136015752)^{510}} = 27.0808480196,$
  - $PV_0 = \$196427.3074299458$
- At t = 511,
  - -g = 0.0410000000,
  - $-CF_{511} = CF_{510}(1 + 0.0410000000) = 27696.4536050673,$
  - $-PVPayment = \frac{CF_{511}}{(1+0.0136015752)^{511}} = 27.8128640258,$
  - $-PV_0 = \$196455.1202939716$
- At t = 512,
  - -g = 0.0410000000,
  - $-CF_{512} = CF_{511}(1 + 0.0410000000) = 28832.0082028751,$
  - $-PVPayment = \frac{CF_{512}}{(1+0.0136015752)^{512}} = 28.5646669838,$
  - $-PV_0 = \$196483.6849609554$
- At t = 513,
  - -g = 0.0410000000,
  - $-CF_{513} = CF_{512}(1 + 0.0410000000) = 30014.1205391929,$
  - $-PVPayment = \frac{CF_{513}}{(1+0.0136015752)^{513}} = 29.3367917500,$
  - $-PV_0 = \$196513.0217527054$
- At t = 514,
  - -g = 0.0410000000,
  - $-CF_{514} = CF_{513}(1 + 0.0410000000) = 31244.6994812998,$
  - $-PVPayment = \frac{CF_{514}}{(1+0.0136015752)^{514}} = 30.1297876384,$
  - $-PV_0 = \$196543.1515403438$
- At t = 515,
  - -g = 0.0410000000,
  - $CF_{515} = CF_{514}(1 + 0.0410000000) = 32525.7321600331,$
  - $-PVPayment = \frac{CF_{515}}{(1+0.0136015752)^{515}} = 30.9442188113,$
  - $-PV_0 = $196574.0957591551$
- At t = 516,
  - -g = 0.0410000000,
  - $-CF_{516} = CF_{515}(1 + 0.0410000000) = 33859.2871785945,$
  - $-PVPayment = \frac{CF_{516}}{(1+0.0136015752)^{516}} = 31.7806646809,$
  - $-PV_0 = $196605.8764238360$
- At t = 517,
  - -g = 0.0410000000,

- $\begin{array}{l} \ CF_{517} = CF_{516}(1+0.0410000000) = 35247.5179529169, \\ \ PVPayment = \frac{CF_{517}}{(1+0.0136015752)^{517}} = 32.6397203212, \\ \ PV_0 = \$196638.5161441572 \end{array}$
- At t = 518,
  - -g = 0.0410000000,
  - $-CF_{518} = CF_{517}(1 + 0.0410000000) = 36692.6661889865,$
  - $PV Payment = \frac{CF_{518}}{(1+0.0136015752)^{518}} = 33.5219968916,$
  - $PV_0 = \$196672.0381410488$
- At t = 519,
  - -g = 0.19000000000,
  - $-CF_{519} = CF_{482}(1 + 0.1900000000) = 10277.7954235878,$
  - $-PVPayment = \frac{CF_{519}}{(1+0.0136015752)^{519}} = 9.2636748612,$
  - $-PV_0 = $196681.3018159101$
- At t = 520,
  - -g = 0.0410000000,
  - $-CF_{520} = CF_{519}(1 + 0.0410000000) = 10699.1850359548,$
  - $-PVPayment = \frac{CF_{520}}{(1+0.0136015752)^{520}} = 9.5140790683,$
  - $-\ PV_0 = \$196690.8158949784$
- At t = 521,
  - -g = 0.0410000000,
  - $CF_{521} = CF_{520}(1 + 0.0410000000) = 11137.8516224290,$
  - $-PVPayment = \frac{CF_{521}}{(1+0.0136015752)^{521}} = 9.7712518923,$
  - $PV_0 = \$196700.5871468707$
- At t = 522,
  - -g = 0.0410000000,
  - $CF_{522} = CF_{521}(1 + 0.0410000000) = 11594.5035389486,$
  - $-PVPayment = \frac{CF_{522}}{(1+0.0136015752)^{522}} = 10.0353762942,$
  - $-PV_0 = \$196710.6225231650$
- At t = 523,
  - -g = 0.0410000000,
  - $-CF_{523} = CF_{522}(1 + 0.0410000000) = 12069.8781840455,$
  - $-PVPayment = \frac{CF_{523}}{(1+0.0136015752)^{523}} = 10.3066401805,$
  - $-PV_0 = \$196720.9291633454$
- At t = 524,
  - -g = 0.0410000000,
  - $-CF_{524} = CF_{523}(1 + 0.0410000000) = 12564.7431895913,$
  - $-PVPayment = \frac{CF_{524}}{(1+0.0136015752)^{524}} = 10.5852365367,$

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-PV_0 = $196731.5143998822
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- At t = 525,
  - -g = 0.0410000000,
  - $CF_{525} = CF_{524}(1 + 0.0410000000) = 13079.8976603646,$
  - $-PVPayment = \frac{CF_{525}}{(1+0.0136015752)^{525}} = 10.8713635653,$
  - $-PV_0 = \$196742.3857634475$
- At t = 526,
  - -g = 0.0410000000,
  - $-CF_{526} = CF_{525}(1 + 0.0410000000) = 13616.1734644395,$
  - $-PVPayment = \frac{CF_{526}}{(1+0.0136015752)^{526}} = 11.1652248260,$
  - $-PV_0 = \$196753.5509882735$
- At t = 527,
  - -g = 0.0410000000,
  - $-CF_{527} = CF_{526}(1 + 0.0410000000) = 14174.4365764815,$
  - $-PVPayment = \frac{CF_{527}}{(1+0.0136015752)^{527}} = 11.4670293810,$
  - $-PV_0 = \$196765.0180176545$
- At t = 528,
  - -q = 0.0410000000
  - $-CF_{528} = CF_{527}(1 + 0.0410000000) = 14755.5884761173,$
  - $-PVPayment = \frac{CF_{528}}{(1+0.0136015752)^{528}} = 11.7769919437,$
  - $-PV_0 = \$196776.7950095981$
- At t = 529,
  - -g = 0.0410000000,
  - $-CF_{529} = CF_{528}(1 + 0.0410000000) = 15360.5676036381,$
  - $-PVPayment = \frac{CF_{529}}{(1+0.0136015752)^{529}} = 12.0953330311,$
  - $-PV_0 = $196788.8903426292$
- At t = 530,
  - -g = 0.0410000000,
  - $-CF_{530} = CF_{529}(1 + 0.0410000000) = 15990.3508753873,$
  - $-PVPayment = \frac{CF_{530}}{(1+0.0136015752)^{530}} = 12.4222791213,$
  - $-PV_0 = \$196801.3126217506$
- At t = 531,
  - g = 0.0410000000,
  - $CF_{531} = CF_{530}(1 + 0.0410000000) = 16645.9552612781,$
  - $-PVPayment = \frac{CF_{531}}{(1+0.0136015752)^{531}} = 12.7580628141,$
  - $-PV_0 = $196814.0706845647$
- At t = 532,

- -g = 0.0410000000,
- $-CF_{532} = CF_{531}(1 + 0.0410000000) = 17328.4394269905,$
- $-PVPayment = \frac{CF_{532}}{(1+0.0136015752)^{532}} = 13.1029229965,$
- $-PV_0 = $196827.1736075612$
- At t = 533,
  - -g = 0.0410000000,
  - $-CF_{533} = CF_{532}(1 + 0.0410000000) = 18038.9054434972,$
  - $-PVPayment = \frac{CF_{533}}{(1+0.0136015752)^{533}} = 13.4571050131,$
  - $PV_0 = \$196840.6307125743$
- At t = 534,
  - -g = 0.0410000000,
  - $-CF_{534} = CF_{533}(1 + 0.0410000000) = 18778.5005666805,$
  - $-PVPayment = \frac{CF_{534}}{(1+0.0136015752)^{534}} = 13.8208608401,$
  - $-PV_0 = $196854.4515734144$
- At t = 535,
  - -g = 0.0410000000,
  - $-CF_{535} = CF_{534}(1 + 0.0410000000) = 19548.4190899144,$
  - $-PVPayment = \frac{CF_{535}}{(1+0.0136015752)^{535}} = 14.1944492650,$
  - $-PV_0 = \$196868.6460226794$
- At t = 536,
  - g = 0.0410000000,
  - $-CF_{536} = CF_{535}(1 + 0.0410000000) = 20349.9042726009,$
  - $-PVPayment = \frac{CF_{536}}{(1+0.0136015752)^{536}} = 14.5781360703,$
  - $PV_0 = \$196883.2241587497$
- At t = 537,
  - -q = 0.0410000000,
  - $-CF_{537} = CF_{536}(1 + 0.0410000000) = 21184.2503477776,$
  - $-PVPayment = \frac{CF_{537}}{(1+0.0136015752)^{537}} = 14.9721942230,$
  - $-PV_0 = $196898.1963529727$
- At t = 538,
  - -g = 0.0410000000,
  - $-CF_{538} = CF_{537}(1 + 0.0410000000) = 22052.8046120364,$
  - $-PVPayment = \frac{CF_{538}}{(1+0.0136015752)^{538}} = 15.3769040686,$
  - $-PV_0 = $196913.5732570413$
- At t = 539,
  - -q = 0.0410000000,
  - $-CF_{539} = CF_{538}(1 + 0.0410000000) = 22956.9696011299,$

- $-PVPayment = \frac{CF_{539}}{(1+0.0136015752)^{539}} = 15.7925535304,$  $-PV_0 = \$196929.3658105716$
- At t = 540,
  - -g = 0.0410000000,
  - $-CF_{540} = CF_{539}(1 + 0.0410000000) = 23898.2053547763,$
  - $-PVPayment = \frac{CF_{540}}{(1+0.0136015752)^{540}} = 16.2194383146,$
  - $-PV_0 = $196945.5852488862$
- At t = 541,
  - -g = 0.0410000000,
  - $-CF_{541} = CF_{540}(1 + 0.0410000000) = 24878.0317743221,$
  - $-PVPayment = \frac{CF_{541}}{(1+0.0136015752)^{541}} = 16.6578621206,$
  - $-PV_0 = \$196962.2431110069$
- At t = 542,
  - g = 0.0410000000,
  - $-CF_{542} = CF_{541}(1 + 0.0410000000) = 25898.0310770693,$
  - $-PVPayment = \frac{CF_{542}}{(1+0.0136015752)^{542}} = 17.1081368570,$
  - $-PV_0 = $196979.3512478638$
- At t = 543,
  - -g = 0.0410000000,
  - $-CF_{543} = CF_{542}(1 + 0.0410000000) = 26959.8503512291,$
  - $-PVPayment = \frac{CF_{543}}{(1+0.0136015752)^{543}} = 17.5705828634,$
  - $-PV_0 = $196996.9218307272$
- At t = 544,
  - g = 0.0410000000,
  - $CF_{544} = CF_{543}(1 + 0.0410000000) = 28065.2042156295,$
  - $-PVPayment = \frac{CF_{544}}{(1+0.0136015752)^{544}} = 18.0455291385,$
  - $-PV_0 = $197014.9673598658$
- At t = 545,
  - -g = 0.0410000000,
  - $-\ CF_{545} = CF_{544}(1 + 0.0410000000) = 29215.8775884703,$
  - $-PVPayment = \frac{CF_{545}}{(1+0.0136015752)^{545}} = 18.5333135743,$
  - $-PV_0 = $197033.5006734400$
- At t = 546,
  - -g = 0.0410000000,
  - $CF_{546} = CF_{545}(1 + 0.0410000000) = 30413.7285695976,$
  - $-PVPayment = \frac{CF_{546}}{(1+0.0136015752)^{546}} = 19.0342831959,$
  - $-PV_0 = \$197052.5349566359$

- At t = 547,
  - -g = 0.0410000000,
  - $CF_{547} = CF_{546}(1 + 0.0410000000) = 31660.6914409511,$
  - $-PVPayment = \frac{CF_{547}}{(1+0.0136015752)^{547}} = 19.5487944090,$
  - $-PV_0 = \$197072.0837510449$
- At t = 548,
  - -g = 0.0410000000,
  - $-CF_{548} = CF_{547}(1 + 0.0410000000) = 32958.7797900301,$
  - $-PVPayment = \frac{CF_{548}}{(1+0.0136015752)^{548}} = 20.0772132532,$
  - $-PV_0 = \$197092.1609642981$
- At t = 549,
  - -g = 0.0410000000,
  - $CF_{549} = CF_{548}(1 + 0.0410000000) = 34310.0897614213,$
  - $-PVPayment = \frac{CF_{549}}{(1+0.0136015752)^{549}} = 20.6199156623,$
  - $-PV_0 = \$197112.7808799604$
- At t = 550,
  - -g = 0.0410000000,
  - $-CF_{550} = CF_{549}(1 + 0.0410000000) = 35716.8034416396,$
  - $-PVPayment = \frac{CF_{550}}{(1+0.0136015752)^{550}} = 21.1772877321,$
  - $-PV_0 = \$197133.9581676926$
- At t = 551,
  - g = 0.0410000000,
  - $-CF_{551} = CF_{550}(1 + 0.0410000000) = 37181.1923827468,$
  - $-PVPayment = \frac{CF_{551}}{(1+0.0136015752)^{551}} = 21.7497259947,$
  - $-PV_0 = \$197155.7078936872$
- At t = 552,
  - -g = 0.0410000000,
  - $CF_{552} = CF_{551}(1 + 0.0410000000) = 38705.6212704394,$
  - $-PVPayment = \frac{CF_{552}}{(1+0.0136015752)^{552}} = 22.3376377007,$
  - $-PV_0 = \$197178.0455313880$
- At t = 553,
  - -g = 0.0410000000,
  - $-CF_{553} = CF_{552}(1 + 0.0410000000) = 40292.5517425275,$
  - $-PVPayment = \frac{CF_{553}}{(1+0.0136015752)^{553}} = 22.9414411092,$
  - $-PV_0 = $197200.9869724972$
- At t = 554,
  - g = 0.0410000000,

- $\begin{array}{l} \ CF_{554} = CF_{553}(1+0.0410000000) = 41944.5463639711, \\ \ PVPayment = \frac{CF_{554}}{(1+0.0136015752)^{554}} = 23.5615657850, \\ \ PV_0 = \$197224.5485382821 \end{array}$
- At t = 555,
  - g = 0.0410000000,
  - $-CF_{555} = CF_{554}(1 + 0.0410000000) = 43664.2727648939,$
  - $-PVPayment = \frac{CF_{555}}{(1+0.0136015752)^{555}} = 24.1984529044,$
  - $-PV_0 = \$197248.7469911865$
- At t = 556,
  - -q = 0.19000000000
  - $-CF_{556} = CF_{519}(1 + 0.1900000000) = 12230.5765540694,$
  - $-PVPayment = \frac{CF_{556}}{(1+0.0136015752)^{556}} = 6.6871493538,$
  - $-PV_0 = \$197255.4341405403$
- At t = 557,
  - -g = 0.0410000000,
  - $-CF_{557} = CF_{556}(1 + 0.0410000000) = 12732.0301927863,$
  - $-PVPayment = \frac{CF_{557}}{(1+0.0136015752)^{557}} = 6.8679081084,$
  - $PV_0 = \$197262.3020486488$
- At t = 558,
  - -g = 0.04100000000,
  - $CF_{558} = CF_{557}(1 + 0.0410000000) = 13254.0434306905,$
  - $-PVPayment = \frac{CF_{558}}{(1+0.0136015752)^{558}} = 7.0535529103,$
  - $PV_0 = \$197269.3556015591$
- At t = 559,
  - -g = 0.0410000000,
  - $-CF_{559} = CF_{558}(1 + 0.0410000000) = 13797.4592113488,$
  - $-PVPayment = \frac{CF_{559}}{(1+0.0136015752)^{559}} = 7.2442158330,$
  - $-PV_0 = \$197276.5998173920$
- At t = 560,
  - -g = 0.0410000000,
  - $-CF_{560} = CF_{559}(1 + 0.0410000000) = 14363.1550390141,$
  - $-PVPayment = \frac{CF_{560}}{(1+0.0136015752)^{560}} = 7.4400325200,$
  - $-PV_0 = $197284.0398499120$
- At t = 561,
  - -g = 0.0410000000,
  - $CF_{561} = CF_{560}(1 + 0.0410000000) = 14952.0443956137,$
  - $-PVPayment = \frac{CF_{561}}{(1+0.0136015752)^{561}} = 7.6411422817,$

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-PV_0 = $197291.6809921938
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- At t = 562,
  - g = 0.0410000000,
  - $-CF_{562} = CF_{561}(1 + 0.0410000000) = 15565.0782158338,$
  - $-PVPayment = \frac{CF_{562}}{(1+0.0136015752)^{562}} = 7.8476881939,$
  - $-PV_0 = $197299.5286803877$
- At t = 563,
  - -g = 0.0410000000,
  - $CF_{563} = CF_{562}(1 + 0.0410000000) = 16203.2464226830,$
  - $-PVPayment = \frac{CF_{563}}{(1+0.0136015752)^{563}} = 8.0598171998,$
  - $-PV_0 = \$197307.5884975875$
- At t = 564,
  - -g = 0.0410000000,
  - $-CF_{564} = CF_{563}(1 + 0.0410000000) = 16867.5795260130,$
  - $-PVPayment = \frac{CF_{564}}{(1+0.0136015752)^{564}} = 8.2776802148,$
  - $PV_0 = \$197315.8661778022$
- At t = 565,
  - -q = 0.0410000000
  - $-CF_{565} = CF_{564}(1 + 0.0410000000) = 17559.1502865796,$
  - $-PVPayment = \frac{CF_{565}}{(1+0.0136015752)^{565}} = 8.5014322335,$
  - $-PV_0 = \$197324.3676100357$
- At t = 566,
  - -g = 0.0410000000,
  - $-CF_{566} = CF_{565}(1 + 0.0410000000) = 18279.0754483293,$
  - $-PVPayment = \frac{CF_{566}}{(1+0.0136015752)^{566}} = 8.7312324401,$
  - $-PV_0 = \$197333.0988424758$
- At t = 567,
  - -g = 0.0410000000,
  - $-CF_{567} = CF_{566}(1 + 0.0410000000) = 19028.5175417108,$
  - $-PVPayment = \frac{CF_{567}}{(1+0.0136015752)^{567}} = 8.9672443218,$
  - $-PV_0 = $197342.0660867977$
- At t = 568,
  - -g = 0.0410000000,
  - $-CF_{568} = CF_{567}(1 + 0.0410000000) = 19808.6867609210,$
  - $-PVPayment = \frac{CF_{568}}{(1+0.0136015752)^{568}} = 9.2096357850,$
  - $PV_0 = \$197351.2757225827$
- At t = 569,

- -g = 0.0410000000,
- $-CF_{569} = CF_{568}(1 + 0.0410000000) = 20620.8429181187,$
- $-PVPayment = \frac{CF_{569}}{(1+0.0136015752)^{569}} = 9.4585792746,$
- $-PV_0 = \$197360.7343018573$
- At t = 570,
  - g = 0.0410000000,
  - $-CF_{570} = CF_{569}(1 + 0.0410000000) = 21466.2974777616,$
  - $-PVPayment = \frac{CF_{570}}{(1+0.0136015752)^{570}} = 9.7142518968,$
  - $-PV_0 = \$197370.4485537541$
- At t = 571,
  - -g = 0.0410000000,
  - $-CF_{571} = CF_{570}(1 + 0.0410000000) = 22346.4156743498,$
  - $-PVPayment = \frac{CF_{571}}{(1+0.0136015752)^{571}} = 9.9768355453,$
  - $-PV_0 = \$197380.4253892994$
- At t = 572,
  - -g = 0.0410000000,
  - $CF_{572} = CF_{571}(1 + 0.0410000000) = 23262.6187169982,$
  - $-PVPayment = \frac{CF_{572}}{(1+0.0136015752)^{572}} = 10.2465170304,$
  - $-PV_0 = \$197390.6719063298$
- At t = 573,
  - g = 0.0410000000,
  - $-CF_{573} = CF_{572}(1 + 0.0410000000) = 24216.3860843951,$
  - $-PVPayment = \frac{CF_{573}}{(1+0.0136015752)^{573}} = 10.5234882120,$
  - $-PV_0 = \$197401.1953945417$
- At t = 574,
  - -q = 0.0410000000,
  - $-CF_{574} = CF_{573}(1 + 0.0410000000) = 25209.2579138553,$
  - $-PVPayment = \frac{CF_{574}}{(1+0.0136015752)^{574}} = 10.8079461362,$
  - $-PV_0 = $197412.0033406779$
- At t = 575,
  - -g = 0.0410000000,
  - $CF_{575} = CF_{574}(1 + 0.0410000000) = 26242.8374883234,$
  - $-PVPayment = \frac{CF_{575}}{(1+0.0136015752)^{575}} = 11.1000931753,$
  - $PV_0 = \$197423.1034338532$
- At t = 576,
  - -g = 0.0410000000,
  - $-CF_{576} = CF_{575}(1 + 0.0410000000) = 27318.7938253446,$

- $PVPayment = \frac{CF_{576}}{(1+0.0136015752)^{576}} = 11.4001371720,$  $- PV_0 = \$197434.5035710253$
- At t = 577,
  - -g = 0.0410000000,
  - $-CF_{577} = CF_{576}(1 + 0.0410000000) = 28438.8643721837,$
  - $-PVPayment = \frac{CF_{577}}{(1+0.0136015752)^{577}} = 11.7082915872,$
  - $-PV_0 = \$197446.2118626125$
- At t = 578,
  - -g = 0.0410000000,
  - $-CF_{578} = CF_{577}(1 + 0.0410000000) = 29604.8578114433,$
  - $-PVPayment = \frac{CF_{578}}{(1+0.0136015752)^{578}} = 12.0247756516,$
  - $PV_0 = \$197458.2366382640$
- At t = 579,
  - -g = 0.0410000000,
  - $-CF_{579} = CF_{578}(1 + 0.0410000000) = 30818.6569817124,$
  - $-PVPayment = \frac{CF_{579}}{(1+0.0136015752)^{579}} = 12.3498145219,$
  - $-PV_0 = $197470.5864527859$
- At t = 580,
  - -g = 0.0410000000,
  - $-CF_{580} = CF_{579}(1 + 0.0410000000) = 32082.2219179626,$
  - $-PVPayment = \frac{CF_{580}}{(1+0.0136015752)^{580}} = 12.6836394412,$
  - $-PV_0 = \$197483.2700922271$
- At t = 581,
  - g = 0.0410000000,
  - $CF_{581} = CF_{580}(1 + 0.0410000000) = 33397.5930165991,$
  - $-PVPayment = \frac{CF_{581}}{(1+0.0136015752)^{581}} = 13.0264879030,$
  - $-PV_0 = \$197496.2965801302$
- At t = 582,
  - -g = 0.0410000000,
  - $CF_{582} = CF_{581}(1 + 0.0410000000) = 34766.8943302797,$
  - $-PVPayment = \frac{CF_{582}}{(1+0.0136015752)^{582}} = 13.3786038206,$
  - $-PV_0 = \$197509.6751839508$
- At t = 583,
  - -g = 0.0410000000,
  - $CF_{583} = CF_{582}(1 + 0.0410000000) = 36192.3369978211,$
  - $-PVPayment = \frac{CF_{583}}{(1+0.0136015752)^{583}} = 13.7402377005,$
  - $-PV_0 = \$197523.4154216513$

- At t = 584,
  - -g = 0.0410000000,
  - $-CF_{584} = CF_{583}(1 + 0.0410000000) = 37676.2228147318,$
  - $-PVPayment = \frac{CF_{584}}{(1+0.0136015752)^{584}} = 14.1116468203,$
  - $-PV_0 = \$197537.5270684715$
- At t = 585,
  - -g = 0.0410000000,
  - $CF_{585} = CF_{584}(1 + 0.0410000000) = 39220.9479501358,$
  - $-PVPayment = \frac{CF_{585}}{(1+0.0136015752)^{585}} = 14.4930954122,$
  - $-PV_0 = \$197552.0201638838$
- At t = 586,
  - -g = 0.0410000000,
  - $-CF_{586} = CF_{585}(1 + 0.0410000000) = 40829.0068160914,$
  - $-PVPayment = \frac{CF_{586}}{(1+0.0136015752)^{586}} = 14.8848548510,$
  - $PV_0 = \$197566.9050187348$
- At t = 587,
  - -g = 0.0410000000,
  - $-CF_{587} = CF_{586}(1 + 0.0410000000) = 42502.9960955511,$
  - $-PVPayment = \frac{CF_{587}}{(1+0.0136015752)^{587}} = 15.2872038467,$
  - $-PV_0 = \$197582.1922225815$
- At t = 588,
  - -q = 0.0410000000,
  - $-CF_{588} = CF_{587}(1 + 0.0410000000) = 44245.6189354687,$
  - $-PVPayment = \frac{CF_{588}}{(1+0.0136015752)^{588}} = 15.7004286430,$
  - $-PV_0 = $197597.8926512245$
- At t = 589,
  - -g = 0.0410000000,
  - $CF_{589} = CF_{588}(1 + 0.0410000000) = 46059.6893118229,$
  - $-PVPayment = \frac{CF_{589}}{(1+0.0136015752)^{589}} = 16.1248232211,$
  - $-PV_0 = \$197614.0174744456$
- At t = 590,
  - -g = 0.0410000000,
  - $-CF_{590} = CF_{589}(1 + 0.0410000000) = 47948.1365736076,$
  - $-PVPayment = \frac{CF_{590}}{(1+0.0136015752)^{590}} = 16.5606895089,$
  - $-PV_0 = \$197630.5781639545$
- At t = 591,
  - -g = 0.0410000000,

- $\begin{array}{l} CF_{591} = CF_{590}(1+0.0410000000) = 49914.0101731255, \\ PVPayment = \frac{CF_{591}}{(1+0.0136015752)^{591}} = 17.0083375953, \\ PV_0 = \$197647.5865015498 \end{array}$
- At t = 592,
  - -g = 0.0410000000,
  - $-CF_{592} = CF_{591}(1 + 0.0410000000) = 51960.4845902237,$
  - $-PVPayment = \frac{CF_{592}}{(1+0.0136015752)^{592}} = 17.4680859515,$
  - $PV_0 = \$197665.0545875012$
- At t = 593,
  - -g = 0.19000000000,
  - $-CF_{593} = CF_{556}(1 + 0.1900000000) = 14554.3860993426,$
  - $-PVPayment = \frac{CF_{593}}{(1+0.0136015752)^{593}} = 4.8272383422,$
  - $-PV_0 = \$197669.8818258434$
- At t = 594,
  - -g = 0.0410000000,
  - $-CF_{594} = CF_{593}(1 + 0.0410000000) = 15151.1159294157,$
  - $-PVPayment = \frac{CF_{594}}{(1+0.0136015752)^{594}} = 4.9577222816,$
  - $-\ PV_0 = \$197674.8395481251$
- At t = 595,
  - g = 0.0410000000,
  - $-CF_{595} = CF_{594}(1 + 0.0410000000) = 15772.3116825217,$
  - $-PVPayment = \frac{CF_{595}}{(1+0.0136015752)^{595}} = 5.0917333016,$
  - $-PV_0 = \$197679.9312814267$
- At t = 596,
  - -g = 0.0410000000,
  - $CF_{596} = CF_{595}(1 + 0.0410000000) = 16418.9764615051,$
  - $-PVPayment = \frac{CF_{596}}{(1+0.0136015752)^{596}} = 5.2293667418,$
  - $PV_0 = \$197685.1606481684$
- At t = 597,
  - -g = 0.0410000000,
  - $-CF_{597} = CF_{596}(1 + 0.0410000000) = 17092.1544964268,$
  - $-PVPayment = \frac{CF_{597}}{(1+0.0136015752)^{597}} = 5.3707205190,$
  - $-PV_0 = $197690.5313686874$
- At t = 598,
  - -q = 0.0410000000,
  - $-CF_{598} = CF_{597}(1 + 0.0410000000) = 17792.9328307803,$
  - $-PVPayment = \frac{CF_{598}}{(1+0.0136015752)^{598}} = 5.5158951968,$

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-PV_0 = $197696.0472638842
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- At t = 599,
  - -g = 0.0410000000,
  - $-CF_{599} = CF_{598}(1 + 0.0410000000) = 18522.4430768423,$
  - $-PVPayment = \frac{CF_{599}}{(1+0.0136015752)^{599}} = 5.6649940570,$
  - $-PV_0 = $197701.7122579411$
- At t = 600,
  - -g = 0.0410000000,
  - $-CF_{600} = CF_{599}(1 + 0.0410000000) = 19281.8632429928,$
  - $-PVPayment = \frac{CF_{600}}{(1+0.0136015752)^{600}} = 5.8181231732,$
  - $-PV_0 = \$197707.5303811144$
- At t = 601,
  - -g = 0.0410000000,
  - $-CF_{601} = CF_{600}(1 + 0.0410000000) = 20072.4196359555,$
  - $-PVPayment = \frac{CF_{601}}{(1+0.0136015752)^{601}} = 5.9753914865,$
  - $PV_0 = \$197713.5057726008$
- At t = 602,
  - -g = 0.0410000000,
  - $-CF_{602} = CF_{601}(1 + 0.0410000000) = 20895.3888410297,$
  - $-PVPayment = \frac{CF_{602}}{(1+0.0136015752)^{602}} = 6.1369108823,$
  - $-PV_0 = \$197719.6426834831$
- At t = 603,
  - -g = 0.0410000000,
  - $CF_{603} = CF_{602}(1 + 0.0410000000) = 21752.0997835119,$
  - $-PVPayment = \frac{CF_{603}}{(1+0.0136015752)^{603}} = 6.3027962708,$
  - $-PV_0 = $197725.9454797540$
- At t = 604,
  - -g = 0.0410000000,
  - $-CF_{604} = CF_{603}(1 + 0.0410000000) = 22643.9358746359,$
  - $-PVPayment = \frac{CF_{604}}{(1+0.0136015752)^{604}} = 6.4731656681,$
  - $-PV_0 = \$197732.4186454221$
- At t = 605,
  - -g = 0.0410000000,
  - $-CF_{605} = CF_{604}(1 + 0.0410000000) = 23572.3372454960,$
  - $-PVPayment = \frac{CF_{605}}{(1+0.0136015752)^{605}} = 6.6481402803,$
  - $-PV_0 = \$197739.0667857023$
- At t = 606,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{606} = CF_{605}(1+0.0410000000) = 24538.8030725613, \\ -PVPayment = \frac{CF_{606}}{(1+0.0136015752)^{606}} = 6.8278445899, \end{array}$
- $-PV_0 = \$197745.8946302922$
- At t = 607,
  - -g = 0.0410000000,
  - $-CF_{607} = CF_{606}(1 + 0.0410000000) = 25544.8939985363,$
  - $-PVPayment = \frac{CF_{607}}{(1+0.0136015752)^{607}} = 7.0124064442,$
  - $PV_0 = \$197752.9070367365$
- At t = 608,
  - -g = 0.0410000000,
  - $-CF_{608} = CF_{607}(1 + 0.0410000000) = 26592.2346524763,$
  - $-PVPayment = \frac{CF_{608}}{(1+0.0136015752)^{608}} = 7.2019571465,$
  - $-PV_0 = $197760.1089938830$
- At t = 609,
  - -g = 0.0410000000,
  - $CF_{609} = CF_{608}(1 + 0.0410000000) = 27682.5162732278,$
  - $-PVPayment = \frac{CF_{609}}{(1+0.0136015752)^{609}} = 7.3966315490,$
  - $PV_0 = \$197767.5056254319$
- At t = 610,
  - g = 0.0410000000,
  - $CF_{610} = CF_{609}(1 + 0.0410000000) = 28817.4994404302,$
  - $-PVPayment = \frac{CF_{610}}{(1+0.0136015752)^{610}} = 7.5965681493,$
  - $-PV_0 = \$197775.1021935812$
- At t = 611,
  - -q = 0.0410000000,
  - $-CF_{611} = CF_{610}(1 + 0.0410000000) = 29999.0169174878,$
  - $-PVPayment = \frac{CF_{611}}{(1+0.0136015752)^{611}} = 7.8019091886,$
  - $-PV_0 = $197782.9041027698$
- At t = 612,
  - -g = 0.0410000000,
  - $CF_{612} = CF_{611}(1 + 0.0410000000) = 31228.9766111048,$
  - $-PVPayment = \frac{CF_{612}}{(1+0.0136015752)^{612}} = 8.0128007531,$
  - $-PV_0 = \$197790.9169035229$
- At t = 613,
  - -q = 0.0410000000,
  - $-CF_{613} = CF_{612}(1 + 0.0410000000) = 32509.3646521601,$

- $-PVPayment = \frac{CF_{613}}{(1+0.0136015752)^{613}} = 8.2293928776,$  $-PV_0 = $197799.1462964005$
- At t = 614,
  - -g = 0.0410000000,
  - $-CF_{614} = CF_{613}(1 + 0.0410000000) = 33842.2486028987,$
  - $-PVPayment = \frac{CF_{614}}{(1+0.0136015752)^{614}} = 8.4518396526,$
  - $-PV_0 = $197807.5981360531$
- At t = 615,
  - -g = 0.0410000000,
  - $-CF_{615} = CF_{614}(1 + 0.0410000000) = 35229.7807956175,$
  - $-PVPayment = \frac{CF_{615}}{(1+0.0136015752)^{615}} = 8.6802993339,$
  - $-PV_0 = \$197816.2784353870$
- At t = 616,
  - -g = 0.0410000000,
  - $-CF_{616} = CF_{615}(1 + 0.0410000000) = 36674.2018082378,$
  - $-PVPayment = \frac{CF_{616}}{(1+0.0136015752)^{616}} = 8.9149344549,$
  - $PV_0 = \$197825.1933698420$
- At t = 617,
  - -g = 0.0410000000,
  - $-CF_{617} = CF_{616}(1 + 0.0410000000) = 38177.8440823756,$
  - $-PVPayment = \frac{CF_{617}}{(1+0.0136015752)^{617}} = 9.1559119424,$
  - $-PV_0 = $197834.3492817844$
- At t = 618,
  - g = 0.0410000000,
  - $-CF_{618} = CF_{617}(1 + 0.0410000000) = 39743.1356897530,$
  - $-PVPayment = \frac{CF_{618}}{(1+0.0136015752)^{618}} = 9.4034032355,$
  - $-PV_0 = \$197843.7526850199$
- At t = 619,
  - -g = 0.0410000000,
  - $-\ CF_{619} = CF_{618}(1+0.0410000000) = 41372.6042530328,$
  - $-PVPayment = \frac{CF_{619}}{(1+0.0136015752)^{619}} = 9.6575844073,$
  - $-PV_0 = \$197853.4102694272$
- At t = 620,
  - -g = 0.0410000000,
  - $CF_{620} = CF_{619}(1 + 0.0410000000) = 43068.8810274072,$
  - $-PVPayment = \frac{CF_{620}}{(1+0.0136015752)^{620}} = 9.9186362902,$
  - $-PV_0 = \$197863.3289057174$

- At t = 621,
  - -g = 0.0410000000,
  - $CF_{621} = CF_{620}(1 + 0.0410000000) = 44834.7051495309,$
  - $-PVPayment = \frac{CF_{621}}{(1+0.0136015752)^{621}} = 10.1867446050,$
  - $-PV_0 = \$197873.5156503224$
- At t = 622,
  - -g = 0.0410000000,
  - $-CF_{622} = CF_{621}(1 + 0.0410000000) = 46672.9280606616,$
  - $-PVPayment = \frac{CF_{622}}{(1+0.0136015752)^{622}} = 10.4621000923,$
  - $-PV_0 = \$197883.9777504146$
- At t = 623,
  - -g = 0.0410000000,
  - $CF_{623} = CF_{622}(1 + 0.0410000000) = 48586.5181111487,$
  - $-PVPayment = \frac{CF_{623}}{(1+0.0136015752)^{623}} = 10.7448986487,$
  - $-PV_0 = \$197894.7226490633$
- At t = 624,
  - -g = 0.0410000000,
  - $-CF_{624} = CF_{623}(1 + 0.0410000000) = 50578.5653537058,$
  - $-PVPayment = \frac{CF_{624}}{(1+0.0136015752)^{624}} = 11.0353414661,$
  - $-PV_0 = \$197905.7579905294$
- At t = 625,
  - g = 0.0410000000,
  - $-CF_{625} = CF_{624}(1 + 0.0410000000) = 52652.2865332078,$
  - $-PVPayment = \frac{CF_{625}}{(1+0.0136015752)^{625}} = 11.3336351747,$
  - $-PV_0 = $197917.0916257041$
- At t = 626,
  - -g = 0.0410000000,
  - $-CF_{626} = CF_{625}(1 + 0.0410000000) = 54811.0302810693,$
  - $-PVPayment = \frac{CF_{626}}{(1+0.0136015752)^{626}} = 11.6399919900,$
  - $-PV_0 = $197928.7316176941$
- At t = 627,
  - -g = 0.0410000000,
  - $-CF_{627} = CF_{626}(1 + 0.0410000000) = 57058.2825225931,$
  - $-PVPayment = \frac{CF_{627}}{(1+0.0136015752)^{627}} = 11.9546298641,$
  - $-PV_0 = $197940.6862475582$
- At t = 628,
  - -g = 0.0410000000,

- $\begin{array}{l} -\ CF_{628} = CF_{627}(1+0.0410000000) = 59397.6721060194, \\ -\ PVPayment = \frac{CF_{628}}{(1+0.0136015752)^{628}} = 12.2777726403, \\ -\ PV_0 = \$197952.9640201985 \end{array}$
- At t = 629,
  - -g = 0.0410000000,
  - $-CF_{629} = CF_{628}(1 + 0.0410000000) = 61832.9766623662,$
  - $-PVPayment = \frac{CF_{629}}{(1+0.0136015752)^{629}} = 12.6096502125,$
  - $-PV_0 = \$197965.\overline{5736704109}$
- At t = 630,
  - -g = 0.19000000000,
  - $-CF_{630} = CF_{593}(1 + 0.1900000000) = 17319.7194582177,$
  - $-PVPayment = \frac{CF_{630}}{(1+0.0136015752)^{630}} = 3.4846283191,$
  - $-PV_0 = \$197969.0582987301$
- At t = 631,
  - -g = 0.0410000000,
  - $-CF_{631} = CF_{630}(1 + 0.0410000000) = 18029.8279560046,$
  - $-PVPayment = \frac{CF_{631}}{(1+0.0136015752)^{631}} = 3.5788204841,$
  - $-\ PV_0 = \$197972.6371192142$
- At t = 632,
  - -g = 0.04100000000,
  - $CF_{632} = CF_{631}(1 + 0.0410000000) = 18769.0509022008,$
  - $-PVPayment = \frac{CF_{632}}{(1+0.0136015752)^{632}} = 3.6755587353,$
  - $-PV_0 = $197976.3126779495$
- At t = 633,
  - -g = 0.0410000000,
  - $CF_{633} = CF_{632}(1 + 0.0410000000) = 19538.5819891911,$
  - $-PVPayment = \frac{CF_{633}}{(1+0.0136015752)^{633}} = 3.7749118953,$
  - $PV_0 = \$197980.0875898448$
- At t = 634,
  - -g = 0.0410000000,
  - $-CF_{634} = CF_{633}(1 + 0.0410000000) = 20339.6638507479,$
  - $-PVPayment = \frac{CF_{634}}{(1+0.0136015752)^{634}} = 3.8769506471,$
  - $-PV_0 = $197983.9645404919$
- At t = 635,
  - -g = 0.0410000000,
  - $-CF_{635} = CF_{634}(1 + 0.0410000000) = 21173.5900686285,$
  - $-PVPayment = \frac{CF_{635}}{(1+0.0136015752)^{635}} = 3.9817475843,$

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-PV_0 = $197987.9462880762
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- At t = 636,
  - g = 0.0410000000,
  - $-CF_{636} = CF_{635}(1 + 0.0410000000) = 22041.7072614423,$
  - $-PVPayment = \frac{CF_{636}}{(1+0.0136015752)^{636}} = 4.0893772628,$
  - $-PV_0 = \$197992.0356653390$
- At t = 637,
  - -g = 0.0410000000,
  - $-CF_{637} = CF_{636}(1 + 0.0410000000) = 22945.4172591614,$
  - $-PVPayment = \frac{CF_{637}}{(1+0.0136015752)^{637}} = 4.1999162536,$
  - $-PV_0 = \$197996.2355815926$
- At t = 638,
  - -g = 0.0410000000,
  - $-CF_{638} = CF_{637}(1 + 0.0410000000) = 23886.1793667871,$
  - $-PVPayment = \frac{CF_{638}}{(1+0.0136015752)^{638}} = 4.3134431979,$
  - $PV_0 = \$198000.5490247905$
- At t = 639,
  - -q = 0.0410000000
  - $-CF_{639} = CF_{638}(1 + 0.0410000000) = 24865.5127208253,$
  - $-PVPayment = \frac{CF_{639}}{(1+0.0136015752)^{639}} = 4.4300388621,$
  - $-PV_0 = $198004.9790636525$
- At t = 640,
  - -g = 0.0410000000,
  - $-CF_{640} = CF_{639}(1 + 0.0410000000) = 25884.9987423792,$
  - $-PVPayment = \frac{CF_{640}}{(1+0.0136015752)^{640}} = 4.5497861962,$
  - $-PV_0 = $198009.5288498487$
- At t = 641,
  - -g = 0.0410000000,
  - $-CF_{641} = CF_{640}(1 + 0.0410000000) = 26946.2836908167,$
  - $-PVPayment = \frac{CF_{641}}{(1+0.0136015752)^{641}} = 4.6727703922,$
  - $-PV_0 = $198014.2016202409$
- At t = 642,
  - -g = 0.0410000000,
  - $-CF_{642} = CF_{641}(1 + 0.0410000000) = 28051.0813221402,$
  - $-PVPayment = \frac{CF_{642}}{(1+0.0136015752)^{642}} = 4.7990789449,$
  - $-PV_0 = $198019.0006991858$
- At t = 643,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{643} = CF_{642}(1+0.0410000000) = 29201.1756563479, \\ -PVPayment = \frac{CF_{643}}{(1+0.0136015752)^{643}} = 4.9288017143, \end{array}$
- $-PV_0 = \$198023.9295009002$
- At t = 644,
  - g = 0.0410000000,
  - $-CF_{644} = CF_{643}(1 + 0.0410000000) = 30398.4238582582,$
  - $-PVPayment = \frac{CF_{644}}{(1+0.0136015752)^{644}} = 5.0620309893,$
  - $PV_0 = \$198028.9915318894$
- At t = 645,
  - -g = 0.0410000000,
  - $-CF_{645} = CF_{644}(1 + 0.0410000000) = 31644.7592364468,$
  - $-PVPayment = \frac{CF_{645}}{(1+0.0136015752)^{645}} = 5.1988615533,$
  - $-PV_0 = \$198034.1903934427$
- At t = 646,
  - -g = 0.0410000000,
  - $CF_{646} = CF_{645}(1 + 0.0410000000) = 32942.1943651411,$
  - $-PVPayment = \frac{CF_{646}}{(1+0.0136015752)^{646}} = 5.3393907519,$
  - $PV_0 = \$198039.5297841946$
- At t = 647,
  - g = 0.0410000000,
  - $-CF_{647} = CF_{646}(1 + 0.0410000000) = 34292.8243341119,$
  - $-PVPayment = \frac{CF_{647}}{(1+0.0136015752)^{647}} = 5.4837185622,$
  - $-PV_0 = \$198045.0135027568$
- At t = 648,
  - -q = 0.0410000000,
  - $-CF_{648} = CF_{647}(1 + 0.0410000000) = 35698.8301318105,$
  - $-PVPayment = \frac{CF_{648}}{(1+0.0136015752)^{648}} = 5.6319476634,$
  - $-PV_0 = $198050.6454504202$
- At t = 649,
  - -g = 0.0410000000,
  - $CF_{649} = CF_{648}(1 + 0.0410000000) = 37162.4821672147,$
  - $-PVPayment = \frac{CF_{649}}{(1+0.0136015752)^{649}} = 5.7841835104,$
  - $-\ PV_0 = \$198056.4296339306$
- At t = 650,
  - -g = 0.04100000000
  - $-CF_{650} = CF_{649}(1 + 0.0410000000) = 38686.1439360705,$

- $-PVPayment = \frac{CF_{650}}{(1+0.0136015752)^{650}} = 5.9405344086,$  $-PV_0 = $198062.3701683392$
- At t = 651,
  - -g = 0.0410000000,
  - $-CF_{651} = CF_{650}(1 + 0.0410000000) = 40272.2758374494,$
  - $-PVPayment = \frac{CF_{651}}{(1+0.0136015752)^{651}} = 6.1011115910,$
  - $-PV_0 = $198068.4712799302$
- At t = 652,
  - -g = 0.0410000000,
  - $CF_{652} = CF_{651}(1 + 0.0410000000) = 41923.4391467848,$
  - $-PVPayment = \frac{CF_{652}}{(1+0.0136015752)^{652}} = 6.2660292973,$
  - $-PV_0 = \$198074.7373092276$
- At t = 653,
  - -g = 0.0410000000,
  - $-CF_{653} = CF_{652}(1 + 0.0410000000) = 43642.3001518030,$
  - $-PVPayment = \frac{CF_{653}}{(1+0.0136015752)^{653}} = 6.4354048552,$
  - $-PV_0 = $198081.1727140828$
- At t = 654,
  - -g = 0.0410000000,
  - $CF_{654} = CF_{653}(1 + 0.0410000000) = 45431.6344580269,$
  - $-PVPayment = \frac{CF_{654}}{(1+0.0136015752)^{654}} = 6.6093587638,$
  - $-PV_0 = $198087.7820728466$
- At t = 655,
  - g = 0.0410000000,
  - $CF_{655} = CF_{654}(1 + 0.0410000000) = 47294.3314708060,$
  - $-PVPayment = \frac{CF_{655}}{(1+0.0136015752)^{655}} = 6.7880147794,$
  - $-PV_0 = \$198094.5700876260$
- At t = 656.
  - -g = 0.0410000000,
  - $CF_{656} = CF_{655}(1 + 0.0410000000) = 49233.3990611091,$
  - $-PVPayment = \frac{CF_{656}}{(1+0.0136015752)^{656}} = 6.9715000036,$
  - $-PV_0 = $198101.5415876296$
- At t = 657,
  - -g = 0.0410000000,
  - $CF_{657} = CF_{656}(1 + 0.0410000000) = 51251.9684226145,$
  - $-PVPayment = \frac{CF_{657}}{(1+0.0136015752)^{657}} = 7.1599449735,$
  - $-PV_0 = $198108.7015326031$

- At t = 658,
  - -g = 0.0410000000,
  - $CF_{658} = CF_{657}(1 + 0.0410000000) = 53353.2991279417,$
  - $-PVPayment = \frac{CF_{658}}{(1+0.0136015752)^{658}} = 7.3534837549,$
  - $-PV_0 = \$198116.0550163579$
- At t = 659,
  - -g = 0.0410000000,
  - $-CF_{659} = CF_{658}(1 + 0.0410000000) = 55540.7843921873,$
  - $-PVPayment = \frac{CF_{659}}{(1+0.0136015752)^{659}} = 7.5522540373,$
  - $-PV_0 = \$198123.6072703952$
- At t = 660,
  - -g = 0.0410000000,
  - $CF_{660} = CF_{659}(1 + 0.0410000000) = 57817.9565522670,$
  - $-PVPayment = \frac{CF_{660}}{(1+0.0136015752)^{660}} = 7.7563972323,$
  - $-PV_0 = \$198131.3636676276$
- At t = 661,
  - -g = 0.0410000000,
  - $-CF_{661} = CF_{660}(1 + 0.0410000000) = 60188.4927709099,$
  - $-PVPayment = \frac{CF_{661}}{(1+0.0136015752)^{661}} = 7.9660585738,$
  - $-PV_0 = \$198139.3297262015$
- At t = 662,
  - g = 0.0410000000,
  - $-CF_{662} = CF_{661}(1 + 0.0410000000) = 62656.2209745172,$
  - $-PVPayment = \frac{CF_{662}}{(1+0.0136015752)^{662}} = 8.1813872216,$
  - $PV_0 = \$198147.5111134230$
- At t = 663,
  - -g = 0.0410000000,
  - $CF_{663} = CF_{662}(1 + 0.0410000000) = 65225.1260344724,$
  - $-PVPayment = \frac{CF_{663}}{(1+0.0136015752)^{663}} = 8.4025363671,$
  - $-PV_0 = $198155.9136497901$
- At t = 664,
  - -g = 0.0410000000,
  - $-CF_{664} = CF_{663}(1 + 0.0410000000) = 67899.3562018858,$
  - $-PVPayment = \frac{CF_{664}}{(1+0.0136015752)^{664}} = 8.6296633429,$
  - $-PV_0 = \$198164.5433131330$
- At t = 665,
  - g = 0.0410000000,

- $\begin{array}{l} -\ CF_{665} = CF_{664}(1+0.0410000000) = 70683.2298061631, \\ -\ PVPayment = \frac{CF_{665}}{(1+0.0136015752)^{665}} = 8.8629297344, \\ -\ PV_0 = \$198173.4062428673 \end{array}$
- At t = 666,
  - -g = 0.0410000000,
  - $CF_{666} = CF_{665}(1 + 0.0410000000) = 73581.2422282158,$
  - $-PVPayment = \frac{CF_{666}}{(1+0.0136015752)^{666}} = 9.1025014946,$
  - $PV_0 = \$198182.5087443619$
- At t = 667,
  - -g = 0.19000000000,
  - $-CF_{667} = CF_{630}(1 + 0.1900000000) = 20610.4661552791,$
  - $-PVPayment = \frac{CF_{667}}{(1+0.0136015752)^{667}} = 2.5154412651,$
  - $-PV_0 = \$198185.0241856270$
- At t = 668,
  - -g = 0.0410000000,
  - $-CF_{668} = CF_{667}(1 + 0.0410000000) = 21455.4952676455,$
  - $-PVPayment = \frac{CF_{668}}{(1+0.0136015752)^{668}} = 2.5834355638,$
  - $-\ PV_0 = \$198187.6076211908$
- At t = 669,
  - -g = 0.0410000000,
  - $-CF_{669} = CF_{668}(1 + 0.0410000000) = 22335.1705736190,$
  - $-PVPayment = \frac{CF_{669}}{(1+0.0136015752)^{669}} = 2.6532678003,$
  - $-PV_0 = \$198190.2608889911$
- At t = 670,
  - -g = 0.0410000000,
  - $CF_{670} = CF_{669}(1 + 0.0410000000) = 23250.9125671374,$
  - $-PVPayment = \frac{CF_{670}}{(1+0.0136015752)^{670}} = 2.7249876555,$
  - $PV_0 = \$198192.9858766466$
- At t = 671,
  - -g = 0.0410000000,
  - $-CF_{671} = CF_{670}(1 + 0.0410000000) = 24204.1999823900,$
  - $-PVPayment = \frac{CF_{671}}{(1+0.0136015752)^{671}} = 2.7986461532,$
  - $-PV_0 = $198195.7845227997$
- At t = 672,
  - -g = 0.0410000000,
  - $CF_{672} = CF_{671}(1 + 0.0410000000) = 25196.5721816680,$
  - $-PVPayment = \frac{CF_{672}}{(1+0.0136015752)^{672}} = 2.8742956963,$

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-PV_0 = $198198.6588184960
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- At t = 673,
  - -g = 0.0410000000,
  - $-CF_{673} = CF_{672}(1 + 0.0410000000) = 26229.6316411164,$
  - $-PVPayment = \frac{CF_{673}}{(1+0.0136015752)^{673}} = 2.9519901043,$
  - $-PV_0 = $198201.6108086004$
- At t = 674,
  - -g = 0.0410000000,
  - $-CF_{674} = CF_{673}(1 + 0.0410000000) = 27305.0465384021,$
  - $-PVPayment = \frac{CF_{674}}{(1+0.0136015752)^{674}} = 3.0317846516,$
  - $-PV_0 = $198204.6425932519$
- At t = 675,
  - -g = 0.0410000000,
  - $-CF_{675} = CF_{674}(1 + 0.0410000000) = 28424.5534464766,$
  - $-PVPayment = \frac{CF_{675}}{(1+0.0136015752)^{675}} = 3.1137361064,$
  - $-PV_0 = $198207.7563293583$
- At t = 676,
  - -q = 0.0410000000
  - $-CF_{676} = CF_{675}(1 + 0.0410000000) = 29589.9601377821,$
  - $-PVPayment = \frac{CF_{676}}{(1+0.0136015752)^{676}} = 3.1979027716,$
  - $-PV_0 = \$198210.9542321299$
- At t = 677,
  - -g = 0.0410000000,
  - $-CF_{677} = CF_{676}(1 + 0.0410000000) = 30803.1485034312,$
  - $-PVPayment = \frac{CF_{677}}{(1+0.0136015752)^{677}} = 3.2843445261,$
  - $-PV_0 = $198214.2385766559$
- At t = 678,
  - -g = 0.0410000000,
  - $-CF_{678} = CF_{677}(1 + 0.0410000000) = 32066.0775920719,$
  - $-PVPayment = \frac{CF_{678}}{(1+0.0136015752)^{678}} = 3.3731228672,$
  - $-PV_0 = $198217.6116995231$
- At t = 679,
  - g = 0.0410000000,
  - $-CF_{679} = CF_{678}(1 + 0.0410000000) = 33380.7867733468,$
  - $-PVPayment = \frac{CF_{679}}{(1+0.0136015752)^{679}} = 3.4643009546,$
  - $PV_0 = \$198221.0760004778$
- At t = 680,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{680} = CF_{679}(1+0.0410000000) = 34749.3990310541, \\ -PVPayment = \frac{CF_{680}}{(1+0.0136015752)^{680}} = 3.5579436555, \end{array}$
- $-PV_0 = \$198224.6339441332$
- At t = 681,
  - -g = 0.0410000000,
  - $-CF_{681} = CF_{680}(1 + 0.0410000000) = 36174.1243913273,$
  - $-PVPayment = \frac{CF_{681}}{(1+0.0136015752)^{681}} = 3.6541175900,$
  - $PV_0 = \$198228.2880617233$
- At t = 682,
  - -g = 0.0410000000,
  - $-CF_{682} = CF_{681}(1 + 0.0410000000) = 37657.2634913717,$
  - $-PVPayment = \frac{CF_{682}}{(1+0.0136015752)^{682}} = 3.7528911795,$
  - $-PV_0 = $198232.0409529028$
- At t = 683,
  - -g = 0.0410000000,
  - $-CF_{683} = CF_{682}(1 + 0.0410000000) = 39201.2112945179,$
  - $-PVPayment = \frac{CF_{683}}{(1+0.0136015752)^{683}} = 3.8543346945,$
  - $PV_0 = \$198235.8952875973$
- At t = 684,
  - g = 0.0410000000,
  - $-CF_{684} = CF_{683}(1 + 0.0410000000) = 40808.4609575931,$
  - $-PVPayment = \frac{CF_{684}}{(1+0.0136015752)^{684}} = 3.9585203052,$
  - $-PV_0 = \$198239.8538079025$
- At t = 685,
  - -q = 0.0410000000,
  - $-CF_{685} = CF_{684}(1 + 0.0410000000) = 42481.6078568545,$
  - $-PVPayment = \frac{CF_{685}}{(1+0.0136015752)^{685}} = 4.0655221326,$
  - $-PV_0 = $198243.9193300352$
- At t = 686,
  - -g = 0.0410000000,
  - $CF_{686} = CF_{685}(1 + 0.0410000000) = 44223.3537789855,$
  - $-PVPayment = \frac{CF_{686}}{(1+0.0136015752)^{686}} = 4.1754163011,$
  - $PV_0 = \$198248.0947463363$
- At t = 687,
  - -g = 0.04100000000
  - $-CF_{687} = CF_{686}(1 + 0.0410000000) = 46036.5112839239,$

- $-PVPayment = \frac{CF_{687}}{(1+0.0136015752)^{687}} = 4.2882809929,$  $-PV_0 = $198252.3830273291$
- At t = 688,
  - -g = 0.0410000000,
  - $-CF_{688} = CF_{687}(1 + 0.0410000000) = 47924.0082465648,$
  - $-PVPayment = \frac{CF_{688}}{(1+0.0136015752)^{688}} = 4.4041965035,$
  - $-PV_0 = $198256.7872238326$
- At t = 689,
  - -g = 0.0410000000,
  - $-CF_{689} = CF_{688}(1 + 0.0410000000) = 49888.8925846739,$
  - $-PVPayment = \frac{CF_{689}}{(1+0.0136015752)^{689}} = 4.5232452989,$
  - $PV_0 = \$198261.3104691315$
- At t = 690,
  - -g = 0.0410000000,
  - $CF_{690} = CF_{689}(1 + 0.0410000000) = 51934.3371806455,$
  - $-PVPayment = \frac{CF_{690}}{(1+0.0136015752)^{690}} = 4.6455120742,$
  - $-PV_0 = $198265.9559812057$
- At t = 691,
  - -g = 0.0410000000,
  - $CF_{691} = CF_{690}(1 + 0.0410000000) = 54063.6450050520,$
  - $-PVPayment = \frac{CF_{691}}{(1+0.0136015752)^{691}} = 4.7710838138,$
  - $-PV_0 = $198270.7270650195$
- At t = 692,
  - -g = 0.0410000000,
  - $CF_{692} = CF_{691}(1 + 0.0410000000) = 56280.2544502591,$
  - $-PVPayment = \frac{CF_{692}}{(1+0.0136015752)^{692}} = 4.9000498534,$
  - $-PV_0 = \$198275.6271148729$
- At t = 693.
  - -g = 0.0410000000,
  - $CF_{693} = CF_{692}(1 + 0.0410000000) = 58587.7448827198,$
  - $-PVPayment = \frac{CF_{693}}{(1+0.0136015752)^{693}} = 5.0325019436,$
  - $-PV_0 = $198280.6596168164$
- At t = 694,
  - -g = 0.0410000000,
  - $CF_{694} = CF_{693}(1 + 0.0410000000) = 60989.8424229113,$
  - $-PVPayment = \frac{CF_{694}}{(1+0.0136015752)^{694}} = 5.1685343149,$
  - $-PV_0 = $198285.8281511314$

- At t = 695,
  - -g = 0.0410000000,
  - $CF_{695} = CF_{694}(1 + 0.0410000000) = 63490.4259622506,$
  - $-PVPayment = \frac{CF_{695}}{(1+0.0136015752)^{695}} = 5.3082437452,$
  - $-PV_0 = $198291.1363948765$
- At t = 696,
  - -g = 0.0410000000,
  - $-CF_{696} = CF_{695}(1 + 0.0410000000) = 66093.5334267029,$
  - $-PVPayment = \frac{CF_{696}}{(1+0.0136015752)^{696}} = 5.4517296280,$
  - $-PV_0 = \$198296.5881245045$
- At t = 697,
  - -g = 0.0410000000,
  - $-CF_{697} = CF_{696}(1 + 0.0410000000) = 68803.3682971977,$
  - $-PVPayment = \frac{CF_{697}}{(1+0.0136015752)^{697}} = 5.5990940439,$
  - $-PV_0 = $198302.1872185484$
- At t = 698,
  - -g = 0.0410000000,
  - $-CF_{698} = CF_{697}(1 + 0.0410000000) = 71624.3063973828,$
  - $-PVPayment = \frac{CF_{698}}{(1+0.0136015752)^{698}} = 5.7504418325,$
  - $PV_0 = \$198307.9376603809$
- At t = 699.
  - g = 0.0410000000,
  - $-CF_{699} = CF_{698}(1 + 0.0410000000) = 74560.9029596755,$
  - $-PVPayment = \frac{CF_{699}}{(1+0.0136015752)^{699}} = 5.9058806674,$
  - $-PV_0 = $198313.8435410483$
- At t = 700,
  - -g = 0.0410000000,
  - $-CF_{700} = CF_{699}(1 + 0.0410000000) = 77617.8999810222,$
  - $-PVPayment = \frac{CF_{700}}{(1+0.0136015752)^{700}} = 6.0655211327,$
  - $-PV_0 = $198319.9090621810$
- At t = 701,
  - -g = 0.0410000000,
  - $-CF_{701} = CF_{700}(1 + 0.0410000000) = 80800.2338802441,$
  - $-PVPayment = \frac{CF_{701}}{(1+0.0136015752)^{701}} = 6.2294768017,$
  - $-PV_0 = $198326.1385389827$
- At t = 702,
  - -g = 0.0410000000,

- $\begin{array}{l} CF_{702} = CF_{701}(1+0.0410000000) = 84113.0434693341, \\ PVPayment = \frac{CF_{702}}{(1+0.0136015752)^{702}} = 6.3978643178, \\ PV_0 = \$198332.5364033004 \end{array}$
- At t = 703,
  - -g = 0.0410000000,
  - $-CF_{703} = CF_{702}(1 + 0.0410000000) = 87561.6782515768,$
  - $-PVPayment = \frac{CF_{703}}{(1+0.0136015752)^{703}} = 6.5708034769,$
  - $PV_0 = \$198339.1072067774$
- At t = 704,
  - -q = 0.19000000000
  - $-CF_{704} = CF_{667}(1 + 0.19000000000) = 24526.4547247821,$
  - $-PVPayment = \frac{CF_{704}}{(1+0.0136015752)^{704}} = 1.8158162589,$
  - $-PV_0 = $198340.9230230363$
- At t = 705,
  - -g = 0.0410000000,
  - $-CF_{705} = CF_{704}(1 + 0.0410000000) = 25532.0393684982,$
  - $-PVPayment = \frac{CF_{705}}{(1+0.0136015752)^{705}} = 1.8648991593,$
  - $-\ PV_0 = \$198342.7879221956$
- At t = 706,
  - g = 0.0410000000,
  - $-CF_{706} = CF_{705}(1 + 0.0410000000) = 26578.8529826066,$
  - $-PVPayment = \frac{CF_{706}}{(1+0.0136015752)^{706}} = 1.9153088080,$
  - $-PV_0 = \$198344.7032310036$
- At t = 707,
  - -g = 0.0410000000,
  - $CF_{707} = CF_{706}(1 + 0.0410000000) = 27668.5859548935,$
  - $-PVPayment = \frac{CF_{707}}{(1+0.0136015752)^{707}} = 1.9670810680,$
  - $PV_0 = \$198346.6703120716$
- At t = 708,
  - -g = 0.0410000000,
  - $-CF_{708} = CF_{707}(1 + 0.0410000000) = 28802.9979790441,$
  - $-PVPayment = \frac{CF_{708}}{(1+0.0136015752)^{708}} = 2.0202527717,$
  - $-PV_0 = \$198348.6905648433$
- At t = 709,
  - -q = 0.0410000000,
  - $CF_{709} = CF_{708}(1 + 0.0410000000) = 29983.9208961849,$
  - $-PVPayment = \frac{CF_{709}}{(1+0.0136015752)^{709}} = 2.0748617472,$

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-PV_0 = $198350.7654265905
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- At t = 710,
  - g = 0.0410000000,
  - $-CF_{710} = CF_{709}(1 + 0.0410000000) = 31213.2616529285,$
  - $-PVPayment = \frac{CF_{710}}{(1+0.0136015752)^{710}} = 2.1309468450,$
  - $-PV_0 = $198352.8963734355$
- At t = 711,
  - -g = 0.0410000000,
  - $-CF_{711} = CF_{710}(1 + 0.0410000000) = 32493.0053806985,$
  - $-PVPayment = \frac{CF_{711}}{(1+0.0136015752)^{711}} = 2.1885479658,$
  - $-PV_0 = \$198355.0849214013$
- At t = 712,
  - g = 0.0410000000,
  - $-CF_{712} = CF_{711}(1 + 0.0410000000) = 33825.2186013072,$
  - $-PVPayment = \frac{CF_{712}}{(1+0.0136015752)^{712}} = 2.2477060889,$
  - $-PV_0 = $198357.3326274903$
- At t = 713,
  - -g = 0.0410000000,
  - $-CF_{713} = CF_{712}(1 + 0.0410000000) = 35212.0525639608,$
  - $-PVPayment = \frac{CF_{713}}{(1+0.0136015752)^{713}} = 2.3084633013,$
  - $-PV_0 = \$198359.6410907916$
- At t = 714,
  - -g = 0.0410000000,
  - $CF_{714} = CF_{713}(1 + 0.0410000000) = 36655.7467190831,$
  - $-PVPayment = \frac{CF_{714}}{(1+0.0136015752)^{714}} = 2.3708628276,$
  - $-PV_0 = $198362.0119536191$
- At t = 715,
  - -g = 0.0410000000,
  - $-CF_{715} = CF_{714}(1 + 0.0410000000) = 38158.6323345656,$
  - $-PVPayment = \frac{CF_{715}}{(1+0.0136015752)^{715}} = 2.4349490606,$
  - $-PV_0 = $198364.4469026797$
- At t = 716,
  - g = 0.0410000000,
  - $-CF_{716} = CF_{715}(1 + 0.0410000000) = 39723.1362602827,$
  - $-PVPayment = \frac{CF_{716}}{(1+0.0136015752)^{716}} = 2.5007675936,$
  - $-PV_0 = $198366.9476702733$
- At t = 717,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{717} = CF_{716}(1+0.0410000000) = 41351.7848469543, \\ -PVPayment = \frac{CF_{717}}{(1+0.0136015752)^{717}} = 2.5683652517, \end{array}$
- $-PV_0 = $198369.5160355250$
- At t = 718,
  - -g = 0.0410000000,
  - $-CF_{718} = CF_{717}(1 + 0.0410000000) = 43047.2080256795,$
  - $-PVPayment = \frac{CF_{718}}{(1+0.0136015752)^{718}} = 2.6377901262,$
  - $-PV_0 = \$198372.1538256511$
- At t = 719,
  - -g = 0.0410000000,
  - $-CF_{719} = CF_{718}(1 + 0.0410000000) = 44812.1435547323,$
  - $-PVPayment = \frac{CF_{719}}{(1+0.0136015752)^{719}} = 2.7090916080,$
  - $-PV_0 = $198374.8629172591$
- At t = 720,
  - -g = 0.0410000000,
  - $-CF_{720} = CF_{719}(1 + 0.0410000000) = 46649.4414404763,$
  - $-PVPayment = \frac{CF_{720}}{(1+0.0136015752)^{720}} = 2.7823204234,$
  - $-PV_0 = \$198377.6452376825$
- At t = 721,
  - g = 0.0410000000,
  - $-CF_{721} = CF_{720}(1 + 0.0410000000) = 48562.0685395359,$
  - $-PVPayment = \frac{CF_{721}}{(1+0.0136015752)^{721}} = 2.8575286695,$
  - $-PV_0 = \$198380.5027663520$
- At t = 722,
  - -q = 0.0410000000,
  - $-CF_{722} = CF_{721}(1 + 0.0410000000) = 50553.1133496568,$
  - $-PVPayment = \frac{CF_{722}}{(1+0.0136015752)^{722}} = 2.9347698520,$
  - $-PV_0 = $198383.4375362041$
- At t = 723,
  - -g = 0.0410000000,
  - $CF_{723} = CF_{722}(1 + 0.0410000000) = 52625.7909969928,$
  - $-PVPayment = \frac{CF_{723}}{(1+0.0136015752)^{723}} = 3.0140989227,$
  - $-PV_0 = $198386.4516351268$
- At t = 724,
  - -q = 0.0410000000,
  - $-CF_{724} = CF_{723}(1 + 0.0410000000) = 54783.4484278695,$

- $-PVPayment = \frac{CF_{724}}{(1+0.0136015752)^{724}} = 3.0955723188,$  $-PV_0 = $198389.5472074455$
- At t = 725,
  - -g = 0.0410000000,
  - $-CF_{725} = CF_{724}(1 + 0.0410000000) = 57029.5698134121,$
  - $-PVPayment = \frac{CF_{725}}{(1+0.0136015752)^{725}} = 3.1792480029,$
  - $-PV_0 = $198392.7264554485$
- At t = 726,
  - -g = 0.0410000000,
  - $-CF_{726} = CF_{725}(1 + 0.0410000000) = 59367.7821757620,$
  - $-PVPayment = \frac{CF_{726}}{(1+0.0136015752)^{726}} = 3.2651855047,$
  - $-PV_0 = \$198395.9916409532$
- At t = 727,
  - g = 0.0410000000,
  - $-CF_{727} = CF_{726}(1 + 0.0410000000) = 61801.8612449682,$
  - $-PVPayment = \frac{CF_{727}}{(1+0.0136015752)^{727}} = 3.3534459629,$
  - $-PV_0 = $198399.3450869161$
- At t = 728,
  - -g = 0.0410000000,
  - $-CF_{728} = CF_{727}(1 + 0.0410000000) = 64335.7375560119,$
  - $-PVPayment = \frac{CF_{728}}{(1+0.0136015752)^{728}} = 3.4440921686,$
  - $-PV_0 = $198402.7891790847$
- At t = 729,
  - -g = 0.0410000000,
  - $-CF_{729} = CF_{728}(1 + 0.0410000000) = 66973.5027958084,$
  - $-PVPayment = \frac{CF_{729}}{(1+0.0136015752)^{729}} = 3.5371886105,$
  - $-PV_0 = \$198406.3263676952$
- At t = 730,
  - -g = 0.0410000000,
  - $-\ CF_{730} = CF_{729}(1 + 0.0410000000) = 69719.4164104365,$
  - $-PVPayment = \frac{CF_{730}}{(1+0.0136015752)^{730}} = 3.6328015203,$
  - $-PV_0 = $198409.9591692155$
- At t = 731,
  - -g = 0.0410000000,
  - $CF_{731} = CF_{730}(1 + 0.0410000000) = 72577.9124832644,$
  - $-PVPayment = \frac{CF_{731}}{(1+0.0136015752)^{731}} = 3.7309989202,$
  - $-PV_0 = $198413.6901681357$

- At t = 732,
  - -g = 0.0410000000,
  - $-\ CF_{732} = CF_{731}(1 + 0.0410000000) = 75553.6068950783,$
  - $-PVPayment = \frac{CF_{732}}{(1+0.0136015752)^{732}} = 3.8318506707,$
  - $-PV_0 = $198417.5220188064$
- At t = 733,
  - -g = 0.0410000000,
  - $CF_{733} = CF_{732}(1 + 0.0410000000) = 78651.3047777765,$
  - $-PVPayment = \frac{CF_{733}}{(1+0.0136015752)^{733}} = 3.9354285211,$
  - $-PV_0 = \$198421.4574473275$
- At t = 734,
  - -g = 0.0410000000,
  - $-CF_{734} = CF_{733}(1 + 0.0410000000) = 81876.0082736653,$
  - $-PVPayment = \frac{CF_{734}}{(1+0.0136015752)^{734}} = 4.0418061599,$
  - $-PV_0 = \$198425.4992534874$
- At t = 735,
  - -g = 0.0410000000,
  - $-CF_{735} = CF_{734}(1 + 0.0410000000) = 85232.9246128856,$
  - $-PVPayment = \frac{CF_{735}}{(1+0.0136015752)^{735}} = 4.1510592675,$
  - $PV_0 = \$198429.6503127549$
- At t = 736,
  - g = 0.0410000000,
  - $-CF_{736} = CF_{735}(1 + 0.0410000000) = 88727.4745220139,$
  - $-PVPayment = \frac{CF_{736}}{(1+0.0136015752)^{736}} = 4.2632655701,$
  - $-PV_0 = $198433.9135783250$
- At t = 737,
  - -g = 0.0410000000,
  - $-\ CF_{737} = CF_{736}(1 + 0.0410000000) = 92365.3009774165,$
  - $-PVPayment = \frac{CF_{737}}{(1+0.0136015752)^{737}} = 4.3785048947,$
  - $-PV_0 = $198438.2920832197$
- At t = 738,
  - -g = 0.0410000000,
  - $-CF_{738} = CF_{737}(1 + 0.0410000000) = 96152.2783174905,$
  - $-PVPayment = \frac{CF_{738}}{(1+0.0136015752)^{738}} = 4.4968592263,$
  - $-PV_0 = $198442.7889424460$
- At t = 739,
  - -g = 0.0410000000,

- $\begin{array}{l} CF_{739} = CF_{738}(1+0.0410000000) = 100094.5217285076, \\ PVPayment = \frac{CF_{739}}{(1+0.0136015752)^{739}} = 4.6184127659, \\ PV_0 = \$198447.4073552118 \end{array}$
- At t = 740,
  - -g = 0.0410000000,
  - $-CF_{740} = CF_{739}(1 + 0.0410000000) = 104198.3971193764,$
  - $-PVPayment = \frac{CF_{740}}{(1+0.0136015752)^{740}} = 4.7432519905,$
  - $PV_0 = \$198452.1506072023$
- At t = 741,
  - -g = 0.1900000000,
  - $-CF_{741} = CF_{704}(1 + 0.1900000000) = 29186.4811224907,$
  - $-PVPayment = \frac{CF_{741}}{(1+0.0136015752)^{741}} = 1.3107794374,$
  - $-PV_0 = $198453.4613866397$
- At t = 742,
  - g = 0.0410000000,
  - $-CF_{742} = CF_{741}(1 + 0.0410000000) = 30383.1268485128,$
  - $-PVPayment = \frac{CF_{742}}{(1+0.0136015752)^{742}} = 1.3462108067,$
  - $-\ PV_0 = \$198454.8075974464$
- At t = 743,
  - -g = 0.04100000000
  - $-CF_{743} = CF_{742}(1 + 0.0410000000) = 31628.8350493018,$
  - $-PVPayment = \frac{CF_{743}}{(1+0.0136015752)^{743}} = 1.3825999131,$
  - $-PV_0 = \$198456.1901973595$
- At t = 744.
  - -g = 0.0410000000,
  - $CF_{744} = CF_{743}(1 + 0.0410000000) = 32925.6172863232,$
  - $-PVPayment = \frac{CF_{744}}{(1+0.0136015752)^{744}} = 1.4199726447,$
  - $PV_0 = \$198457.6101700042$
- At t = 745,
  - -g = 0.0410000000,
  - $-CF_{745} = CF_{744}(1 + 0.0410000000) = 34275.5675950625,$
  - $-PVPayment = \frac{CF_{745}}{(1+0.0136015752)^{745}} = 1.4583555899,$
  - $-PV_0 = $198459.0685255941$
- At t = 746,
  - -g = 0.0410000000,
  - $-CF_{746} = CF_{745}(1 + 0.0410000000) = 35680.8658664600,$
  - $-PVPayment = \frac{CF_{746}}{(1+0.0136015752)^{746}} = 1.4977760554,$

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-PV_0 = $198460.5663016494
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- At t = 747,
  - g = 0.0410000000,
  - $CF_{747} = CF_{746}(1 + 0.0410000000) = 37143.7813669849,$
  - $-PVPayment = \frac{CF_{747}}{(1+0.0136015752)^{747}} = 1.5382620861,$
  - $-PV_0 = $198462.1045637356$
- At t = 748,
  - -g = 0.0410000000,
  - $-CF_{748} = CF_{747}(1 + 0.0410000000) = 38666.6764030313,$
  - $-PVPayment = \frac{CF_{748}}{(1+0.0136015752)^{748}} = 1.5798424853,$
  - $-PV_0 = $198463.6844062208$
- At t = 749,
  - -g = 0.0410000000,
  - $-\ CF_{749} = CF_{748}(1 + 0.0410000000) = 40252.0101355555,$
  - $-PVPayment = \frac{CF_{749}}{(1+0.0136015752)^{749}} = 1.6225468343,$
  - $-PV_0 = $198465.3069530551$
- At t = 750,
  - -q = 0.0410000000
  - $-CF_{750} = CF_{749}(1 + 0.0410000000) = 41902.3425511133,$
  - $-PVPayment = \frac{CF_{750}}{(1+0.0136015752)^{750}} = 1.6664055145,$
  - $PV_0 = \$198466.9733585697$
- At t = 751,
  - -g = 0.0410000000,
  - $-CF_{751} = CF_{750}(1 + 0.0410000000) = 43620.3385957090,$
  - $-PVPayment = \frac{CF_{751}}{(1+0.0136015752)^{751}} = 1.7114497284,$
  - $-PV_0 = $198468.6848082981$
- At t = 752,
  - -g = 0.0410000000,
  - $-CF_{752} = CF_{751}(1 + 0.0410000000) = 45408.7724781330,$
  - $-PVPayment = \frac{CF_{752}}{(1+0.0136015752)^{752}} = 1.7577115218,$
  - $-PV_0 = $198470.4425198199$
- At t = 753,
  - g = 0.0410000000,
  - $-CF_{753} = CF_{752}(1 + 0.0410000000) = 47270.5321497365,$
  - $-PVPayment = \frac{CF_{753}}{(1+0.0136015752)^{753}} = 1.8052238067,$
  - $-PV_0 = \$198472.2477436266$
- At t = 754,

- -g = 0.0410000000,  $-CF_{754} = CF_{753}(1 + 0.0410000000) = 49208.6239678757,$   $-PVPayment = \frac{CF_{754}}{(1+0.0136015752)^{754}} = 1.8540203850,$
- $-PV_0 = \$198474.1017640116$
- At t = 755,
  - -g = 0.0410000000,
  - $-CF_{755} = CF_{754}(1 + 0.0410000000) = 51226.1775505586,$
  - $-PVPayment = \frac{CF_{755}}{(1+0.0136015752)^{755}} = 1.9041359721,$
  - $PV_0 = \$198476.0058999838$
- At t = 756,
  - -g = 0.0410000000,
  - $CF_{756} = CF_{755}(1 + 0.0410000000) = 53326.4508301315,$
  - $-PVPayment = \frac{CF_{756}}{(1+0.0136015752)^{756}} = 1.9556062218,$
  - $PV_0 = \$198477.9615062056$
- At t = 757,
  - -g = 0.0410000000,
  - $-CF_{757} = CF_{756}(1 + 0.0410000000) = 55512.8353141668,$
  - $-PVPayment = \frac{CF_{757}}{(1+0.0136015752)^{757}} = 2.0084677517,$
  - $-PV_0 = $198479.9699739573$
- At t = 758,
  - g = 0.0410000000,
  - $-CF_{758} = CF_{757}(1 + 0.0410000000) = 57788.8615620477,$
  - $-PVPayment = \frac{CF_{758}}{(1+0.0136015752)^{758}} = 2.0627581691,$
  - $-PV_0 = \$198482.0327321264$
- At t = 759,
  - -q = 0.0410000000,
  - $-CF_{759} = CF_{758}(1 + 0.0410000000) = 60158.2048860916,$
  - $-PVPayment = \frac{CF_{759}}{(1+0.0136015752)^{759}} = 2.1185160979,$
  - $-PV_0 = $198484.1512482244$
- At t = 760,
  - -g = 0.0410000000,
  - $CF_{760} = CF_{759}(1 + 0.0410000000) = 62624.6912864214,$
  - $-PVPayment = \frac{CF_{760}}{(1+0.0136015752)^{760}} = 2.1757812062,$
  - $-PV_0 = $198486.3270294305$
- At t = 761,
  - -q = 0.0410000000,
  - $-CF_{761} = CF_{760}(1 + 0.0410000000) = 65192.3036291646,$

- $-PVPayment = \frac{CF_{761}}{(1+0.0136015752)^{761}} = 2.2345942340,$  $-PV_0 = $198488.5616236646$
- At t = 762,
  - -g = 0.0410000000,
  - $-CF_{762} = CF_{761}(1 + 0.0410000000) = 67865.1880779604,$
  - $-PVPayment = \frac{CF_{762}}{(1+0.0136015752)^{762}} = 2.2949970230,$
  - $-PV_0 = $198490.8566206875$
- At t = 763,
  - -g = 0.0410000000,
  - $CF_{763} = CF_{762}(1 + 0.0410000000) = 70647.6607891568,$
  - $-PVPayment = \frac{CF_{763}}{(1+0.0136015752)^{763}} = 2.3570325454,$
  - $-PV_0 = \$198493.2136532329$
- At t = 764,
  - g = 0.0410000000,
  - $-CF_{764} = CF_{763}(1 + 0.0410000000) = 73544.2148815122,$
  - $-PVPayment = \frac{CF_{764}}{(1+0.0136015752)^{764}} = 2.4207449354,$
  - $-PV_0 = $198495.6343981683$
- At t = 765,
  - -g = 0.0410000000,
  - $CF_{765} = CF_{764}(1 + 0.0410000000) = 76559.5276916542,$
  - $-PVPayment = \frac{CF_{765}}{(1+0.0136015752)^{765}} = 2.4861795200,$
  - $-PV_0 = $198498.1205776883$
- At t = 766,
  - g = 0.0410000000,
  - $CF_{766} = CF_{765}(1 + 0.0410000000) = 79698.4683270120,$
  - $-PVPayment = \frac{CF_{766}}{(1+0.0136015752)^{766}} = 2.5533828513,$
  - $-PV_0 = \$198500.6739605396$
- At t = 767,
  - -g = 0.0410000000,
  - $CF_{767} = CF_{766}(1 + 0.0410000000) = 82966.1055284195,$
  - $-PVPayment = \frac{CF_{767}}{(1+0.0136015752)^{767}} = 2.6224027401,$
  - $-PV_0 = $198503.2963632797$
- At t = 768,
  - -g = 0.0410000000,
  - $CF_{768} = CF_{767}(1 + 0.0410000000) = 86367.7158550847,$
  - $-PVPayment = \frac{CF_{768}}{(1+0.0136015752)^{768}} = 2.6932882891,$
  - $-PV_0 = $198505.9896515688$

- At t = 769,
  - -g = 0.0410000000,
  - $-CF_{769} = CF_{768}(1 + 0.0410000000) = 89908.7922051432,$
  - $-PVPayment = \frac{CF_{769}}{(1+0.0136015752)^{769}} = 2.7660899287,$
  - $-PV_0 = \$198508.7557414975$
- At t = 770,
  - -g = 0.0410000000,
  - $-CF_{770} = CF_{769}(1 + 0.0410000000) = 93595.0526855540,$
  - $-PVPayment = \frac{CF_{770}}{(1+0.0136015752)^{770}} = 2.8408594522,$
  - $-PV_0 = \$198511.5966009497$
- At t = 771,
  - -g = 0.0410000000,
  - $-CF_{771} = CF_{770}(1 + 0.0410000000) = 97432.4498456617,$
  - $-PVPayment = \frac{CF_{771}}{(1+0.0136015752)^{771}} = 2.9176500530,$
  - $-PV_0 = \$198514.5142510028$
- At t = 772,
  - -g = 0.0410000000,
  - $-CF_{772} = CF_{771}(1 + 0.0410000000) = 101427.1802893338,$
  - $-PVPayment = \frac{CF_{772}}{(1+0.0136015752)^{772}} = 2.9965163625,$
  - $-PV_0 = \$198517.5107673652$
- At t = 773,
  - g = 0.0410000000,
  - $-CF_{773} = CF_{772}(1 + 0.0410000000) = 105585.6946811965,$
  - $-PVPayment = \frac{CF_{773}}{(1+0.0136015752)^{773}} = 3.0775144885,$
  - $-PV_0 = $198520.5882818537$
- At t = 774,
  - -g = 0.0410000000,
  - $-\ CF_{774} = CF_{773}(1 + 0.0410000000) = 109914.7081631256,$
  - $-PVPayment = \frac{CF_{774}}{(1+0.0136015752)^{774}} = 3.1607020557,$
  - $-PV_0 = $198523.7489839094$
- At t = 775,
  - -g = 0.0410000000,
  - $-CF_{775} = CF_{774}(1 + 0.0410000000) = 114421.2111978137,$
  - $-PVPayment = \frac{CF_{775}}{(1+0.0136015752)^{775}} = 3.2461382464,$
  - $-PV_0 = $198526.9951221558$
- At t = 776,
  - g = 0.0410000000,

- $-CF_{776} = CF_{775}(1 + 0.0410000000) = 119112.4808569241,$  $-PV Payment = \frac{CF_{776}}{(1+0.0136015752)^{776}} = 3.3338838426,$
- $PV_0 = \$198530.3290059984$
- At t = 777,
  - -g = 0.0410000000,
  - $-CF_{777} = CF_{776}(1 + 0.0410000000) = 123996.0925720580,$
  - $-PVPayment = \frac{CF_{777}}{(1+0.0136015752)^{777}} = 3.4240012693,$
  - $-PV_0 = \$198533.7530072677$
- At t = 778,
  - -q = 0.19000000000
  - $-CF_{778} = CF_{741}(1 + 0.1900000000) = 34731.9125357639,$
  - $-PVPayment = \frac{CF_{778}}{(1+0.0136015752)^{778}} = 0.9462095765,$
  - $-PV_0 = $198534.6992168442$
- At t = 779,
  - -g = 0.0410000000,
  - $-CF_{779} = CF_{778}(1 + 0.0410000000) = 36155.9209497302,$
  - $-PVPayment = \frac{CF_{779}}{(1+0.0136015752)^{779}} = 0.9717863441,$
  - $PV_0 = \$198535.6710031883$
- At t = 780,
  - -g = 0.04100000000
  - $CF_{780} = CF_{779}(1 + 0.0410000000) = 37638.3137086692,$
  - $-PVPayment = \frac{CF_{780}}{(1+0.0136015752)^{780}} = 0.9980544712,$
  - $-PV_0 = \$198536.6690576595$
- At t = 781,
  - -g = 0.0410000000,
  - $CF_{781} = CF_{780}(1 + 0.0410000000) = 39181.4845707246,$
  - $-PVPayment = \frac{CF_{781}}{(1+0.0136015752)^{781}} = 1.0250326459,$
  - $PV_0 = \$198537.6940903054$
- At t = 782,
  - -g = 0.0410000000,
  - $-CF_{782} = CF_{781}(1 + 0.0410000000) = 40787.9254381243,$
  - $-PVPayment = \frac{CF_{782}}{(1+0.0136015752)^{782}} = 1.0527400612,$
  - $-PV_0 = $198538.7468303666$
- At t = 783,
  - -g = 0.0410000000,
  - $-CF_{783} = CF_{782}(1 + 0.0410000000) = 42460.2303810874,$
  - $-PVPayment = \frac{CF_{783}}{(1+0.0136015752)^{783}} = 1.0811964292,$

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-PV_0 = $198539.8280267957
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- At t = 784,
  - -g = 0.0410000000,
  - $CF_{784} = CF_{783}(1 + 0.0410000000) = 44201.0998267120,$
  - $-PVPayment = \frac{CF_{784}}{(1+0.0136015752)^{784}} = 1.1104219944,$
  - $-PV_0 = $198540.9384487902$
- At t = 785,
  - -g = 0.0410000000,
  - $CF_{785} = CF_{784}(1 + 0.0410000000) = 46013.3449196072,$
  - $-PVPayment = \frac{CF_{785}}{(1+0.0136015752)^{785}} = 1.1404375491,$
  - $-PV_0 = $198542.0788863393$
- At t = 786,
  - g = 0.0410000000,
  - $-CF_{786} = CF_{785}(1 + 0.0410000000) = 47899.8920613111,$
  - $-PVPayment = \frac{CF_{786}}{(1+0.0136015752)^{786}} = 1.1712644471,$
  - $-PV_0 = $198543.2501507864$
- At t = 787,
  - -q = 0.0410000000
  - $-CF_{787} = CF_{786}(1 + 0.0410000000) = 49863.7876358248,$
  - $-PVPayment = \frac{CF_{787}}{(1+0.0136015752)^{787}} = 1.2029246197,$
  - $-PV_0 = \$198544.4530754061$
- At t = 788,
  - -g = 0.0410000000,
  - $-CF_{788} = CF_{787}(1 + 0.0410000000) = 51908.2029288936,$
  - $-PVPayment = \frac{CF_{788}}{(1+0.0136015752)^{788}} = 1.2354405910,$
  - $-PV_0 = $198545.6885159971$
- At t = 789,
  - -g = 0.0410000000,
  - $-CF_{789} = CF_{788}(1 + 0.0410000000) = 54036.4392489783,$
  - $-PVPayment = \frac{CF_{789}}{(1+0.0136015752)^{789}} = 1.2688354938,$
  - $-PV_0 = \$198546.9573514908$
- At t = 790,
  - -g = 0.0410000000,
  - $-CF_{790} = CF_{789}(1 + 0.0410000000) = 56251.9332581864,$
  - $-PVPayment = \frac{CF_{790}}{(1+0.0136015752)^{790}} = 1.3031330863,$
  - $-PV_0 = $198548.2604845771$
- At t = 791,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{791} = CF_{790}(1+0.0410000000) = 58558.2625217720, \\ -PVPayment = \frac{CF_{791}}{(1+0.0136015752)^{791}} = 1.3383577690, \\ -PV_0 = \$198549.5988423461 \end{array}$
- At t = 792,
  - -g = 0.0410000000,
  - $-CF_{792} = CF_{791}(1 + 0.0410000000) = 60959.1512851647,$
  - $-PVPayment = \frac{CF_{792}}{(1+0.0136015752)^{792}} = 1.3745346017,$
  - $-PV_0 = \$198550.9733769478$
- At t = 793,
  - -g = 0.0410000000,
  - $CF_{793} = CF_{792}(1 + 0.0410000000) = 63458.4764878564,$
  - $-PVPayment = \frac{CF_{793}}{(1+0.0136015752)^{793}} = 1.4116893218,$
  - $-PV_0 = $198552.3850662697$
- At t = 794,
  - -g = 0.0410000000,
  - $-CF_{794} = CF_{793}(1 + 0.0410000000) = 66060.2740238585,$
  - $-PVPayment = \frac{CF_{794}}{(1+0.0136015752)^{794}} = 1.4498483625,$
  - $-PV_0 = \$198553.8349146321$
- At t = 795,
  - g = 0.0410000000,
  - $-CF_{795} = CF_{794}(1 + 0.0410000000) = 68768.7452588367,$
  - $-PVPayment = \frac{CF_{795}}{(1+0.0136015752)^{795}} = 1.4890388711,$
  - $-PV_0 = \$198555.3239535032$
- At t = 796.
  - -q = 0.0410000000,
  - $-CF_{796} = CF_{795}(1 + 0.0410000000) = 71588.2638144490,$
  - $-PVPayment = \frac{CF_{796}}{(1+0.0136015752)^{796}} = 1.5292887291,$
  - $-PV_0 = $198556.8532422323$
- At t = 797,
  - -g = 0.0410000000,
  - $-\ CF_{797} = CF_{796}(1 + 0.0410000000) = 74523.3826308414,$
  - $-PVPayment = \frac{CF_{797}}{(1+0.0136015752)^{797}} = 1.5706265715,$
  - $-PV_0 = $198558.4238688038$
- At t = 798,
  - -q = 0.0410000000,
  - $-CF_{798} = CF_{797}(1 + 0.0410000000) = 77578.8413187059,$

- $-PVPayment = \frac{CF_{798}}{(1+0.0136015752)^{798}} = 1.6130818074,$  $-PV_0 = $198560.0369506112$
- At t = 799,
  - -g = 0.0410000000,
  - $-CF_{799} = CF_{798}(1 + 0.0410000000) = 80759.5738127729,$
  - $-PVPayment = \frac{CF_{799}}{(1+0.0136015752)^{799}} = 1.6566846407,$
  - $-PV_0 = $198561.6936352519$
- At t = 800,
  - -g = 0.0410000000,
  - $-CF_{800} = CF_{799}(1 + 0.0410000000) = 84070.7163390965,$
  - $-PVPayment = \frac{CF_{800}}{(1+0.0136015752)^{800}} = 1.7014660919,$
  - $-PV_0 = \$198563.3951013438$
- At t = 801,
  - -g = 0.0410000000,
  - $-CF_{801} = CF_{800}(1 + 0.0410000000) = 87517.6157089995,$
  - $-PVPayment = \frac{CF_{801}}{(1+0.0136015752)^{801}} = 1.7474580200,$
  - $-PV_0 = $198565.1425593638$
- At t = 802,
  - -g = 0.0410000000,
  - $-CF_{802} = CF_{801}(1 + 0.0410000000) = 91105.8379530684,$
  - $-PVPayment = \frac{CF_{802}}{(1+0.0136015752)^{802}} = 1.7946931449,$
  - $-PV_0 = $198566.9372525087$
- At t = 803,
  - -g = 0.0410000000,
  - $-CF_{803} = CF_{802}(1 + 0.0410000000) = 94841.1773091442,$
  - $-PVPayment = \frac{CF_{803}}{(1+0.0136015752)^{803}} = 1.8432050714,$
  - $-PV_0 = \$198568.7804575801$
- At t = 804,
  - -g = 0.0410000000,
  - $-\ CF_{804} = CF_{803}(1 + 0.0410000000) = 98729.6655788192,$
  - $-PVPayment = \frac{CF_{804}}{(1+0.0136015752)^{804}} = 1.8930283123,$
  - $-PV_0 = $198570.6734858925$
- At t = 805,
  - -g = 0.0410000000,
  - $CF_{805} = CF_{804}(1 + 0.0410000000) = 102777.5818675507,$
  - $-PVPayment = \frac{CF_{805}}{(1+0.0136015752)^{805}} = 1.9441983135,$
  - $-PV_0 = $198572.6176842060$

- At t = 806,
  - -g = 0.0410000000,
  - $-CF_{806} = CF_{805}(1 + 0.0410000000) = 106991.4627241203,$
  - $-PVPayment = \frac{CF_{806}}{(1+0.0136015752)^{806}} = 1.9967514789,$
  - $PV_0 = \$198574.6144356849$
- At t = 807,
  - -g = 0.0410000000,
  - $-CF_{807} = CF_{806}(1 + 0.0410000000) = 111378.1126958092,$
  - $-PVPayment = \frac{CF_{807}}{(1+0.0136015752)^{807}} = 2.0507251965,$
  - $-PV_0 = \$198576.6651608814$
- At t = 808,
  - -g = 0.0410000000,
  - $-CF_{808} = CF_{807}(1 + 0.0410000000) = 115944.6153163374,$
  - $-PVPayment = \frac{CF_{808}}{(1+0.0136015752)^{808}} = 2.1061578649,$
  - $-PV_0 = $198578.7713187463$
- At t = 809,
  - -g = 0.0410000000,
  - $-CF_{809} = CF_{808}(1 + 0.0410000000) = 120698.3445443072,$
  - $-PVPayment = \frac{CF_{809}}{(1+0.0136015752)^{809}} = 2.1630889207,$
  - $-PV_0 = \$198580.9344076669$
- At t = 810,
  - g = 0.0410000000,
  - $-CF_{810} = CF_{809}(1 + 0.0410000000) = 125646.9766706238,$
  - $-PVPayment = \frac{CF_{810}}{(1+0.0136015752)^{810}} = 2.2215588663,$
  - $-PV_0 = $198583.1559665333$
- At t = 811,
  - -g = 0.0410000000,
  - $CF_{811} = CF_{810}(1 + 0.0410000000) = 130798.5027141194,$
  - $-PVPayment = \frac{CF_{811}}{(1+0.0136015752)^{811}} = 2.2816092993,$
  - $-PV_0 = $198585.4375758326$
- At t = 812,
  - -g = 0.0410000000,
  - $-CF_{812} = CF_{811}(1 + 0.0410000000) = 136161.2413253983,$
  - $-PVPayment = \frac{CF_{812}}{(1+0.0136015752)^{812}} = 2.3432829414,$
  - $-PV_0 = $198587.7808587740$
- At t = 813,
  - g = 0.0410000000,

- $\begin{array}{l} CF_{813} = CF_{812}(1+0.0410000000) = 141743.8522197396, \\ PVPayment = \frac{CF_{813}}{(1+0.0136015752)^{813}} = 2.4066236691, \\ PV_0 = \$198590.1874824430 \end{array}$
- $1 V_0 = 0130330.$ 
  - -g = 0.0410000000,
- $-CF_{814} = CF_{813}(1 + 0.0410000000) = 147555.3501607489,$
- $-PVPayment = \frac{CF_{814}}{(1+0.0136015752)^{814}} = 2.4716765450,$
- $PV_0 = \$198592.6591589880$
- At t = 815,

• At t = 814,

- -g = 0.19000000000,
- $-CF_{815} = CF_{778}(1 + 0.1900000000) = 41330.9759175591,$
- $-PVPayment = \frac{CF_{815}}{(1+0.0136015752)^{815}} = 0.6830383032,$
- $-PV_0 = \$198593.3421972912$
- At t = 816,
  - -g = 0.0410000000,
  - $-CF_{816} = CF_{815}(1 + 0.0410000000) = 43025.5459301790,$
  - $-PVPayment = \frac{CF_{816}}{(1+0.0136015752)^{816}} = 0.7015013502,$
  - $-PV_0 = $198594.0436986414$
- At t = 817,
  - -g = 0.0410000000,
  - $-CF_{817} = CF_{816}(1 + 0.0410000000) = 44789.5933133163,$
  - $-PVPayment = \frac{CF_{817}}{(1+0.0136015752)^{817}} = 0.7204634675,$
  - $PV_0 = \$198594.7641621089$
- At t = 818,
  - -g = 0.0410000000,
  - $-\ CF_{818} = CF_{817}(1 + 0.0410000000) = 46625.9666391623,$
  - $-PVPayment = \frac{CF_{818}}{(1+0.0136015752)^{818}} = 0.7399381453,$
  - $PV_0 = \$198595.5041002542$
- At t = 819,
  - -g = 0.0410000000,
  - $-CF_{819} = CF_{818}(1 + 0.0410000000) = 48537.6312713679,$
  - $-PVPayment = \frac{CF_{819}}{(1+0.0136015752)^{819}} = 0.7599392385,$
  - $-PV_0 = $198596.2640394927$
- At t = 820,
  - -g = 0.0410000000,
  - $CF_{820} = CF_{819}(1 + 0.0410000000) = 50527.6741534940,$
  - $-PVPayment = \frac{CF_{820}}{(1+0.0136015752)^{820}} = 0.7804809766,$

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-PV_0 = $198597.0445204693
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- At t = 821,
  - g = 0.0410000000,
  - $-CF_{821} = CF_{820}(1 + 0.0410000000) = 52599.3087937873,$
  - $-PVPayment = \frac{CF_{821}}{(1+0.0136015752)^{821}} = 0.8015779735,$
  - $-PV_0 = $198597.8460984429$
- At t = 822,
  - -g = 0.0410000000,
  - $-CF_{822} = CF_{821}(1 + 0.0410000000) = 54755.8804543326,$
  - $-PVPayment = \frac{CF_{822}}{(1+0.0136015752)^{822}} = 0.8232452384,$
  - $-PV_0 = \$198598.6693436812$
- At t = 823,
  - -g = 0.0410000000,
  - $CF_{823} = CF_{822}(1 + 0.0410000000) = 57000.8715529602,$
  - $-PVPayment = \frac{CF_{823}}{(1+0.0136015752)^{823}} = 0.8454981860,$
  - $-PV_0 = $198599.5148418672$
- At t = 824,
  - -q = 0.0410000000
  - $-CF_{824} = CF_{823}(1 + 0.0410000000) = 59337.9072866315,$
  - $-PVPayment = \frac{CF_{824}}{(1+0.0136015752)^{824}} = 0.8683526477,$
  - $-PV_0 = \$198600.3831945150$
- At t = 825,
  - -g = 0.0410000000,
  - $-\ CF_{825} = CF_{824}(1 + 0.0410000000) = 61770.7614853834,$
  - $-PVPayment = \frac{CF_{825}}{(1+0.0136015752)^{825}} = 0.8918248830,$
  - $-PV_0 = $198601.2750193980$
- At t = 826,
  - -g = 0.0410000000,
  - $-CF_{826} = CF_{825}(1 + 0.0410000000) = 64303.3627062842,$
  - $-PVPayment = \frac{CF_{826}}{(1+0.0136015752)^{826}} = 0.9159315908,$
  - $-PV_0 = $198602.1909509888$
- At t = 827,
  - -g = 0.0410000000,
  - $-CF_{827} = CF_{826}(1 + 0.0410000000) = 66939.8005772418,$
  - $-PVPayment = \frac{CF_{827}}{(1+0.0136015752)^{827}} = 0.9406899213,$
  - $-PV_0 = $198603.1316409101$
- At t = 828,

- $\begin{array}{l} -\ g = 0.0410000000, \\ -\ CF_{828} = CF_{827}(1+0.0410000000) = 69684.3324009087, \\ -\ PVPayment = \frac{CF_{828}}{(1+0.0136015752)^{828}} = 0.9661174884, \\ -\ PV_0 = \$198604.0977583984 \end{array}$
- At t = 829,
  - g = 0.0410000000,
  - $-CF_{829} = CF_{828}(1 + 0.0410000000) = 72541.3900293460,$
  - $-PVPayment = \frac{CF_{829}}{(1+0.0136015752)^{829}} = 0.9922323820,$
  - $PV_0 = \$198605.0899907804$
- At t = 830,
  - -g = 0.0410000000,
  - $CF_{830} = CF_{829}(1 + 0.0410000000) = 75515.5870205491,$
  - $-PVPayment = \frac{CF_{830}}{(1+0.0136015752)^{830}} = 1.0190531811,$
  - $-PV_0 = $198606.1090439616$
- At t = 831,
  - -g = 0.0410000000,
  - $-CF_{831} = CF_{830}(1 + 0.0410000000) = 78611.7260883916,$
  - $-PVPayment = \frac{CF_{831}}{(1+0.0136015752)^{831}} = 1.0465989670,$
  - $-PV_0 = $198607.1556429285$
- At t = 832,
  - g = 0.0410000000,
  - $-CF_{832} = CF_{831}(1 + 0.0410000000) = 81834.8068580157,$
  - $-PVPayment = \frac{CF_{832}}{(1+0.0136015752)^{832}} = 1.0748893364,$
  - $-PV_0 = \$198608.2305322650$
- At t = 833,
  - -q = 0.0410000000,
  - $-CF_{833} = CF_{832}(1 + 0.0410000000) = 85190.0339391943,$
  - $-PVPayment = \frac{CF_{833}}{(1+0.0136015752)^{833}} = 1.1039444162,$
  - $-PV_0 = $198609.3344766812$
- At t = 834,
  - -g = 0.0410000000,
  - $-\ CF_{834} = CF_{833}(1 + 0.0410000000) = 88682.8253307013,$
  - $-PVPayment = \frac{CF_{834}}{(1+0.0136015752)^{834}} = 1.1337848770,$
  - $-PV_0 = \$198610.4682615581$
- At t = 835,
  - -g = 0.04100000000
  - $-CF_{835} = CF_{834}(1 + 0.0410000000) = 92318.8211692601,$

- $-PVPayment = \frac{CF_{835}}{(1+0.0136015752)^{835}} = 1.1644319482,$  $-PV_0 = $198611.6326935063$
- At t = 836,
  - -g = 0.0410000000,
  - $-CF_{836} = CF_{835}(1 + 0.0410000000) = 96103.8928371997,$
  - $-PVPayment = \frac{CF_{836}}{(1+0.0136015752)^{836}} = 1.1959074331,$
  - $-PV_0 = $198612.8286009394$
- At t = 837,
  - -g = 0.0410000000,
  - $-CF_{837} = CF_{836}(1 + 0.0410000000) = 100044.1524435249,$
  - $-PVPayment = \frac{CF_{837}}{(1+0.0136015752)^{837}} = 1.2282337245,$
  - $-PV_0 = \$198614.0568346638$
- At t = 838,
  - -g = 0.0410000000,
  - $CF_{838} = CF_{837}(1 + 0.0410000000) = 104145.9626937094,$
  - $-PVPayment = \frac{CF_{838}}{(1+0.0136015752)^{838}} = 1.2614338202,$
  - $-PV_0 = $198615.3182684840$
- At t = 839,
  - -g = 0.0410000000,
  - $-CF_{839} = CF_{838}(1 + 0.0410000000) = 108415.9471641515,$
  - $-PVPayment = \frac{CF_{839}}{(1+0.0136015752)^{839}} = 1.2955313398,$
  - $-PV_0 = $198616.6137998238$
- At t = 840,
  - g = 0.0410000000,
  - $CF_{840} = CF_{839}(1 + 0.0410000000) = 112861.0009978817,$
  - $-PVPayment = \frac{CF_{840}}{(1+0.0136015752)^{840}} = 1.3305505414,$
  - $-PV_0 = \$198617.9443503652$
- At t = 841,
  - -g = 0.0410000000,
  - $-\ CF_{841} = CF_{840}(1+0.0410000000) = 117488.3020387948,$
  - $-PVPayment = \frac{CF_{841}}{(1+0.0136015752)^{841}} = 1.3665163388,$
  - $-PV_0 = $198619.3108667041$
- At t = 842,
  - -g = 0.0410000000,
  - $-\ CF_{842} = CF_{841}(1 + 0.0410000000) = 122305.3224223854,$
  - $-PVPayment = \frac{CF_{842}}{(1+0.0136015752)^{842}} = 1.4034543192,$
  - $-PV_0 = $198620.7143210233$

- At t = 843,
  - -g = 0.0410000000,
  - $-CF_{843} = CF_{842}(1 + 0.0410000000) = 127319.8406417032,$
  - $-PVPayment = \frac{CF_{843}}{(1+0.0136015752)^{843}} = 1.4413907614,$
  - $PV_0 = \$198622.1557117847$
- At t = 844,
  - -g = 0.0410000000,
  - $-CF_{844} = CF_{843}(1 + 0.0410000000) = 132539.9541080130,$
  - $-PVPayment = \frac{CF_{844}}{(1+0.0136015752)^{844}} = 1.4803526546,$
  - $-PV_0 = \$198623.6360644394$
- At t = 845,
  - -g = 0.0410000000,
  - $CF_{845} = CF_{844}(1 + 0.0410000000) = 137974.0922264416,$
  - $-PVPayment = \frac{CF_{845}}{(1+0.0136015752)^{845}} = 1.5203677176,$
  - $-PV_0 = \$198625.1564321569$
- At t = 846,
  - -g = 0.0410000000,
  - $-CF_{846} = CF_{845}(1 + 0.0410000000) = 143631.0300077257,$
  - $-PVPayment = \frac{CF_{846}}{(1+0.0136015752)^{846}} = 1.5614644182,$
  - $-PV_0 = \$198626.7178965752$
- At t = 847,
  - g = 0.0410000000,
  - $-CF_{847} = CF_{846}(1 + 0.0410000000) = 149519.9022380424,$
  - $-PVPayment = \frac{CF_{847}}{(1+0.0136015752)^{847}} = 1.6036719941,$
  - $-PV_0 = $198628.3215685693$
- At t = 848,
  - -g = 0.0410000000,
  - $-\ CF_{848} = CF_{847}(1 + 0.0410000000) = 155650.2182298022,$
  - $-PVPayment = \frac{CF_{848}}{(1+0.0136015752)^{848}} = 1.6470204730,$
  - $-PV_0 = $198629.9685890423$
- At t = 849,
  - -g = 0.0410000000,
  - $-CF_{849} = CF_{848}(1 + 0.0410000000) = 162031.8771772240,$
  - $-PVPayment = \frac{CF_{849}}{(1+0.0136015752)^{849}} = 1.6915406944,$
  - $-PV_0 = $198631.6601297366$
- At t = 850,
  - -g = 0.0410000000,

- $\begin{array}{l} CF_{850} = CF_{849}(1+0.0410000000) = 168675.1841414902, \\ PVPayment = \frac{CF_{850}}{(1+0.0136015752)^{850}} = 1.7372643313, \\ PV_0 = \$198633.3973940679 \end{array}$
- At t = 851,
  - -g = 0.0410000000,
  - $-CF_{851} = CF_{850}(1 + 0.0410000000) = 175590.8666912913,$
  - $-PVPayment = \frac{CF_{851}}{(1+0.0136015752)^{851}} = 1.7842239131,$
  - $PV_0 = \$198635.1816179811$
- At t = 852,
  - -q = 0.19000000000
  - $-CF_{852} = CF_{815}(1 + 0.1900000000) = 49183.8613418953,$
  - $-PVPayment = \frac{CF_{852}}{(1+0.0136015752)^{852}} = 0.4930634134,$
  - $-PV_0 = \$198635.6746813944$
- At t = 853,
  - -g = 0.0410000000,
  - $-CF_{853} = CF_{852}(1 + 0.0410000000) = 51200.3996569130,$
  - $-PVPayment = \frac{CF_{853}}{(1+0.0136015752)^{853}} = 0.5063912940,$
  - $-\ PV_0 = \$198636.1810726885$
- At t = 854,
  - -g = 0.0410000000,
  - $CF_{854} = CF_{853}(1 + 0.0410000000) = 53299.6160428464,$
  - $-PVPayment = \frac{CF_{854}}{(1+0.0136015752)^{854}} = 0.5200794375,$
  - $PV_0 = \$198636.7011521260$
- At t = 855,
  - -g = 0.0410000000,
  - $-\ CF_{855} = CF_{854}(1 + 0.0410000000) = 55484.9003006031,$
  - $-PVPayment = \frac{CF_{855}}{(1+0.0136015752)^{855}} = 0.5341375819,$
  - $PV_0 = \$198637.2352897079$
- At t = 856,
  - -g = 0.0410000000,
  - $-CF_{856} = CF_{855}(1 + 0.0410000000) = 57759.7812129279,$
  - $-PVPayment = \frac{CF_{856}}{(1+0.0136015752)^{856}} = 0.5485757287,$
  - $-PV_0 = $198637.7838654367$
- At t = 857,
  - -g = 0.0410000000,
  - $CF_{857} = CF_{856}(1 + 0.0410000000) = 60127.9322426579,$
  - $-PVPayment = \frac{CF_{857}}{(1+0.0136015752)^{857}} = 0.5634041497,$

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-PV_0 = $198638.3472695864
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- At t = 858,
  - g = 0.0410000000,
  - $-CF_{858} = CF_{857}(1 + 0.0410000000) = 62593.1774646069,$
  - $-PVPayment = \frac{CF_{858}}{(1+0.0136015752)^{858}} = 0.5786333942,$
  - $-PV_0 = $198638.9259029806$
- At t = 859,
  - -g = 0.0410000000,
  - $-CF_{859} = CF_{858}(1 + 0.0410000000) = 65159.4977406557,$
  - $-PVPayment = \frac{CF_{859}}{(1+0.0136015752)^{859}} = 0.5942742968,$
  - $-PV_0 = \$198639.5201772774$
- At t = 860,
  - -g = 0.0410000000,
  - $-CF_{860} = CF_{859}(1 + 0.0410000000) = 67831.0371480226,$
  - $-PVPayment = \frac{CF_{860}}{(1+0.0136015752)^{860}} = 0.6103379849,$
  - $PV_0 = \$198640.1305152623$
- At t = 861,
  - -q = 0.0410000000
  - $-CF_{861} = CF_{860}(1 + 0.0410000000) = 70612.1096710916,$
  - $-PVPayment = \frac{CF_{861}}{(1+0.0136015752)^{861}} = 0.6268358868,$
  - $PV_0 = \$198640.7573511492$
- At t = 862,
  - -g = 0.0410000000,
  - $CF_{862} = CF_{861}(1 + 0.0410000000) = 73507.2061676063,$
  - $-PVPayment = \frac{CF_{862}}{(1+0.0136015752)^{862}} = 0.6437797396,$
  - $-PV_0 = $198641.4011308888$
- At t = 863,
  - -g = 0.0410000000,
  - $-CF_{863} = CF_{862}(1 + 0.0410000000) = 76521.0016204782,$
  - $-PVPayment = \frac{CF_{863}}{(1+0.0136015752)^{863}} = 0.6611815977,$
  - $-PV_0 = $198642.0623124866$
- At t = 864,
  - g = 0.0410000000,
  - $-CF_{864} = CF_{863}(1 + 0.0410000000) = 79658.3626869178,$
  - $-PVPayment = \frac{CF_{864}}{(1+0.0136015752)^{864}} = 0.6790538413,$
  - $-PV_0 = $198642.7413663279$
- At t = 865,

- $\begin{array}{l} -\ g = 0.0410000000, \\ -\ CF_{865} = CF_{864}(1+0.0410000000) = 82924.3555570814, \\ -\ PVPayment = \frac{CF_{865}}{(1+0.0136015752)^{865}} = 0.6974091853, \\ -\ PV_0 = \$198643.4387755132 \end{array}$
- At t = 866,
  - -g = 0.0410000000,
  - $-CF_{866} = CF_{865}(1 + 0.0410000000) = 86324.2541349217,$
  - $-PVPayment = \frac{CF_{866}}{(1+0.0136015752)^{866}} = 0.7162606883,$
  - $PV_0 = \$198644.1550362015$
- At t = 867,
  - -g = 0.0410000000,
  - $-CF_{867} = CF_{866}(1 + 0.0410000000) = 89863.5485544535,$
  - $-PVPayment = \frac{CF_{867}}{(1+0.0136015752)^{867}} = 0.7356217617,$
  - $-PV_0 = $198644.8906579632$
- At t = 868,
  - -g = 0.0410000000,
  - $CF_{868} = CF_{867}(1 + 0.0410000000) = 93547.9540451861,$
  - $-PVPayment = \frac{CF_{868}}{(1+0.0136015752)^{868}} = 0.7555061798,$
  - $-PV_0 = $198645.6461641431$
- At t = 869,
  - -g = 0.0410000000,
  - $-CF_{869} = CF_{868}(1 + 0.0410000000) = 97383.4201610387,$
  - $-PVPayment = \frac{CF_{869}}{(1+0.0136015752)^{869}} = 0.7759280889,$
  - $-PV_0 = \$198646.4220922320$
- At t = 870.
  - -q = 0.0410000000,
  - $-CF_{870} = CF_{869}(1 + 0.0410000000) = 101376.1403876413,$
  - $-PVPayment = \frac{CF_{870}}{(1+0.0136015752)^{870}} = 0.7969020178,$
  - $-PV_0 = $198647.2189942498$
- At t = 871,
  - -g = 0.0410000000,
  - $-CF_{871} = CF_{870}(1 + 0.0410000000) = 105532.5621435346,$
  - $-PVPayment = \frac{CF_{871}}{(1+0.0136015752)^{871}} = 0.8184428880,$
  - $-PV_0 = \$198648.0374371379$
- At t = 872,
  - -q = 0.0410000000,
  - $-CF_{872} = CF_{871}(1 + 0.0410000000) = 109859.3971914195,$

- $-PVPayment = \frac{CF_{872}}{(1+0.0136015752)^{872}} = 0.8405660244,$  $-PV_0 = $198648.8780031623$
- At t = 873,
  - -g = 0.0410000000,
  - $-CF_{873} = CF_{872}(1 + 0.0410000000) = 114363.6324762677,$
  - $-PVPayment = \frac{CF_{873}}{(1+0.0136015752)^{873}} = 0.8632871661,$
  - $-PV_0 = $198649.7412903284$
- At t = 874,
  - -g = 0.0410000000,
  - $-CF_{874} = CF_{873}(1 + 0.0410000000) = 119052.5414077947,$
  - $-PVPayment = \frac{CF_{874}}{(1+0.0136015752)^{874}} = 0.8866224776,$
  - $-PV_0 = \$198650.6279128059$
- At t = 875,
  - -g = 0.0410000000,
  - $-CF_{875} = CF_{874}(1 + 0.0410000000) = 123933.6956055142,$
  - $-PVPayment = \frac{CF_{875}}{(1+0.0136015752)^{875}} = 0.9105885603,$
  - $-PV_0 = \$198651.5385013662$
- At t = 876,
  - -g = 0.0410000000,
  - $-CF_{876} = CF_{875}(1 + 0.0410000000) = 129014.9771253403,$
  - $-PVPayment = \frac{CF_{876}}{(1+0.0136015752)^{876}} = 0.9352024646,$
  - $-PV_0 = $198652.4737038309$
- At t = 877,
  - g = 0.0410000000,
  - $CF_{877} = CF_{876}(1 + 0.0410000000) = 134304.5911874793,$
  - $-PVPayment = \frac{CF_{877}}{(1+0.0136015752)^{877}} = 0.9604817015,$
  - $-PV_0 = \$198653.4341855324$
- At t = 878.
  - -g = 0.0410000000,
  - $CF_{878} = CF_{877}(1 + 0.0410000000) = 139811.0794261659,$
  - $-PVPayment = \frac{CF_{878}}{(1+0.0136015752)^{878}} = 0.9864442556,$
  - $-PV_0 = $198654.4206297880$
- At t = 879,
  - -g = 0.0410000000,
  - $-\ CF_{879} = CF_{878}(1 + 0.0410000000) = 145543.3336826387,$
  - $-PVPayment = \frac{CF_{879}}{(1+0.0136015752)^{879}} = 1.0131085972,$
  - $-PV_0 = $198655.4337383852$

- At t = 880,
  - -g = 0.0410000000,
  - $-CF_{880} = CF_{879}(1 + 0.0410000000) = 151510.6103636269,$
  - $-PVPayment = \frac{CF_{880}}{(1+0.0136015752)^{880}} = 1.0404936964,$
  - $-PV_0 = \$198656.4742320816$
- At t = 881,
  - -g = 0.0410000000,
  - $-CF_{881} = CF_{880}(1 + 0.0410000000) = 157722.5453885355,$
  - $-PVPayment = \frac{CF_{881}}{(1+0.0136015752)^{881}} = 1.0686190358,$
  - $-PV_0 = \$198657.5428511174$
- At t = 882,
  - -g = 0.0410000000,
  - $-CF_{882} = CF_{881}(1 + 0.0410000000) = 164189.1697494655,$
  - $-PVPayment = \frac{CF_{882}}{(1+0.0136015752)^{882}} = 1.0975046245,$
  - $PV_0 = \$198658.6403557419$
- At t = 883,
  - -g = 0.0410000000,
  - $-CF_{883} = CF_{882}(1 + 0.0410000000) = 170920.9257091935,$
  - $-PVPayment = \frac{CF_{883}}{(1+0.0136015752)^{883}} = 1.1271710128,$
  - $-PV_0 = \$198659.7675267547$
- At t = 884,
  - g = 0.0410000000,
  - $-CF_{884} = CF_{883}(1 + 0.0410000000) = 177928.6836632705,$
  - $-PVPayment = \frac{CF_{884}}{(1+0.0136015752)^{884}} = 1.1576393062,$
  - $-PV_0 = $198660.9251660609$
- At t = 885,
  - -g = 0.0410000000,
  - $-CF_{885} = CF_{884}(1 + 0.0410000000) = 185223.7596934646,$
  - $-PVPayment = \frac{CF_{885}}{(1+0.0136015752)^{885}} = 1.1889311808,$
  - $-PV_0 = $198662.1140972417$
- At t = 886,
  - -g = 0.0410000000,
  - $-CF_{886} = CF_{885}(1 + 0.0410000000) = 192817.9338408966,$
  - $-PVPayment = \frac{CF_{886}}{(1+0.0136015752)^{886}} = 1.2210688988,$
  - $-PV_0 = $198663.3351661405$
- At t = 887,
  - -g = 0.0410000000,

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 \begin{array}{l} - \ CF_{887} = CF_{886}(1+0.0410000000) = 200723.4691283733, \\ - \ PVPayment = \frac{CF_{887}}{(1+0.0136015752)^{887}} = 1.2540753237, \\ - \ PV_0 = \$198664.5892414642 \end{array}
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- At t = 888,
  - -g = 0.0410000000,
  - $-CF_{888} = CF_{887}(1 + 0.0410000000) = 208953.1313626366,$
  - $-PVPayment = \frac{CF_{888}}{(1+0.0136015752)^{888}} = 1.2879739376,$
  - $PV_0 = \$198665.8772154018$
- At t = 889,
  - -g = 0.19000000000,
  - $-CF_{889} = CF_{852}(1 + 0.1900000000) = 58528.7949968554,$
  - $-PVPayment = \frac{CF_{889}}{(1+0.0136015752)^{889}} = 0.3559266420,$
  - $-PV_0 = $198666.2331420438$
- At t = 890,
  - -g = 0.0410000000,
  - $-CF_{890} = CF_{889}(1 + 0.0410000000) = 60928.4755917265,$
  - $-PVPayment = \frac{CF_{890}}{(1+0.0136015752)^{890}} = 0.3655476110,$
  - $-PV_0 = $198666.5986896548$
- At t = 891,
  - -g = 0.04100000000,
  - $-CF_{891} = CF_{890}(1 + 0.0410000000) = 63426.5430909873,$
  - $-PVPayment = \frac{CF_{891}}{(1+0.0136015752)^{891}} = 0.3754286421,$
  - $PV_0 = \$198666.9741182970$
- At t = 892,
  - -g = 0.0410000000,
  - $CF_{892} = CF_{891}(1 + 0.0410000000) = 66027.0313577177,$
  - $-PVPayment = \frac{CF_{892}}{(1+0.0136015752)^{892}} = 0.3855767651,$
  - $PV_0 = \$198667.3596950620$
- At t = 893,
  - -g = 0.0410000000,
  - $-CF_{893} = CF_{892}(1 + 0.0410000000) = 68734.1396433842,$
  - $-PVPayment = \frac{CF_{893}}{(1+0.0136015752)^{893}} = 0.3959991996,$
  - $-PV_0 = $198667.7556942616$
- At t = 894,
  - -g = 0.0410000000,
  - $-CF_{894} = CF_{893}(1 + 0.0410000000) = 71552.2393687629,$
  - $-PVPayment = \frac{CF_{894}}{(1+0.0136015752)^{894}} = 0.4067033604,$

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-PV_0 = $198668.1623976220
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- At t = 895,
  - g = 0.0410000000,
  - $-CF_{895} = CF_{894}(1 + 0.0410000000) = 74485.8811828822,$
  - $-PVPayment = \frac{CF_{895}}{(1+0.0136015752)^{895}} = 0.4176968629,$
  - $-PV_0 = $198668.5800944848$
- At t = 896,
  - -g = 0.0410000000,
  - $-CF_{896} = CF_{895}(1 + 0.0410000000) = 77539.8023113803,$
  - $-PVPayment = \frac{CF_{896}}{(1+0.0136015752)^{896}} = 0.4289875281,$
  - $-PV_0 = $198669.0090820129$
- At t = 897,
  - -g = 0.0410000000,
  - $-CF_{897} = CF_{896}(1 + 0.0410000000) = 80718.9342061469,$
  - $-PVPayment = \frac{CF_{897}}{(1+0.0136015752)^{897}} = 0.4405833886,$
  - $-PV_0 = $198669.4496654016$
- At t = 898,
  - -q = 0.0410000000
  - $-CF_{898} = CF_{897}(1 + 0.0410000000) = 84028.4105085989,$
  - $-PVPayment = \frac{CF_{898}}{(1+0.0136015752)^{898}} = 0.4524926941,$
  - $PV_0 = \$198669.9021580957$
- At t = 899,
  - -g = 0.0410000000,
  - $-CF_{899} = CF_{898}(1 + 0.0410000000) = 87473.5753394515,$
  - $-PVPayment = \frac{CF_{899}}{(1+0.0136015752)^{899}} = 0.4647239173,$
  - $-PV_0 = $198670.3668820130$
- At t = 900,
  - -g = 0.0410000000,
  - $-CF_{900} = CF_{899}(1 + 0.0410000000) = 91059.9919283690,$
  - $-PVPayment = \frac{CF_{900}}{(1+0.0136015752)^{900}} = 0.4772857597,$
  - $-PV_0 = $198670.8441677727$
- At t = 901,
  - g = 0.0410000000,
  - $-CF_{901} = CF_{900}(1 + 0.0410000000) = 94793.4515974321,$
  - $-PVPayment = \frac{CF_{901}}{(1+0.0136015752)^{901}} = 0.4901871584,$
  - $-PV_0 = \$198671.3343549311$
- At t = 902,

- -g = 0.0410000000,  $-CF_{902} = CF_{901}(1 + 0.0410000000) = 98679.9831129268,$  $-PVPayment = \frac{CF_{902}}{(1+0.0136015752)^{902}} = 0.5034372917,$
- $-PV_0 = \$198671.8377922227$
- At t = 903,
  - -g = 0.0410000000,
  - $-CF_{903} = CF_{902}(1 + 0.0410000000) = 102725.8624205568,$
  - $-PVPayment = \frac{CF_{903}}{(1+0.0136015752)^{903}} = 0.5170455862,$
  - $-PV_0 = \$198672.3548378089$
- At t = 904,
  - -g = 0.0410000000,
  - $-CF_{904} = CF_{903}(1 + 0.0410000000) = 106937.6227797996,$
  - $-PVPayment = \frac{CF_{904}}{(1+0.0136015752)^{904}} = 0.5310217233,$
  - $-PV_0 = $198672.8858595322$
- At t = 905,
  - -g = 0.0410000000,
  - $-CF_{905} = CF_{904}(1 + 0.0410000000) = 111322.0653137714,$
  - $-PVPayment = \frac{CF_{905}}{(1+0.0136015752)^{905}} = 0.5453756461,$
  - $-PV_0 = \$198673.4312351782$
- At t = 906,
  - g = 0.0410000000,
  - $-CF_{906} = CF_{905}(1 + 0.0410000000) = 115886.2699916360,$
  - $-PVPayment = \frac{CF_{906}}{(1+0.0136015752)^{906}} = 0.5601175663,$
  - $-PV_0 = \$198673.9913527445$
- At t = 907,
  - -q = 0.0410000000,
  - $-CF_{907} = CF_{906}(1 + 0.0410000000) = 120637.6070612931,$
  - $-PVPayment = \frac{CF_{907}}{(1+0.0136015752)^{907}} = 0.5752579720,$
  - $-PV_0 = $198674.5666107165$
- At t = 908,
  - -g = 0.0410000000,
  - $-CF_{908} = CF_{907}(1 + 0.0410000000) = 125583.7489508061,$
  - $-PVPayment = \frac{CF_{908}}{(1+0.0136015752)^{908}} = 0.5908076343,$
  - $-PV_0 = $198675.1574183508$
- At t = 909,
  - -g = 0.0410000000,
  - $-CF_{909} = CF_{908}(1 + 0.0410000000) = 130732.6826577891,$

- $-PVPayment = \frac{CF_{909}}{(1+0.0136015752)^{909}} = 0.6067776159,$
- $-PV_0 = \$198675.7641959668$
- At t = 910,
  - -g = 0.0410000000,
  - $-CF_{910} = CF_{909}(1 + 0.0410000000) = 136092.7226467585,$
  - $-PVPayment = \frac{CF_{910}}{(1+0.0136015752)^{910}} = 0.6231792783,$
  - $-PV_0 = $198676.3873752451$
- At t = 911,
  - -g = 0.0410000000,
  - $-CF_{911} = CF_{910}(1 + 0.0410000000) = 141672.5242752756,$
  - $-PVPayment = \frac{CF_{911}}{(1+0.0136015752)^{911}} = 0.6400242902,$
  - $PV_0 = \$198677.0273995353$
- At t = 912,
  - -g = 0.0410000000,
  - $-CF_{912} = CF_{911}(1 + 0.0410000000) = 147481.0977705618,$
  - $-PVPayment = \frac{CF_{912}}{(1+0.0136015752)^{912}} = 0.6573246356,$
  - $-PV_0 = $198677.6847241709$
- At t = 913,
  - -g = 0.0410000000,
  - $-CF_{913} = CF_{912}(1 + 0.0410000000) = 153527.8227791549,$
  - $-PVPayment = \frac{CF_{913}}{(1+0.0136015752)^{913}} = 0.6750926226,$
  - $-PV_0 = $198678.3598167936$
- At t = 914,
  - -g = 0.0410000000,
  - $-CF_{914} = CF_{913}(1 + 0.0410000000) = 159822.4635131002,$
  - $-PVPayment = \frac{CF_{914}}{(1+0.0136015752)^{914}} = 0.6933408918,$
  - $-PV_0 = \$198679.0531576854$
- At t = 915,
  - -g = 0.0410000000,
  - $-CF_{915} = CF_{914}(1 + 0.0410000000) = 166375.1845171373,$
  - $-PVPayment = \frac{CF_{915}}{(1+0.0136015752)^{915}} = 0.7120824257,$
  - $-PV_0 = $198679.7652401111$
- At t = 916,
  - -g = 0.0410000000,
  - $-CF_{916} = CF_{915}(1 + 0.0410000000) = 173196.5670823399,$
  - $-PVPayment = \frac{CF_{916}}{(1+0.0136015752)^{916}} = 0.7313305576,$
  - $-PV_0 = $198680.4965706686$

- At t = 917,
  - -g = 0.0410000000,
  - $-CF_{917} = CF_{916}(1 + 0.0410000000) = 180297.6263327159,$
  - $-PVPayment = \frac{CF_{917}}{(1+0.0136015752)^{917}} = 0.7510989811,$
  - $-PV_0 = \$198681.2476696497$
- At t = 918,
  - -g = 0.0410000000,
  - $-CF_{918} = CF_{917}(1 + 0.0410000000) = 187689.8290123572,$
  - $-PVPayment = \frac{CF_{918}}{(1+0.0136015752)^{918}} = 0.7714017603,$
  - $-PV_0 = \$198682.0190714100$
- At t = 919,
  - -g = 0.0410000000,
  - $-CF_{919} = CF_{918}(1 + 0.0410000000) = 195385.1120018638,$
  - $-PVPayment = \frac{CF_{919}}{(1+0.0136015752)^{919}} = 0.7922533390,$
  - $-PV_0 = \$198682.8113247490$
- At t = 920,
  - -g = 0.0410000000,
  - $-CF_{920} = CF_{919}(1 + 0.0410000000) = 203395.9015939402,$
  - $-PVPayment = \frac{CF_{920}}{(1+0.0136015752)^{920}} = 0.8136685519,$
  - $PV_0 = \$198683.6249933009$
- At t = 921,
  - g = 0.0410000000,
  - $-CF_{921} = CF_{920}(1 + 0.0410000000) = 211735.1335592918,$
  - $-PVPayment = \frac{CF_{921}}{(1+0.0136015752)^{921}} = 0.8356626343,$
  - $-PV_0 = $198684.4606559353$
- At t = 922,
  - -g = 0.0410000000,
  - $CF_{922} = CF_{921}(1 + 0.0410000000) = 220416.2740352227,$
  - $-PVPayment = \frac{CF_{922}}{(1+0.0136015752)^{922}} = 0.8582512336,$
  - $-PV_0 = $198685.3189071689$
- At t = 923,
  - -g = 0.0410000000,
  - $-CF_{923} = CF_{922}(1 + 0.0410000000) = 229453.3412706668,$
  - $-PVPayment = \frac{CF_{923}}{(1+0.0136015752)^{923}} = 0.8814504200,$
  - $-PV_0 = $198686.2003575889$
- At t = 924,
  - -g = 0.0410000000,

- $\begin{array}{l} CF_{924} = CF_{923}(1+0.0410000000) = 238860.9282627642, \\ PVPayment = \frac{CF_{924}}{(1+0.0136015752)^{924}} = 0.9052766981, \\ PV_0 = \$198687.1056342870 \end{array}$
- At t = 925,
  - -g = 0.0410000000,
  - $-CF_{925} = CF_{924}(1 + 0.0410000000) = 248654.2263215375,$
  - $-PVPayment = \frac{CF_{925}}{(1+0.0136015752)^{925}} = 0.9297470187,$
  - $PV_0 = \$198688.0353813057$
- At t = 926,
  - -g = 0.19000000000,
  - $-CF_{926} = CF_{889}(1 + 0.1900000000) = 69649.2660462579,$
  - $-PVPayment = \frac{CF_{926}}{(1+0.0136015752)^{926}} = 0.2569320113,$
  - $-PV_0 = $198688.2923133170$
- At t = 927,
  - -g = 0.0410000000,
  - $-CF_{927} = CF_{926}(1 + 0.0410000000) = 72504.8859541545,$
  - $-PVPayment = \frac{CF_{927}}{(1+0.0136015752)^{927}} = 0.2638770798,$
  - $-\ PV_0 = \$198688.5561903969$
- At t = 928,
  - -g = 0.0410000000,
  - $-CF_{928} = CF_{927}(1 + 0.0410000000) = 75477.5862782748,$
  - $-PVPayment = \frac{CF_{928}}{(1+0.0136015752)^{928}} = 0.2710098788,$
  - $PV_0 = \$198688.8272002757$
- At t = 929.
  - -g = 0.0410000000,
  - $-\ CF_{929} = CF_{928}(1 + 0.0410000000) = 78572.1673156841,$
  - $-PVPayment = \frac{CF_{929}}{(1+0.0136015752)^{929}} = 0.2783354829,$
  - $PV_0 = \$198689.1055357585$
- At t = 930,
  - -g = 0.0410000000,
  - $-CF_{930} = CF_{929}(1 + 0.0410000000) = 81793.6261756271,$
  - $-PVPayment = \frac{CF_{930}}{(1+0.0136015752)^{930}} = 0.2858591035,$
  - $-PV_0 = $198689.3913948621$
- At t = 931,
  - -g = 0.0410000000,
  - $CF_{931} = CF_{930}(1 + 0.0410000000) = 85147.1648488278,$
  - $-PVPayment = \frac{CF_{931}}{(1+0.0136015752)^{931}} = 0.2935860935,$

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-PV_0 = $198689.6849809556
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- At t = 932,
  - -g = 0.0410000000,
  - $-CF_{932} = CF_{931}(1 + 0.0410000000) = 88638.1986076298,$
  - $-PVPayment = \frac{CF_{932}}{(1+0.0136015752)^{932}} = 0.3015219498,$
  - $-PV_0 = $198689.9865029053$
- At t = 933,
  - -g = 0.0410000000,
  - $-CF_{933} = CF_{932}(1 + 0.0410000000) = 92272.3647505426,$
  - $-PVPayment = \frac{CF_{933}}{(1+0.0136015752)^{933}} = 0.3096723184,$
  - $-PV_0 = $198690.2961752237$
- At t = 934,
  - -g = 0.0410000000,
  - $-CF_{934} = CF_{933}(1 + 0.0410000000) = 96055.5317053148,$
  - $-PVPayment = \frac{CF_{934}}{(1+0.0136015752)^{934}} = 0.3180429977,$
  - $-PV_0 = $198690.6142182215$
- At t = 935,
  - -q = 0.0410000000
  - $-CF_{935} = CF_{934}(1 + 0.0410000000) = 99993.8085052327,$
  - $-PVPayment = \frac{CF_{935}}{(1+0.0136015752)^{935}} = 0.3266399429,$
  - $PV_0 = \$198690.9408581643$
- At t = 936,
  - -g = 0.0410000000,
  - $-CF_{936} = CF_{935}(1 + 0.0410000000) = 104093.5546539473,$
  - $-PVPayment = \frac{CF_{936}}{(1+0.0136015752)^{936}} = 0.3354692700,$
  - $PV_0 = \$198691.2763274343$
- At t = 937,
  - -g = 0.0410000000,
  - $-CF_{937} = CF_{936}(1 + 0.0410000000) = 108361.3903947591,$
  - $-PVPayment = \frac{CF_{937}}{(1+0.0136015752)^{937}} = 0.3445372606,$
  - $-PV_0 = \$198691.6208646949$
- At t = 938,
  - -g = 0.0410000000,
  - $-CF_{938} = CF_{937}(1 + 0.0410000000) = 112804.2074009442,$
  - $-PVPayment = \frac{CF_{938}}{(1+0.0136015752)^{938}} = 0.3538503659,$
  - $-PV_0 = $198691.9747150608$
- At t = 939,

- $\begin{array}{l} -g = 0.0410000000, \\ -CF_{939} = CF_{938}(1+0.0410000000) = 117429.1799043829, \\ -PVPayment = \frac{CF_{939}}{(1+0.0136015752)^{939}} = 0.3634152116, \end{array}$
- $-PV_0 = \$198692.3381302723$
- At t = 940,
  - g = 0.0410000000,
  - $-CF_{940} = CF_{939}(1 + 0.0410000000) = 122243.7762804626,$
  - $-PVPayment = \frac{CF_{940}}{(1+0.0136015752)^{940}} = 0.3732386023,$
  - $PV_0 = \$198692.7113688746$
- At t = 941,
  - -g = 0.0410000000,
  - $-CF_{941} = CF_{940}(1 + 0.0410000000) = 127255.7711079616,$
  - $-PVPayment = \frac{CF_{941}}{(1+0.0136015752)^{941}} = 0.3833275268,$
  - $-PV_0 = $198693.0946964014$
- At t = 942,
  - -g = 0.0410000000,
  - $-CF_{942} = CF_{941}(1 + 0.0410000000) = 132473.2577233880,$
  - $-PVPayment = \frac{CF_{942}}{(1+0.0136015752)^{942}} = 0.3936891626,$
  - $-PV_0 = \$198693.4883855641$
- At t = 943,
  - g = 0.0410000000,
  - $-CF_{943} = CF_{942}(1 + 0.0410000000) = 137904.6612900469,$
  - $-PVPayment = \frac{CF_{943}}{(1+0.0136015752)^{943}} = 0.4043308814,$
  - $-PV_0 = \$198693.8927164455$
- At t = 944,
  - -q = 0.0410000000,
  - $-CF_{944} = CF_{943}(1 + 0.0410000000) = 143558.7524029388,$
  - $-PVPayment = \frac{CF_{944}}{(1+0.0136015752)^{944}} = 0.4152602540,$
  - $-PV_0 = $198694.3079766995$
- At t = 945,
  - -g = 0.0410000000,
  - $CF_{945} = CF_{944}(1 + 0.0410000000) = 149444.6612514593,$
  - $-PVPayment = \frac{CF_{945}}{(1+0.0136015752)^{945}} = 0.4264850558,$
  - $PV_0 = \$198694.7344617553$
- At t = 946,
  - -g = 0.0410000000,
  - $-CF_{946} = CF_{945}(1 + 0.0410000000) = 155571.8923627691,$

- $-PVPayment = \frac{CF_{946}}{(1+0.0136015752)^{946}} = 0.4380132726,$  $-PV_0 = $198695.1724750279$
- At t = 947,
  - -g = 0.0410000000,
  - $-CF_{947} = CF_{946}(1 + 0.0410000000) = 161950.3399496426,$
  - $-PVPayment = \frac{CF_{947}}{(1+0.0136015752)^{947}} = 0.4498531059,$
  - $-PV_0 = $198695.6223281338$
- At t = 948,
  - -g = 0.0410000000,
  - $-CF_{948} = CF_{947}(1 + 0.0410000000) = 168590.3038875779,$
  - $-PVPayment = \frac{CF_{948}}{(1+0.0136015752)^{948}} = 0.4620129790,$
  - $PV_0 = \$198696.0843411127$
- At t = 949,
  - -g = 0.0410000000,
  - $-CF_{949} = CF_{948}(1 + 0.0410000000) = 175502.5063469686,$
  - $-PVPayment = \frac{CF_{949}}{(1+0.0136015752)^{949}} = 0.4745015427,$
  - $-PV_0 = $198696.5588426554$
- At t = 950,
  - -g = 0.0410000000,
  - $CF_{950} = CF_{949}(1 + 0.0410000000) = 182698.1091071943,$
  - $-PVPayment = \frac{CF_{950}}{(1+0.0136015752)^{950}} = 0.4873276818,$
  - $-PV_0 = $198697.0461703372$
- At t = 951,
  - -g = 0.0410000000,
  - $-CF_{951} = CF_{950}(1 + 0.0410000000) = 190188.7315805893,$
  - $-PVPayment = \frac{CF_{951}}{(1+0.0136015752)^{951}} = 0.5005005212,$
  - $-PV_0 = \$198697.5466708584$
- At t = 952.
  - -g = 0.0410000000,
  - $-CF_{952} = CF_{951}(1 + 0.0410000000) = 197986.4695753934,$
  - $-PVPayment = \frac{CF_{952}}{(1+0.0136015752)^{952}} = 0.5140294326,$
  - $-PV_0 = $198698.0607002910$
- At t = 953,
  - -g = 0.0410000000,
  - $CF_{953} = CF_{952}(1 + 0.0410000000) = 206103.9148279845,$
  - $-PVPayment = \frac{CF_{953}}{(1+0.0136015752)^{953}} = 0.5279240408,$
  - $-PV_0 = $198698.5886243318$

- At t = 954,
  - -g = 0.0410000000,
  - $-CF_{954} = CF_{953}(1 + 0.0410000000) = 214554.1753359319,$
  - $-PVPayment = \frac{CF_{954}}{(1+0.0136015752)^{954}} = 0.5421942308,$
  - $-PV_0 = $198699.1308185627$
- At t = 955,
  - -g = 0.0410000000,
  - $-CF_{955} = CF_{954}(1 + 0.0410000000) = 223350.8965247051,$
  - $-PVPayment = \frac{CF_{955}}{(1+0.0136015752)^{955}} = 0.5568501550,$
  - $-PV_0 = \$198699.6876687177$
- At t = 956,
  - -g = 0.0410000000,
  - $-CF_{956} = CF_{955}(1 + 0.0410000000) = 232508.2832822180,$
  - $-PVPayment = \frac{CF_{956}}{(1+0.0136015752)^{956}} = 0.5719022400,$
  - $-PV_0 = \$198700.2595709577$
- At t = 957,
  - -g = 0.0410000000,
  - $-CF_{957} = CF_{956}(1 + 0.0410000000) = 242041.1228967889,$
  - $-PVPayment = \frac{CF_{957}}{(1+0.0136015752)^{957}} = 0.5873611944,$
  - $-PV_0 = \$198700.8469321521$
- At t = 958,
  - g = 0.0410000000,
  - $-CF_{958} = CF_{957}(1 + 0.0410000000) = 251964.8089355572,$
  - $-PVPayment = \frac{CF_{958}}{(1+0.0136015752)^{958}} = 0.6032380161,$
  - $-PV_0 = $198701.4501701682$
- At t = 959,
  - -g = 0.0410000000,
  - $CF_{959} = CF_{958}(1 + 0.0410000000) = 262295.3661019151,$
  - $-PVPayment = \frac{CF_{959}}{(1+0.0136015752)^{959}} = 0.6195440004,$
  - $-PV_0 = $198702.0697141687$
- At t = 960,
  - g = 0.0410000000,
  - $-CF_{960} = CF_{959}(1 + 0.0410000000) = 273049.4761120936,$
  - $-PVPayment = \frac{CF_{960}}{(1+0.0136015752)^{960}} = 0.6362907480,$
  - $-PV_0 = $198702.7060049167$
- At t = 961,
  - -g = 0.0410000000,

- $-CF_{961} = CF_{960}(1 + 0.0410000000) = 284244.5046326894,$   $-PVPayment = \frac{CF_{961}}{(1+0.0136015752)^{961}} = 0.6534901729,$  $-PV_0 = \$198703.3594950896$
- At t = 962,
  - -g = 0.0410000000,
  - $-CF_{962} = CF_{961}(1 + 0.0410000000) = 295898.5293226297,$
  - $-PVPayment = \frac{CF_{962}}{(1+0.0136015752)^{962}} = 0.6711545114,$
  - $-PV_0 = \$198704.0306496010$
- At t = 963,
  - -g = 0.19000000000,
  - $-CF_{963} = CF_{926}(1 + 0.1900000000) = 82882.6265950469,$
  - $-PVPayment = \frac{CF_{963}}{(1+0.0136015752)^{963}} = 0.1854709669,$
  - $-PV_0 = \$198704.2161205679$
- At t = 964,
  - -g = 0.0410000000,
  - $-CF_{964} = CF_{963}(1 + 0.0410000000) = 86280.8142854438,$
  - $-PVPayment = \frac{CF_{964}}{(1+0.0136015752)^{964}} = 0.1904843888,$
  - $-PV_0 = \$198704.4066049567$
- At t = 965,
  - g = 0.0410000000,
  - $CF_{965} = CF_{964}(1 + 0.0410000000) = 89818.3276711470,$
  - $-PVPayment = \frac{CF_{965}}{(1+0.0136015752)^{965}} = 0.1956333273,$
  - $-PV_0 = $198704.6022382840$
- At t = 966.
  - -g = 0.0410000000,
  - $CF_{966} = CF_{965}(1 + 0.0410000000) = 93500.8791056641,$
  - $-PVPayment = \frac{CF_{966}}{(1+0.0136015752)^{966}} = 0.2009214456,$
  - $PV_0 = \$198704.8031597295$
- At t = 967,
  - -g = 0.0410000000,
  - $-CF_{967} = CF_{966}(1 + 0.0410000000) = 97334.4151489963,$
  - $-PVPayment = \frac{CF_{967}}{(1+0.0136015752)^{967}} = 0.2063525057,$
  - $-PV_0 = $198705.0095122352$
- At t = 968,
  - -q = 0.0410000000,
  - $CF_{968} = CF_{967}(1 + 0.0410000000) = 101325.1261701051,$
  - $-PVPayment = \frac{CF_{968}}{(1+0.0136015752)^{968}} = 0.2119303715,$

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-PV_0 = $198705.2214426067
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- At t = 969,
  - g = 0.0410000000,
  - $-CF_{969} = CF_{968}(1 + 0.0410000000) = 105479.4563430794,$
  - $-PVPayment = \frac{CF_{969}}{(1+0.0136015752)^{969}} = 0.2176590114,$
  - $-PV_0 = \$198705.4391016181$
- At t = 970,
  - -g = 0.0410000000,
  - $-CF_{970} = CF_{969}(1 + 0.0410000000) = 109804.1140531457,$
  - $-PVPayment = \frac{CF_{970}}{(1+0.0136015752)^{970}} = 0.2235425007,$
  - $-PV_0 = \$198705.6626441187$
- At t = 971,
  - -g = 0.0410000000,
  - $-CF_{971} = CF_{970}(1 + 0.0410000000) = 114306.0827293246,$
  - $-PVPayment = \frac{CF_{971}}{(1+0.0136015752)^{971}} = 0.2295850252,$
  - $-PV_0 = $198705.8922291439$
- At t = 972,
  - -g = 0.0410000000,
  - $-CF_{972} = CF_{971}(1 + 0.0410000000) = 118992.6321212269,$
  - $-PVPayment = \frac{CF_{972}}{(1+0.0136015752)^{972}} = 0.2357908838,$
  - $PV_0 = \$198706.1280200277$
- At t = 973,
  - -g = 0.0410000000,
  - $-CF_{973} = CF_{972}(1 + 0.0410000000) = 123871.3300381972,$
  - $-PVPayment = \frac{CF_{973}}{(1+0.0136015752)^{973}} = 0.2421644915,$
  - $-PV_0 = $198706.3701845192$
- At t = 974,
  - -g = 0.0410000000,
  - $-CF_{974} = CF_{973}(1 + 0.0410000000) = 128950.0545697633,$
  - $-PVPayment = \frac{CF_{974}}{(1+0.0136015752)^{974}} = 0.2487103827,$
  - $-PV_0 = $198706.6188949019$
- At t = 975,
  - -g = 0.0410000000,
  - $-CF_{975} = CF_{974}(1 + 0.0410000000) = 134237.0068071236,$
  - $-PVPayment = \frac{CF_{975}}{(1+0.0136015752)^{975}} = 0.2554332143,$
  - $-PV_0 = \$198706.8743281161$
- At t = 976,

- -g = 0.0410000000,  $-CF_{976} = CF_{975}(1 + 0.0410000000) = 139740.7240862157,$   $-PVPayment = \frac{CF_{976}}{(1+0.0136015752)^{976}} = 0.2623377691,$
- $-PV_0 = \$198707.1366658853$
- At t = 977,
  - -g = 0.0410000000,
  - $-CF_{977} = CF_{976}(1 + 0.0410000000) = 145470.0937737505,$
  - $-PVPayment = \frac{CF_{977}}{(1+0.0136015752)^{977}} = 0.2694289594,$
  - $-PV_0 = $198707.4060948447$
- At t = 978,
  - -g = 0.0410000000,
  - $-CF_{978} = CF_{977}(1 + 0.0410000000) = 151434.3676184743,$
  - $-PVPayment = \frac{CF_{978}}{(1+0.0136015752)^{978}} = 0.2767118300,$
  - $-PV_0 = $198707.6828066747$
- At t = 979,
  - -g = 0.0410000000,
  - $-CF_{979} = CF_{978}(1 + 0.0410000000) = 157643.1766908317,$
  - $-PVPayment = \frac{CF_{979}}{(1+0.0136015752)^{979}} = 0.2841915621,$
  - $-PV_0 = \$198707.9669982367$
- At t = 980,
  - g = 0.0410000000,
  - $-CF_{980} = CF_{979}(1 + 0.0410000000) = 164106.5469351558,$
  - $-PVPayment = \frac{CF_{980}}{(1+0.0136015752)^{980}} = 0.2918734771,$
  - $PV_0 = \$198708.2588717138$
- At t = 981,
  - -q = 0.0410000000,
  - $-CF_{981} = CF_{980}(1 + 0.0410000000) = 170834.9153594972,$
  - $-PVPayment = \frac{CF_{981}}{(1+0.0136015752)^{981}} = 0.2997630401,$
  - $-PV_0 = $198708.5586347539$
- At t = 982,
  - -g = 0.0410000000,
  - $-CF_{982} = CF_{981}(1 + 0.0410000000) = 177839.1468892365,$
  - $-PVPayment = \frac{CF_{982}}{(1+0.0136015752)^{982}} = 0.3078658640,$
  - $-PV_0 = $198708.8665006180$
- At t = 983,
  - -g = 0.0410000000,
  - $-CF_{983} = CF_{982}(1 + 0.0410000000) = 185130.5519116952,$

- $-PVPayment = \frac{CF_{983}}{(1+0.0136015752)^{983}} = 0.3161877135,$  $-PV_0 = $198709.1826883314$
- At t = 984,
  - -g = 0.0410000000,
  - $-CF_{984} = CF_{983}(1 + 0.0410000000) = 192720.9045400747,$
  - $-PVPayment = \frac{CF_{984}}{(1+0.0136015752)^{984}} = 0.3247345089,$
  - $-PV_0 = $198709.5074228403$
- At t = 985,
  - -g = 0.0410000000,
  - $-CF_{985} = CF_{984}(1 + 0.0410000000) = 200622.4616262178,$
  - $-PVPayment = \frac{CF_{985}}{(1+0.0136015752)^{985}} = 0.3335123307,$
  - $PV_0 = \$198709.8409351710$
- At t = 986,
  - -g = 0.0410000000,
  - $-CF_{986} = CF_{985}(1 + 0.0410000000) = 208847.9825528927,$
  - $-PVPayment = \frac{CF_{986}}{(1+0.0136015752)^{986}} = 0.3425274237,$
  - $-PV_0 = $198710.1834625947$
- At t = 987,
  - -g = 0.0410000000,
  - $-CF_{987} = CF_{986}(1 + 0.0410000000) = 217410.7498375612,$
  - $-PVPayment = \frac{CF_{987}}{(1+0.0136015752)^{987}} = 0.3517862016,$
  - $-PV_0 = $198710.5352487963$
- At t = 988,
  - g = 0.0410000000,
  - $CF_{988} = CF_{987}(1 + 0.0410000000) = 226324.5905809012,$
  - $-PVPayment = \frac{CF_{988}}{(1+0.0136015752)^{988}} = 0.3612952513,$
  - $-PV_0 = \$198710.8965440477$
- At t = 989.
  - -g = 0.0410000000,
  - $-CF_{989} = CF_{988}(1 + 0.0410000000) = 235603.8987947182,$
  - $-PVPayment = \frac{CF_{989}}{(1+0.0136015752)^{989}} = 0.3710613379,$
  - $-PV_0 = $198711.2676053856$
- At t = 990,
  - -g = 0.0410000000,
  - $CF_{990} = CF_{989}(1 + 0.0410000000) = 245263.6586453016,$
  - $-PVPayment = \frac{CF_{990}}{(1+0.0136015752)^{990}} = 0.3810914093,$
  - $-PV_0 = $198711.6486967949$

- At t = 991,
  - -g = 0.0410000000,
  - $-CF_{991} = CF_{990}(1 + 0.0410000000) = 255319.4686497589,$
  - $-PVPayment = \frac{CF_{991}}{(1+0.0136015752)^{991}} = 0.3913926012,$
  - $-PV_0 = \$198712.0400893961$
- At t = 992,
  - -g = 0.0410000000,
  - $-CF_{992} = CF_{991}(1 + 0.0410000000) = 265787.5668643990,$
  - $-PVPayment = \frac{CF_{992}}{(1+0.0136015752)^{992}} = 0.4019722421,$
  - $-PV_0 = \$198712.4420616382$
- At t = 993,
  - -g = 0.0410000000,
  - $-CF_{993} = CF_{992}(1 + 0.0410000000) = 276684.8571058394,$
  - $-PVPayment = \frac{CF_{993}}{(1+0.0136015752)^{993}} = 0.4128378589,$
  - $-PV_0 = $198712.8548994971$
- At t = 994,
  - -g = 0.0410000000,
  - $-CF_{994} = CF_{993}(1 + 0.0410000000) = 288028.9362471788,$
  - $-PVPayment = \frac{CF_{994}}{(1+0.0136015752)^{994}} = 0.4239971815,$
  - $-PV_0 = \$198713.2788966786$
- At t = 995,
  - -q = 0.0410000000,
  - $-CF_{995} = CF_{994}(1 + 0.0410000000) = 299838.1226333131,$
  - $-PVPayment = \frac{CF_{995}}{(1+0.0136015752)^{995}} = 0.4354581492,$
  - $-PV_0 = $198713.7143548278$
- At t = 996,
  - -g = 0.0410000000,
  - $CF_{996} = CF_{995}(1 + 0.0410000000) = 312131.4856612789,$
  - $-PVPayment = \frac{CF_{996}}{(1+0.0136015752)^{996}} = 0.4472289156,$
  - $-PV_0 = $198714.1615837433$
- At t = 997,
  - -g = 0.0410000000,
  - $-CF_{997} = CF_{996}(1 + 0.0410000000) = 324928.8765733913,$
  - $-PVPayment = \frac{CF_{997}}{(1+0.0136015752)^{997}} = 0.4593178547,$
  - $-PV_0 = $198714.6209015981$
- At t = 998,
  - g = 0.0410000000,

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-CF_{998} = CF_{997}(1 + 0.0410000000) = 338250.9605129003,
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$$-PVPayment = \frac{CF_{998}}{(1+0.0136015752)^{998}} = 0.4717335672,$$

- $PV_0 = \$198715.0926351652$
- At t = 999,
  - -g = 0.0410000000,
  - $-CF_{999} = CF_{998}(1 + 0.0410000000) = 352119.2498939292,$
  - $-PVPayment = \frac{CF_{999}}{(1+0.0136015752)^{999}} = 0.4844848858,$
  - $PV_0 = \$198715.5771200510$
- At t = 1000,
  - -q = 0.19000000000
  - $-CF_{1000} = CF_{963}(1 + 0.1900000000) = 98630.3256481058,$
  - $-PVPayment = \frac{CF_{1000}}{(1+0.0136015752)^{1000}} = 0.1338855341,$
  - $-PV_0 = \$198715.7110055851$
- At t = 1001,
  - -g = 0.0410000000,
  - $-CF_{1001} = CF_{1000}(1 + 0.0410000000) = 102674.1689996782,$
  - $-PVPayment = \frac{CF_{1001}}{(1+0.0136015752)^{1001}} = 0.1375045623,$
  - $-PV_0 = $198715.8485101474$
- At t = 1002,
  - -g = 0.04100000000
  - $-CF_{1002} = CF_{1001}(1 + 0.0410000000) = 106883.8099286650,$
  - $-PVPayment = \frac{CF_{1002}}{(1+0.0136015752)^{1002}} = 0.1412214157,$
  - $-PV_0 = $198715.9897315631$
- At t = 1003,
  - -g = 0.0410000000,
  - $CF_{1003} = CF_{1002}(1 + 0.0410000000) = 111266.0461357402,$
  - $-PVPayment = \frac{CF_{1003}}{(1+0.0136015752)^{1003}} = 0.1450387384,$
  - $PV_0 = \$198716.1347703015$
- At t = 1004,
  - -g = 0.0410000000,
  - $-CF_{1004} = CF_{1003}(1 + 0.0410000000) = 115827.9540273056,$
  - $-PVPayment = \frac{CF_{1004}}{(1+0.0136015752)^{1004}} = 0.1489592463,$
  - $-PV_0 = $198716.2837295478$
- At t = 1005,
  - -g = 0.0410000000,
  - $CF_{1005} = CF_{1004}(1 + 0.0410000000) = 120576.9001424251,$
  - $-PVPayment = \frac{CF_{1005}}{(1+0.0136015752)^{1005}} = 0.1529857285,$

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-PV_0 = $198716.4367152763
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- At t = 1006,
  - g = 0.0410000000,
  - $-CF_{1006} = CF_{1005}(1 + 0.0410000000) = 125520.5530482645,$
  - $-PVPayment = \frac{CF_{1006}}{(1+0.0136015752)^{1006}} = 0.1571210496,$
  - $-PV_0 = $198716.5938363258$
- At t = 1007,
  - -g = 0.0410000000,
  - $-CF_{1007} = CF_{1006}(1 + 0.0410000000) = 130666.8957232433,$
  - $-PVPayment = \frac{CF_{1007}}{(1+0.0136015752)^{1007}} = 0.1613681516,$
  - $-PV_0 = $198716.7552044774$
- At t = 1008,
  - -g = 0.0410000000,
  - $-CF_{1008} = CF_{1007}(1 + 0.0410000000) = 136024.2384478963,$
  - $-PVPayment = \frac{CF_{1008}}{(1+0.0136015752)^{1008}} = 0.1657300559,$
  - $PV_0 = \$198716.9209345333$
- At t = 1009,
  - -q = 0.0410000000
  - $-CF_{1009} = CF_{1008}(1 + 0.0410000000) = 141601.2322242600,$
  - $-PVPayment = \frac{CF_{1009}}{(1+0.0136015752)^{1009}} = 0.1702098659,$
  - $-PV_0 = $198717.0911443993$
- At t = 1010,
  - -g = 0.0410000000,
  - $CF_{1010} = CF_{1009}(1 + 0.0410000000) = 147406.8827454547,$
  - $-PVPayment = \frac{CF_{1010}}{(1+0.0136015752)^{1010}} = 0.1748107686,$
  - $-PV_0 = $198717.2659551679$
- At t = 1011,
  - -g = 0.0410000000,
  - $-CF_{1011} = CF_{1010}(1 + 0.0410000000) = 153450.5649380183,$
  - $-PVPayment = \frac{CF_{1011}}{(1+0.0136015752)^{1011}} = 0.1795360372,$
  - $-PV_0 = \$198717.4454912051$
- At t = 1012,
  - g = 0.0410000000,
  - $-CF_{1012} = CF_{1011}(1 + 0.0410000000) = 159742.0381004770,$
  - $-PVPayment = \frac{CF_{1012}}{(1+0.0136015752)^{1012}} = 0.1843890334,$
  - $-PV_0 = $198717.6298802385$
- At t = 1013,

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-g = 0.0410000000,
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- $-CF_{1013} = CF_{1012}(1 + 0.0410000000) = 166291.4616625966,$
- $-PVPayment = \frac{CF_{1013}}{(1+0.0136015752)^{1013}} = 0.1893732098,$
- $-PV_0 = $198717.8192534484$
- At t = 1014,
  - g = 0.0410000000
  - $-CF_{1014} = CF_{1013}(1 + 0.0410000000) = 173109.4115907630,$
  - $-PVPayment = \frac{CF_{1014}}{(1+0.0136015752)^{1014}} = 0.1944921123,$
  - $-PV_0 = \$198718.0137455607$
- At t = 1015,
  - -g = 0.0410000000,
  - $-CF_{1015} = CF_{1014}(1 + 0.0410000000) = 180206.8974659843,$
  - $-PVPayment = \frac{CF_{1015}}{(1+0.0136015752)^{1015}} = 0.1997493827,$
  - $-PV_0 = $198718.2134949434$
- At t = 1016,
  - -g = 0.0410000000,
  - $-CF_{1016} = CF_{1015}(1 + 0.0410000000) = 187595.3802620897,$
  - $-PVPayment = \frac{CF_{1016}}{(1+0.0136015752)^{1016}} = 0.2051487611,$
  - $-PV_0 = $198718.4186437045$
- At t = 1017,
  - g = 0.0410000000
  - $-CF_{1017} = CF_{1016}(1 + 0.0410000000) = 195286.7908528353,$
  - $-PVPayment = \frac{CF_{1017}}{(1+0.0136015752)^{1017}} = 0.2106940888,$
  - $-PV_0 = \$198718.6293377933$
- At t = 1018,
  - -q = 0.0410000000,
  - $-CF_{1018} = CF_{1017}(1 + 0.0410000000) = 203293.5492778016,$
  - $-PVPayment = \frac{CF_{1018}}{(1+0.0136015752)^{1018}} = 0.2163893109,$
  - $-PV_0 = $198718.8457271042$
- At t = 1019,
  - -g = 0.0410000000,
  - $CF_{1019} = CF_{1018}(1 + 0.0410000000) = 211628.5847981914,$
  - $-PVPayment = \frac{CF_{1019}}{(1+0.0136015752)^{1019}} = 0.2222384793,$
  - $PV_0 = \$198719.0679655835$
- At t = 1020,
  - -g = 0.0410000000,
  - $-CF_{1020} = CF_{1019}(1 + 0.0410000000) = 220305.3567749173,$

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\begin{array}{l} -\ PVPayment = \frac{CF_{1020}}{(1+0.0136015752)^{1020}} = 0.2282457551, \\ -\ PV_0 = \$198719.2962113386 \end{array}
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- At t = 1021,
  - -g = 0.0410000000,
  - $CF_{1021} = CF_{1020}(1 + 0.0410000000) = 229337.8764026889,$
  - $-PVPayment = \frac{CF_{1021}}{(1+0.0136015752)^{1021}} = 0.2344154122,$
  - $-PV_0 = $198719.5306267508$
- At t = 1022,
  - -g = 0.0410000000,
  - $-CF_{1022} = CF_{1021}(1 + 0.0410000000) = 238740.7293351991,$
  - $-PVPayment = \frac{CF_{1022}}{(1+0.0136015752)^{1022}} = 0.2407518399,$
  - $-PV_0 = \$198719.7713785907$
- At t = 1023,
  - -g = 0.0410000000,
  - $CF_{1023} = CF_{1022}(1 + 0.0410000000) = 248529.0992379422,$
  - $-PVPayment = \frac{CF_{1023}}{(1+0.0136015752)^{1023}} = 0.2472595460,$
  - $-PV_0 = $198720.0186381366$
- At t = 1024,
  - -g = 0.0410000000,
  - $-CF_{1024} = CF_{1023}(1 + 0.0410000000) = 258718.7923066978,$
  - $-PVPayment = \frac{CF_{1024}}{(1+0.0136015752)^{1024}} = 0.2539431604,$
  - $PV_0 = \$198720.2725812970$
- At t = 1025,
  - g = 0.0410000000,
  - $-CF_{1025} = CF_{1024}(1 + 0.0410000000) = 269326.2627912724,$
  - $-PVPayment = \frac{CF_{1025}}{(1+0.0136015752)^{1025}} = 0.2608074379,$
  - $-PV_0 = \$198720.5333887349$
- At t = 1026,
  - -g = 0.0410000000,
  - $-CF_{1026} = CF_{1025}(1 + 0.0410000000) = 280368.6395657146,$
  - $-PVPayment = \frac{CF_{1026}}{(1+0.0136015752)^{1026}} = 0.2678572622,$
  - $-PV_0 = $198720.8012459971$
- At t = 1027,
  - -g = 0.0410000000,
  - $CF_{1027} = CF_{1026}(1 + 0.0410000000) = 291863.7537879089,$
  - $-PVPayment = \frac{CF_{1027}}{(1+0.0136015752)^{1027}} = 0.2750976486,$
  - $-PV_0 = $198721.0763436457$

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• At t = 1028,
```

- -g = 0.0410000000,
- $-CF_{1028} = CF_{1027}(1 + 0.0410000000) = 303830.1676932131,$
- $-PVPayment = \frac{CF_{1028}}{(1+0.0136015752)^{1028}} = 0.2825337481,$
- $PV_0 = \$198721.3588773938$
- At t = 1029,
  - -g = 0.0410000000,
  - $-CF_{1029} = CF_{1028}(1 + 0.0410000000) = 316287.2045686348,$
  - $-PVPayment = \frac{CF_{1029}}{(1+0.0136015752)^{1029}} = 0.2901708511,$
  - $-PV_0 = $198721.6490482450$
- At t = 1030,
  - -g = 0.0410000000,
  - $CF_{1030} = CF_{1029}(1 + 0.0410000000) = 329254.9799559488,$
  - $-PVPayment = \frac{CF_{1030}}{(1+0.0136015752)^{1030}} = 0.2980143909,$
  - $-PV_0 = $198721.9470626359$
- At t = 1031,
  - -g = 0.0410000000,
  - $-CF_{1031} = CF_{1030}(1 + 0.0410000000) = 342754.4341341427,$
  - $-PVPayment = \frac{CF_{1031}}{(1+0.0136015752)^{1031}} = 0.3060699475,$
  - $-PV_0 = \$198722.2531325833$
- At t = 1032,
  - -q = 0.0410000000,
  - $-CF_{1032} = CF_{1031}(1 + 0.0410000000) = 356807.3659336425,$
  - $-PVPayment = \frac{CF_{1032}}{(1+0.0136015752)^{1032}} = 0.3143432519,$
  - $PV_0 = \$198722.5674758353$
- At t = 1033,
  - -g = 0.0410000000,
  - $CF_{1033} = CF_{1032}(1 + 0.0410000000) = 371436.4679369219,$
  - $-PVPayment = \frac{CF_{1033}}{(1+0.0136015752)^{1033}} = 0.3228401901,$
  - $-PV_0 = $198722.8903160254$
- At t = 1034,
  - -g = 0.0410000000,
  - $-CF_{1034} = CF_{1033}(1 + 0.0410000000) = 386665.3631223356,$
  - $-PVPayment = \frac{CF_{1034}}{(1+0.0136015752)^{1034}} = 0.3315668071,$
  - $-PV_0 = $198723.2218828325$
- At t = 1035,
  - -g = 0.0410000000,

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-CF_{1035} = CF_{1034}(1 + 0.0410000000) = 402518.6430103513,
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- $-PVPayment = \frac{CF_{1035}}{(1+0.0136015752)^{1035}} = 0.3405293111,$
- $PV_0 = \$198723.5624121436$
- At t = 1036,
  - -g = 0.0410000000,
  - $-CF_{1036} = CF_{1035}(1 + 0.0410000000) = 419021.9073737757,$
  - $PV Payment = \frac{CF_{1036}}{(1+0.0136015752)^{1036}} = 0.3497340785,$
  - $-PV_0 = \$198723.9121462221$
- At t = 1037,
  - -q = 0.19000000000
  - $-CF_{1037} = CF_{1000}(1 + 0.1900000000) = 117370.0875212459,$
  - $-PVPayment = \frac{CF_{1037}}{(1+0.0136015752)^{1037}} = 0.0966476669,$
  - $-PV_0 = $198724.0087938890$
- At t = 1038,
  - -g = 0.0410000000,
  - $-CF_{1038} = CF_{1037}(1 + 0.0410000000) = 122182.2611096170,$
  - $-PVPayment = \frac{CF_{1038}}{(1+0.0136015752)^{1038}} = 0.0992601272,$
  - $PV_0 = \$198724.1080540162$
- At t = 1039,
  - -g = 0.0410000000,
  - $-CF_{1039} = CF_{1038}(1 + 0.0410000000) = 127191.7338151113,$
  - $-PVPayment = \frac{CF_{1039}}{(1+0.0136015752)^{1039}} = 0.1019432043,$
  - $PV_0 = \$198724.2099972205$
- At t = 1040,
  - -g = 0.0410000000,
  - $CF_{1040} = CF_{1039}(1 + 0.0410000000) = 132406.5949015309,$
  - $-PVPayment = \frac{CF_{1040}}{(1+0.0136015752)^{1040}} = 0.1046988069,$
  - $PV_0 = \$198724.3146960274$
- At t = 1041,
  - -g = 0.0410000000,
  - $-CF_{1041} = CF_{1040}(1 + 0.0410000000) = 137835.2652924936,$
  - $-PVPayment = \frac{CF_{1041}}{(1+0.0136015752)^{1041}} = 0.1075288957,$
  - $-PV_0 = $198724.4222249231$
- At t = 1042,
  - -g = 0.0410000000,
  - $CF_{1042} = CF_{1041}(1 + 0.0410000000) = 143486.5111694859,$
  - $-PVPayment = \frac{CF_{1042}}{(1+0.0136015752)^{1042}} = 0.1104354838,$

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-PV_0 = $198724.5326604069
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• At t = 1043,
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- g = 0.0410000000,
- $-CF_{1043} = CF_{1042}(1 + 0.0410000000) = 149369.4581274348,$
- $-PVPayment = \frac{CF_{1043}}{(1+0.0136015752)^{1043}} = 0.1134206393,$
- $-PV_0 = $198724.6460810462$
- At t = 1044,
  - -g = 0.0410000000,
  - $-CF_{1044} = CF_{1043}(1 + 0.0410000000) = 155493.6059106596,$
  - $-PVPayment = \frac{CF_{1044}}{(1+0.0136015752)^{1044}} = 0.1164864858,$
  - $-PV_0 = \$198724.7625675320$
- At t = 1045,
  - -g = 0.0410000000,
  - $-CF_{1045} = CF_{1044}(1 + 0.0410000000) = 161868.8437529966,$
  - $-PVPayment = \frac{CF_{1045}}{(1+0.0136015752)^{1045}} = 0.1196352045,$
  - $PV_0 = \$198724.8822027365$
- At t = 1046,
  - -q = 0.0410000000
  - $-CF_{1046} = CF_{1045}(1 + 0.0410000000) = 168505.4663468695,$
  - $-PVPayment = \frac{CF_{1046}}{(1+0.0136015752)^{1046}} = 0.1228690355,$
  - $-PV_0 = \$198725.0050717720$
- At t = 1047,
  - -g = 0.0410000000,
  - $CF_{1047} = CF_{1046}(1 + 0.0410000000) = 175414.1904670911,$
  - $-PVPayment = \frac{CF_{1047}}{(1+0.0136015752)^{1047}} = 0.1261902793,$
  - $-PV_0 = \$198725.1312620513$
- At t = 1048,
  - -g = 0.0410000000,
  - $-CF_{1048} = CF_{1047}(1 + 0.0410000000) = 182606.1722762418,$
  - $-PVPayment = \frac{CF_{1048}}{(1+0.0136015752)^{1048}} = 0.1296012990,$
  - $-PV_0 = $198725.2608633503$
- At t = 1049,
  - g = 0.0410000000,
  - $-CF_{1049} = CF_{1048}(1 + 0.0410000000) = 190093.0253395677,$
  - $-PVPayment = \frac{CF_{1049}}{(1+0.0136015752)^{1049}} = 0.1331045211,$
  - $-PV_0 = $198725.3939678714$
- At t = 1050,

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-g = 0.0410000000,

-CF_{1050} = CF_{1049}(1 + 0.0410000000) = 197886.8393784900,
```

- $-PVPayment = \frac{CF_{1050}}{(1+0.0136015752)^{1050}} = 0.1367024379,$
- $-PV_0 = \$198725.5306703094$
- At t = 1051,
  - g = 0.0410000000
  - $-CF_{1051} = CF_{1050}(1 + 0.0410000000) = 206000.1997930080,$
  - $-PVPayment = \frac{CF_{1051}}{(1+0.0136015752)^{1051}} = 0.1403976092,$
  - $-PV_0 = \$198725.6710679186$
- At t = 1052,
  - -g = 0.0410000000,
  - $CF_{1052} = CF_{1051}(1 + 0.0410000000) = 214446.2079845213,$
  - $-PVPayment = \frac{CF_{1052}}{(1+0.0136015752)^{1052}} = 0.1441926639,$
  - $-PV_0 = $198725.8152605825$
- At t = 1053,
  - -g = 0.0410000000,
  - $-CF_{1053} = CF_{1052}(1 + 0.0410000000) = 223238.5025118867,$
  - $-PVPayment = \frac{CF_{1053}}{(1+0.0136015752)^{1053}} = 0.1480903017,$
  - $-PV_0 = \$198725.9633508842$
- At t = 1054,
  - g = 0.0410000000
  - $CF_{1054} = CF_{1053}(1 + 0.0410000000) = 232391.2811148740,$
  - $-PVPayment = \frac{CF_{1054}}{(1+0.0136015752)^{1054}} = 0.1520932957,$
  - $-PV_0 = $198726.1154441798$
- At t = 1055,
  - -q = 0.0410000000,
  - $-CF_{1055} = CF_{1054}(1 + 0.0410000000) = 241919.3236405838,$
  - $-PVPayment = \frac{CF_{1055}}{(1+0.0136015752)^{1055}} = 0.1562044936,$
  - $-PV_0 = $198726.2716486735$
- At t = 1056.
  - -g = 0.0410000000,
  - $-CF_{1056} = CF_{1055}(1 + 0.0410000000) = 251838.0159098477,$
  - $-PVPayment = \frac{CF_{1056}}{(1+0.0136015752)^{1056}} = 0.1604268204,$
  - $PV_0 = \$198726.4320754939$
- At t = 1057,
  - -g = 0.0410000000,
  - $-CF_{1057} = CF_{1056}(1 + 0.0410000000) = 262163.3745621515,$

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-PVPayment = \frac{CF_{1057}}{(1+0.0136015752)^{1057}} = 0.1647632799, 
-PV_0 = $198726.5968387737
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- At t = 1058,
  - -g = 0.0410000000,
  - $CF_{1058} = CF_{1057}(1 + 0.0410000000) = 272912.0729191997,$
  - $-PVPayment = \frac{CF_{1058}}{(1+0.0136015752)^{1058}} = 0.1692169572,$
  - $-PV_0 = $198726.7660557309$
- At t = 1059,
  - -g = 0.0410000000,
  - $-CF_{1059} = CF_{1058}(1 + 0.0410000000) = 284101.4679088869,$
  - $-PVPayment = \frac{CF_{1059}}{(1+0.0136015752)^{1059}} = 0.1737910208,$
  - $-PV_0 = \$198726.9398467517$
- At t = 1060,
  - -g = 0.0410000000,
  - $CF_{1060} = CF_{1059}(1 + 0.0410000000) = 295749.6280931513,$
  - $-PVPayment = \frac{CF_{1060}}{(1+0.0136015752)^{1060}} = 0.1784887248,$
  - $-PV_0 = $198727.1183354765$
- At t = 1061,
  - -g = 0.0410000000,
  - $-CF_{1061} = CF_{1060}(1 + 0.0410000000) = 307875.3628449704,$
  - $-PVPayment = \frac{CF_{1061}}{(1+0.0136015752)^{1061}} = 0.1833134114,$
  - $PV_0 = \$198727.3016488879$
- At t = 1062,
  - -g = 0.0410000000,
  - $-CF_{1062} = CF_{1061}(1 + 0.0410000000) = 320498.2527216142,$
  - $-PVPayment = \frac{CF_{1062}}{(1+0.0136015752)^{1062}} = 0.1882685129,$
  - $-PV_0 = \$198727.4899174008$
- At t = 1063,
  - -g = 0.0410000000,
  - $CF_{1063} = CF_{1062}(1 + 0.0410000000) = 333638.6810832004,$
  - $-PVPayment = \frac{CF_{1063}}{(1+0.0136015752)^{1063}} = 0.1933575546,$
  - $-PV_0 = $198727.6832749553$
- At t = 1064,
  - -g = 0.0410000000,
  - $CF_{1064} = CF_{1063}(1 + 0.0410000000) = 347317.8670076116,$
  - $-PVPayment = \frac{CF_{1064}}{(1+0.0136015752)^{1064}} = 0.1985841570,$
  - $-PV_0 = $198727.8818591123$

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• At t = 1065,
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- -g = 0.0410000000,
- $-CF_{1065} = CF_{1064}(1 + 0.0410000000) = 361557.8995549236,$
- $-PVPayment = \frac{CF_{1065}}{(1+0.0136015752)^{1065}} = 0.2039520384,$
- $PV_0 = \$198728.0858111508$
- At t = 1066,
  - -g = 0.0410000000,
  - $-CF_{1066} = CF_{1065}(1 + 0.0410000000) = 376381.7734366754,$
  - $-PVPayment = \frac{CF_{1066}}{(1+0.0136015752)^{1066}} = 0.2094650178,$
  - $-PV_0 = \$198728.2952761686$
- At t = 1067,
  - -g = 0.0410000000,
  - $-CF_{1067} = CF_{1066}(1 + 0.0410000000) = 391813.4261475791,$
  - $-PVPayment = \frac{CF_{1067}}{(1+0.0136015752)^{1067}} = 0.2151270172,$
  - $-PV_0 = \$198728.\hat{5}104031858$
- At t = 1068,
  - -g = 0.0410000000,
  - $-CF_{1068} = CF_{1067}(1 + 0.0410000000) = 407877.7766196298,$
  - $-PVPayment = \frac{CF_{1068}}{(1+0.0136015752)^{1068}} = 0.2209420648,$
  - $PV_0 = \$198728.7313452506$
- At t = 1069,
  - -q = 0.0410000000,
  - $-CF_{1069} = CF_{1068}(1 + 0.0410000000) = 424600.7654610346,$
  - $-PVPayment = \frac{CF_{1069}}{(1+0.0136015752)^{1069}} = 0.2269142976,$
  - $PV_0 = \$198728.9582595482$
- At t = 1070,
  - -g = 0.0410000000,
  - $-CF_{1070} = CF_{1069}(1 + 0.0410000000) = 442009.3968449370,$
  - $-PVPayment = \frac{CF_{1070}}{(1+0.0136015752)^{1070}} = 0.2330479644,$
  - $-PV_0 = $198729.1913075125$
- At t = 1071,
  - -g = 0.0410000000,
  - $-CF_{1071} = CF_{1070}(1 + 0.0410000000) = 460131.7821155794,$
  - $-PVPayment = \frac{CF_{1071}}{(1+0.0136015752)^{1071}} = 0.2393474288,$
  - $-PV_0 = $198729.4306549414$
- At t = 1072,
  - g = 0.0410000000,

- $-CF_{1072} = CF_{1071}(1 + 0.0410000000) = 478997.1851823181,$
- $-PVPayment = \frac{CF_{1072}}{(1+0.0136015752)^{1072}} = 0.2458171727,$
- $PV_0 = \$198729.6764721140$
- At t = 1073,
  - -g = 0.0410000000,
  - $-CF_{1073} = CF_{1072}(1 + 0.0410000000) = 498636.0697747932,$
  - $PV Payment = \frac{CF_{1073}}{(1+0.0136015752)^{1073}} = 0.2524617986,$
  - $PV_0 = \$198729.9289339126$
- At t = 1074,
  - -q = 0.19000000000
  - $-CF_{1074} = CF_{1037}(1 + 0.1900000000) = 139670.4041502826,$
  - $-PVPayment = \frac{CF_{1074}}{(1+0.0136015752)^{1074}} = 0.0697668467,$
  - $-PV_0 = $198729.9987007593$
- At t = 1075.
  - -g = 0.0410000000,
  - $-CF_{1075} = CF_{1074}(1 + 0.0410000000) = 145396.8907204442,$
  - $-PVPayment = \frac{CF_{1075}}{(1+0.0136015752)^{1075}} = 0.0716526978,$
  - $-PV_0 = $198730.0703534571$
- At t = 1076,
  - g = 0.0410000000,
  - $-CF_{1076} = CF_{1075}(1 + 0.0410000000) = 151358.1632399824,$
  - $-PVPayment = \frac{CF_{1076}}{(1+0.0136015752)^{1076}} = 0.0735895250,$
  - $-PV_0 = \$198730.1439429820$
- At t = 1077,
  - -g = 0.0410000000,
  - $CF_{1077} = CF_{1076}(1 + 0.0410000000) = 157563.8479328217,$
  - $-PVPayment = \frac{CF_{1077}}{(1+0.0136015752)^{1077}} = 0.0755787060,$
  - $-PV_0 = \$198730.2195216881$
- At t = 1078,
  - -g = 0.0410000000,
  - $-CF_{1078} = CF_{1077}(1 + 0.0410000000) = 164023.9656980674,$
  - $-PVPayment = \frac{CF_{1078}}{(1+0.0136015752)^{1078}} = 0.0776216562,$
  - $-PV_0 = $198730.2971433442$
- At t = 1079,
  - -g = 0.0410000000,
  - $CF_{1079} = CF_{1078}(1 + 0.0410000000) = 170748.9482916881,$
  - $-PVPayment = \frac{CF_{1079}}{(1+0.0136015752)^{1079}} = 0.0797198288,$

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-PV_0 = \$198730.3768631731
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- At t = 1080,
  - g = 0.0410000000,
  - $-CF_{1080} = CF_{1079}(1 + 0.0410000000) = 177749.6551716473,$
  - $-PVPayment = \frac{CF_{1080}}{(1+0.0136015752)^{1080}} = 0.0818747167,$
  - $-PV_0 = $198730.4587378898$
- At t = 1081,
  - -g = 0.0410000000,
  - $-CF_{1081} = CF_{1080}(1 + 0.0410000000) = 185037.3910336848,$
  - $-PVPayment = \frac{CF_{1081}}{(1+0.0136015752)^{1081}} = 0.0840878528,$
  - $-PV_0 = \$198730.5428257426$
- At t = 1082,
  - -g = 0.0410000000,
  - $-CF_{1082} = CF_{1081}(1 + 0.0410000000) = 192623.9240660659,$
  - $-PVPayment = \frac{CF_{1082}}{(1+0.0136015752)^{1082}} = 0.0863608117,$
  - $PV_0 = \$198730.6291865543$
- At t = 1083,
  - -q = 0.0410000000
  - $-CF_{1083} = CF_{1082}(1 + 0.0410000000) = 200521.5049527746,$
  - $-PVPayment = \frac{CF_{1083}}{(1+0.0136015752)^{1083}} = 0.0886952104,$
  - $-PV_0 = \$198730.7178817648$
- At t = 1084,
  - -g = 0.0410000000,
  - $-CF_{1084} = CF_{1083}(1 + 0.0410000000) = 208742.8866558383,$
  - $-PVPayment = \frac{CF_{1084}}{(1+0.0136015752)^{1084}} = 0.0910927097,$
  - $-PV_0 = $198730.8089744745$
- At t = 1085,
  - -g = 0.0410000000,
  - $-CF_{1085} = CF_{1084}(1 + 0.0410000000) = 217301.3450087277,$
  - $-PVPayment = \frac{CF_{1085}}{(1+0.0136015752)^{1085}} = 0.0935550152,$
  - $-PV_0 = \$198730.9025294897$
- At t = 1086,
  - g = 0.0410000000,
  - $-CF_{1086} = CF_{1085}(1 + 0.0410000000) = 226210.7001540855,$
  - $-PVPayment = \frac{CF_{1086}}{(1+0.0136015752)^{1086}} = 0.0960838787,$
  - $-PV_0 = $198730.9986133685$
- At t = 1087,

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\begin{array}{l} -g = 0.0410000000, \\ -CF_{1087} = CF_{1086}(1+0.0410000000) = 235485.3388604030, \\ -PVPayment = \frac{CF_{1087}}{(1+0.0136015752)^{1087}} = 0.0986810994, \end{array}
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- At t = 1088,
  - g = 0.0410000000,
  - $-CF_{1088} = CF_{1087}(1 + 0.0410000000) = 245140.2377536795,$
  - $-PVPayment = \frac{CF_{1088}}{(1+0.0136015752)^{1088}} = 0.1013485249,$
  - $-PV_0 = \$198731.1986429927$

 $-PV_0 = $198731.0972944678$ 

- At t = 1089.
  - -g = 0.0410000000,
  - $-CF_{1089} = CF_{1088}(1 + 0.0410000000) = 255190.9875015803,$
  - $-PVPayment = \frac{CF_{1089}}{(1+0.0136015752)^{1089}} = 0.1040880529,$
  - $-PV_0 = $198731.3027310456$
- At t = 1090,
  - -g = 0.0410000000,
  - $-CF_{1090} = CF_{1089}(1 + 0.0410000000) = 265653.8179891451,$
  - $-PVPayment = \frac{CF_{1090}}{(1+0.0136015752)^{1090}} = 0.1069016325,$
  - $PV_0 = \$198731.4096326781$
- At t = 1091,
  - g = 0.0410000000
  - $CF_{1091} = CF_{1090}(1 + 0.0410000000) = 276545.6245267000,$
  - $-PVPayment = \frac{CF_{1091}}{(1+0.0136015752)^{1091}} = 0.1097912652,$
  - $-PV_0 = \$198731.5194239433$
- At t = 1092,
  - -q = 0.0410000000,
  - $-CF_{1092} = CF_{1091}(1 + 0.0410000000) = 287883.9951322947,$
  - $-PVPayment = \frac{CF_{1092}}{(1+0.0136015752)^{1092}} = 0.1127590070,$
  - $-PV_0 = $198731.6321829503$
- At t = 1093.
  - -g = 0.0410000000,
  - $-CF_{1093} = CF_{1092}(1 + 0.0410000000) = 299687.2389327187,$
  - $-PVPayment = \frac{CF_{1093}}{(1+0.0136015752)^{1093}} = 0.1158069691,$
  - $PV_0 = \$198731.7479899194$
- At t = 1094,
  - -g = 0.0410000000,
  - $-CF_{1094} = CF_{1093}(1 + 0.0410000000) = 311974.4157289601,$

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-PVPayment = \frac{CF_{1094}}{(1+0.0136015752)^{1094}} = 0.1189373199, 
-PV_0 = $198731.8669272393
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- At t = 1095,
  - -g = 0.0410000000,
  - $-CF_{1095} = CF_{1094}(1 + 0.0410000000) = 324765.3667738475,$
  - $-PVPayment = \frac{CF_{1095}}{(1+0.0136015752)^{1095}} = 0.1221522865,$
  - $-PV_0 = $198731.9890795258$
- At t = 1096,
  - g = 0.0410000000,
  - $-CF_{1096} = CF_{1095}(1 + 0.0410000000) = 338080.7468115752,$
  - $-PVPayment = \frac{CF_{1096}}{(1+0.0136015752)^{1096}} = 0.1254541561,$
  - $PV_0 = \$198732.1145336819$
- At t = 1097,
  - -g = 0.0410000000,
  - $-CF_{1097} = CF_{1096}(1 + 0.0410000000) = 351942.0574308498,$
  - $-PVPayment = \frac{CF_{1097}}{(1+0.0136015752)^{1097}} = 0.1288452778,$
  - $-PV_0 = $198732.2433789597$
- At t = 1098,
  - -g = 0.0410000000,
  - $-CF_{1098} = CF_{1097}(1 + 0.0410000000) = 366371.6817855146,$
  - $-PVPayment = \frac{CF_{1098}}{(1+0.0136015752)^{1098}} = 0.1323280641,$
  - $-PV_0 = $198732.3757070238$
- At t = 1099,
  - g = 0.0410000000,
  - $CF_{1099} = CF_{1098}(1 + 0.0410000000) = 381392.9207387206,$
  - $-PVPayment = \frac{CF_{1099}}{(1+0.0136015752)^{1099}} = 0.1359049927,$
  - $-PV_0 = \$198732.5116120165$
- At t = 1100,
  - -g = 0.0410000000,
  - $CF_{1100} = CF_{1099}(1 + 0.0410000000) = 397030.0304890081,$
  - $-PVPayment = \frac{CF_{1100}}{(1+0.0136015752)^{1100}} = 0.1395786085,$
  - $-PV_0 = \$198732.6511906249$
- At t = 1101,
  - -g = 0.0410000000,
  - $CF_{1101} = CF_{1100}(1 + 0.0410000000) = 413308.2617390574,$
  - $-PVPayment = \frac{CF_{1101}}{(1+0.0136015752)^{1101}} = 0.1433515248,$
  - $-PV_0 = $198732.7945421498$

- At t = 1102,
  - -g = 0.0410000000,
  - $-CF_{1102} = CF_{1101}(1 + 0.0410000000) = 430253.9004703587,$
  - $-PVPayment = \frac{CF_{1102}}{(1+0.0136015752)^{1102}} = 0.1472264261,$
  - $PV_0 = \$198732.9417685758$
- At t = 1103,
  - -g = 0.0410000000,
  - $-CF_{1103} = CF_{1102}(1 + 0.0410000000) = 447894.3103896434,$
  - $-PVPayment = \frac{CF_{1103}}{(1+0.0136015752)^{1103}} = 0.1512060688,$
  - $-PV_0 = \$198733.0929746446$
- At t = 1104,
  - -g = 0.0410000000,
  - $CF_{1104} = CF_{1103}(1 + 0.0410000000) = 466257.9771156188,$
  - $-PVPayment = \frac{CF_{1104}}{(1+0.0136015752)^{1104}} = 0.1552932843,$
  - $-PV_0 = \$198733.2482679290$
- At t = 1105,
  - -g = 0.0410000000,
  - $-CF_{1105} = CF_{1104}(1 + 0.0410000000) = 485374.5541773591,$
  - $-PVPayment = \frac{CF_{1105}}{(1+0.0136015752)^{1105}} = 0.1594909804,$
  - $-PV_0 = $198733.4077589094$
- At t = 1106,
  - -q = 0.0410000000,
  - $-CF_{1106} = CF_{1105}(1 + 0.0410000000) = 505274.9108986308,$
  - $-PVPayment = \frac{CF_{1106}}{(1+0.0136015752)^{1106}} = 0.1638021434,$
  - $PV_0 = \$198733.5715610528$
- At t = 1107,
  - -g = 0.0410000000,
  - $-CF_{1107} = CF_{1106}(1 + 0.0410000000) = 525991.1822454747,$
  - $-PVPayment = \frac{CF_{1107}}{(1+0.0136015752)^{1107}} = 0.1682298405,$
  - $-PV_0 = \$198733.7397908933$
- At t = 1108,
  - -g = 0.0410000000,
  - $CF_{1108} = CF_{1107}(1 + 0.0410000000) = 547556.8207175391,$
  - $-PVPayment = \frac{CF_{1108}}{(1+0.0136015752)^{1108}} = 0.1727772216,$
  - $-PV_0 = $198733.9125681149$
- At t = 1109,
  - -g = 0.0410000000,

- $CF_{1109} = CF_{1108}(1 + 0.0410000000) = 570006.6503669581,$
- $-PVPayment = \frac{CF_{1109}}{(1+0.0136015752)^{1109}} = 0.1774475218,$
- $PV_0 = \$198734.0900156367$
- At t = 1110,
  - -g = 0.0410000000,
  - $-CF_{1110} = CF_{1109}(1 + 0.0410000000) = 593376.9230320033,$
  - $PV Payment = \frac{CF_{1110}}{(1+0.0136015752)^{1110}} = 0.1822440639,$
  - $PV_0 = \$198734.2722597006$
- At t = 1111,
  - g = 0.1900000000
  - $-CF_{1111} = CF_{1074}(1 + 0.1900000000) = 166207.7809388363,$
  - $-PVPayment = \frac{CF_{1111}}{(1+0.0136015752)^{1111}} = 0.0503624459,$
  - $-PV_0 = $198734.3226221464$
- At t = 1112,
  - -g = 0.0410000000,
  - $-CF_{1112} = CF_{1111}(1 + 0.0410000000) = 173022.2999573286,$
  - $-PVPayment = \frac{CF_{1112}}{(1+0.0136015752)^{1112}} = 0.0517237812,$
  - $-PV_0 = $198734.3743459276$
- At t = 1113,
  - g = 0.0410000000,
  - $-CF_{1113} = CF_{1112}(1 + 0.0410000000) = 180116.2142555791,$
  - $-PVPayment = \frac{CF_{1113}}{(1+0.0136015752)^{1113}} = 0.0531219145,$
  - $PV_0 = \$198734.4274678422$
- At t = 1114,
  - -g = 0.0410000000,
  - $-CF_{1114} = CF_{1113}(1 + 0.0410000000) = 187500.9790400578,$
  - $-PVPayment = \frac{CF_{1114}}{(1+0.0136015752)^{1114}} = 0.0545578405,$
  - $-PV_0 = $198734.4820256826$
- At t = 1115,
  - -g = 0.0410000000,
  - $-CF_{1115} = CF_{1114}(1 + 0.0410000000) = 195188.5191807002,$
  - $-PVPayment = \frac{CF_{1115}}{(1+0.0136015752)^{1115}} = 0.0560325806,$
  - $-PV_0 = $198734.5380582632$
- At t = 1116,
  - -g = 0.0410000000,
  - $CF_{1116} = CF_{1115}(1 + 0.0410000000) = 203191.2484671088,$
  - $-PVPayment = \frac{CF_{1116}}{(1+0.0136015752)^{1116}} = 0.0575471840,$

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-PV_0 = $198734.5956054472
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- At t = 1117,
  - g = 0.0410000000,
  - $-CF_{1117} = CF_{1116}(1 + 0.0410000000) = 211522.0896542603,$
  - $-PVPayment = \frac{CF_{1117}}{(1+0.0136015752)^{1117}} = 0.0591027284,$
  - $-PV_0 = $198734.6547081756$
- At t = 1118,
  - -g = 0.0410000000,
  - $-CF_{1118} = CF_{1117}(1 + 0.0410000000) = 220194.4953300849,$
  - $-PVPayment = \frac{CF_{1118}}{(1+0.0136015752)^{1118}} = 0.0607003202,$
  - $-PV_0 = \$198734.7154084958$
- At t = 1119,
  - -g = 0.0410000000,
  - $-CF_{1119} = CF_{1118}(1 + 0.0410000000) = 229222.4696386184,$
  - $-PVPayment = \frac{CF_{1119}}{(1+0.0136015752)^{1119}} = 0.0623410963,$
  - $-PV_0 = \$198734.7777495921$
- At t = 1120,
  - -g = 0.0410000000,
  - $-CF_{1120} = CF_{1119}(1 + 0.0410000000) = 238620.5908938017,$
  - $-PVPayment = \frac{CF_{1120}}{(1+0.0136015752)^{1120}} = 0.0640262237,$
  - $-PV_0 = \$198734.8417758158$
- At t = 1121,
  - -g = 0.0410000000,
  - $-CF_{1121} = CF_{1120}(1 + 0.0410000000) = 248404.0351204476,$
  - $-PVPayment = \frac{CF_{1121}}{(1+0.0136015752)^{1121}} = 0.0657569014,$
  - $-PV_0 = $198734.9075327172$
- At t = 1122,
  - -g = 0.0410000000,
  - $-CF_{1122} = CF_{1121}(1 + 0.0410000000) = 258588.6005603859,$
  - $-PVPayment = \frac{CF_{1122}}{(1+0.0136015752)^{1122}} = 0.0675343607,$
  - $-PV_0 = \$198734.9750670779$
- At t = 1123,
  - g = 0.0410000000,
  - $-CF_{1123} = CF_{1122}(1 + 0.0410000000) = 269190.7331833618,$
  - $-PVPayment = \frac{CF_{1123}}{(1+0.0136015752)^{1123}} = 0.0693598661,$
  - $-PV_0 = $198735.0444269440$
- At t = 1124,

- -g = 0.0410000000,  $-CF_{1124} = CF_{1123}(1 + 0.0410000000) = 280227.5532438796,$   $-PVPayment = \frac{CF_{1124}}{(1+0.0136015752)^{1124}} = 0.0712347162,$
- $-PV_0 = \$198735.1156616602$
- At t = 1125,
  - g = 0.0410000000,
  - $-CF_{1125} = CF_{1124}(1 + 0.0410000000) = 291716.8829268786,$
  - $-PVPayment = \frac{CF_{1125}}{(1+0.0136015752)^{1125}} = 0.0731602450,$
  - $-PV_0 = \$198735.1888219052$
- At t = 1126,
  - -g = 0.0410000000,
  - $-CF_{1126} = CF_{1125}(1 + 0.0410000000) = 303677.2751268806,$
  - $-PVPayment = \frac{CF_{1126}}{(1+0.0136015752)^{1126}} = 0.0751378223,$
  - $-PV_0 = $198735.2639597275$
- At t = 1127,
  - -g = 0.0410000000,
  - $-CF_{1127} = CF_{1126}(1 + 0.0410000000) = 316128.0434070827,$
  - $-PVPayment = \frac{CF_{1127}}{(1+0.0136015752)^{1127}} = 0.0771688550,$
  - $-PV_0 = \$198735.3411285825$
- At t = 1128,
  - g = 0.0410000000,
  - $-CF_{1128} = CF_{1127}(1 + 0.0410000000) = 329089.2931867730,$
  - $-PVPayment = \frac{CF_{1128}}{(1+0.0136015752)^{1128}} = 0.0792547881,$
  - $-PV_0 = \$198735.4203833707$
- At t = 1129,
  - -q = 0.0410000000,
  - $-CF_{1129} = CF_{1128}(1 + 0.0410000000) = 342581.9542074307,$
  - $-PVPayment = \frac{CF_{1129}}{(1+0.0136015752)^{1129}} = 0.0813971056,$
  - $-PV_0 = $198735.5017804762$
- At t = 1130,
  - -g = 0.0410000000,
  - $CF_{1130} = CF_{1129}(1 + 0.0410000000) = 356627.8143299354,$
  - $-PVPayment = \frac{CF_{1130}}{(1+0.0136015752)^{1130}} = 0.0835973315,$
  - $PV_0 = \$198735.5853778078$
- At t = 1131,
  - -g = 0.0410000000,
  - $-CF_{1131} = CF_{1130}(1 + 0.0410000000) = 371249.5547174627,$

- $-PVPayment = \frac{CF_{1131}}{(1+0.0136015752)^{1131}} = 0.0858570312,$
- $PV_0 = \$198735.6712348390$
- At t = 1132,
  - -g = 0.0410000000,
  - $-CF_{1132} = CF_{1131}(1 + 0.0410000000) = 386470.7864608786,$
  - $-PVPayment = \frac{CF_{1132}}{(1+0.0136015752)^{1132}} = 0.0881778124,$
  - $-PV_0 = $198735.7594126514$
- At t = 1133,
  - -g = 0.0410000000,
  - $-CF_{1133} = CF_{1132}(1 + 0.0410000000) = 402316.0887057746,$
  - $-PVPayment = \frac{CF_{1133}}{(1+0.0136015752)^{1133}} = 0.0905613260,$
  - $-PV_0 = \$198735.8499739774$
- At t = 1134,
  - -g = 0.0410000000,
  - $CF_{1134} = CF_{1133}(1 + 0.0410000000) = 418811.0483427114,$
  - $-PVPayment = \frac{CF_{1134}}{(1+0.0136015752)^{1134}} = 0.0930092678,$
  - $-PV_0 = $198735.9429832452$
- At t = 1135,
  - -g = 0.0410000000,
  - $-CF_{1135} = CF_{1134}(1 + 0.0410000000) = 435982.3013247625,$
  - $-PVPayment = \frac{CF_{1135}}{(1+0.0136015752)^{1135}} = 0.0955233794,$
  - $-PV_0 = \$198736.0385066246$
- At t = 1136,
  - g = 0.0410000000,
  - $-CF_{1136} = CF_{1135}(1 + 0.0410000000) = 453857.5756790777,$
  - $-PVPayment = \frac{CF_{1136}}{(1+0.0136015752)^{1136}} = 0.0981054493,$
  - $-PV_0 = \$198736.1366120738$
- At t = 1137,
  - -g = 0.0410000000,
  - $CF_{1137} = CF_{1136}(1 + 0.0410000000) = 472465.7362819199,$
  - $-PVPayment = \frac{CF_{1137}}{(1+0.0136015752)^{1137}} = 0.1007573145,$
  - $-PV_0 = $198736.2373693883$
- At t = 1138,
  - -g = 0.0410000000,
  - $CF_{1138} = CF_{1137}(1 + 0.0410000000) = 491836.8314694786,$
  - $-PVPayment = \frac{CF_{1138}}{(1+0.0136015752)^{1138}} = 0.1034808617,$
  - $-PV_0 = \$198736.3408502500$

- At t = 1139,
  - -g = 0.0410000000,
  - $-CF_{1139} = CF_{1138}(1 + 0.0410000000) = 512002.1415597271,$
  - $-PVPayment = \frac{CF_{1139}}{(1+0.0136015752)^{1139}} = 0.1062780284,$
  - $PV_0 = \$198736.4471282783$
- At t = 1140,
  - -g = 0.0410000000,
  - $-CF_{1140} = CF_{1139}(1 + 0.0410000000) = 532994.2293636759,$
  - $-PVPayment = \frac{CF_{1140}}{(1+0.0136015752)^{1140}} = 0.1091508047,$
  - $-PV_0 = \$198736.5562790830$
- At t = 1141,
  - -g = 0.0410000000,
  - $-CF_{1141} = CF_{1140}(1 + 0.0410000000) = 554846.9927675866,$
  - $-PVPayment = \frac{CF_{1141}}{(1+0.0136015752)^{1141}} = 0.1121012343,$
  - $-PV_0 = \$198736.6683803173$
- At t = 1142,
  - -g = 0.0410000000,
  - $-CF_{1142} = CF_{1141}(1 + 0.0410000000) = 577595.7194710576,$
  - $-PVPayment = \frac{CF_{1142}}{(1+0.0136015752)^{1142}} = 0.1151314163,$
  - $-PV_0 = \$198736.7835117336$
- At t = 1143,
  - -g = 0.0410000000,
  - $-CF_{1143} = CF_{1142}(1 + 0.0410000000) = 601277.1439693710,$
  - $-PVPayment = \frac{CF_{1143}}{(1+0.0136015752)^{1143}} = 0.1182435064,$
  - $PV_0 = \$198736.9017552400$
- At t = 1144,
  - -g = 0.0410000000,
  - $-CF_{1144} = CF_{1143}(1 + 0.0410000000) = 625929.5068721152,$
  - $-PVPayment = \frac{CF_{1144}}{(1+0.0136015752)^{1144}} = 0.1214397187,$
  - $-PV_0 = $198737.0231949586$
- At t = 1145,
  - -g = 0.0410000000,
  - $CF_{1145} = CF_{1144}(1 + 0.0410000000) = 651592.6166538718,$
  - $-PVPayment = \frac{CF_{1145}}{(1+0.0136015752)^{1145}} = 0.1247223270,$
  - $-PV_0 = $198737.1479172857$
- At t = 1146,
  - -g = 0.0410000000,

- $-CF_{1146} = CF_{1145}(1 + 0.0410000000) = 678307.9139366805,$
- $-PVPayment = \frac{CF_{1146}}{(1+0.0136015752)^{1146}} = 0.1280936668,$
- $PV_0 = \$198737.2760109525$
- At t = 1147,
  - g = 0.0410000000
  - $-CF_{1147} = CF_{1146}(1 + 0.0410000000) = 706118.5384080844,$
  - $PV Payment = \frac{CF_{1147}}{(1+0.0136015752)^{1147}} = 0.1315561364,$
  - $-PV_0 = \$198737.4075670889$
- At t = 1148,
  - -g = 0.19000000000,
  - $-CF_{1148} = CF_{1111}(1 + 0.1900000000) = 197787.2593172152,$
  - $-PVPayment = \frac{CF_{1148}}{(1+0.0136015752)^{1148}} = 0.0363550321,$
  - $-PV_0 = $198737.4439221210$
- At t = 1149,
  - -g = 0.0410000000,
  - $-CF_{1149} = CF_{1148}(1 + 0.0410000000) = 205896.5369492210,$
  - $-PVPayment = \frac{CF_{1149}}{(1+0.0136015752)^{1149}} = 0.0373377364,$
  - $-PV_0 = $198737.4812598575$
- At t = 1150,
  - -g = 0.0410000000,
  - $-CF_{1150} = CF_{1149}(1 + 0.0410000000) = 214338.2949641391,$
  - $-PVPayment = \frac{CF_{1150}}{(1+0.0136015752)^{1150}} = 0.0383470040,$
  - $PV_0 = \$198737.5196068614$
- At t = 1151,
  - -g = 0.0410000000,
  - $CF_{1151} = CF_{1150}(1 + 0.0410000000) = 223126.1650576688,$
  - $-PVPayment = \frac{CF_{1151}}{(1+0.0136015752)^{1151}} = 0.0393835528,$
  - $-PV_0 = \$198737.5589904142$
- At t = 1152,
  - -g = 0.0410000000,
  - $-CF_{1152} = CF_{1151}(1 + 0.0410000000) = 232274.3378250332,$
  - $-PVPayment = \frac{CF_{1152}}{(1+0.0136015752)^{1152}} = 0.0404481203,$
  - $-PV_0 = $198737.5994385345$
- At t = 1153,
  - -g = 0.0410000000,
  - $CF_{1153} = CF_{1152}(1 + 0.0410000000) = 241797.5856758595,$
  - $-PVPayment = \frac{CF_{1153}}{(1+0.0136015752)^{1153}} = 0.0415414639,$

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-PV_0 = $198737.6409799983
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- At t = 1154,
  - g = 0.0410000000,
  - $-CF_{1154} = CF_{1153}(1 + 0.0410000000) = 251711.2866885697,$
  - $-PVPayment = \frac{CF_{1154}}{(1+0.0136015752)^{1154}} = 0.0426643614,$
  - $-PV_0 = $198737.6836443597$
- At t = 1155,
  - -g = 0.0410000000,
  - $-CF_{1155} = CF_{1154}(1 + 0.0410000000) = 262031.4494428011,$
  - $-PVPayment = \frac{CF_{1155}}{(1+0.0136015752)^{1155}} = 0.0438176116,$
  - $-PV_0 = \$198737.7274619713$
- At t = 1156,
  - -g = 0.0410000000,
  - $-CF_{1156} = CF_{1155}(1 + 0.0410000000) = 272774.7388699559,$
  - $-PVPayment = \frac{CF_{1156}}{(1+0.0136015752)^{1156}} = 0.0450020351,$
  - $-PV_0 = \$198737.7724640064$
- At t = 1157,
  - -g = 0.0410000000,
  - $-CF_{1157} = CF_{1156}(1 + 0.0410000000) = 283958.5031636240,$
  - $-PVPayment = \frac{CF_{1157}}{(1+0.0136015752)^{1157}} = 0.0462184745,$
  - $-PV_0 = $198737.8186824809$
- At t = 1158,
  - -g = 0.0410000000,
  - $-CF_{1158} = CF_{1157}(1 + 0.0410000000) = 295600.8017933326,$
  - $-PVPayment = \frac{CF_{1158}}{(1+0.0136015752)^{1158}} = 0.0474677952,$
  - $-PV_0 = $198737.8661502761$
- At t = 1159,
  - -g = 0.0410000000,
  - $-CF_{1159} = CF_{1158}(1 + 0.0410000000) = 307720.4346668592,$
  - $-PVPayment = \frac{CF_{1159}}{(1+0.0136015752)^{1159}} = 0.0487508859,$
  - $-PV_0 = $198737.9149011620$
- At t = 1160,
  - g = 0.0410000000,
  - $-CF_{1160} = CF_{1159}(1 + 0.0410000000) = 320336.9724882004,$
  - $-PVPayment = \frac{CF_{1160}}{(1+0.0136015752)^{1160}} = 0.0500686596,$
  - $-PV_0 = $198737.9649698217$
- At t = 1161,

- -g = 0.0410000000,  $-CF_{1161} = CF_{1160}(1 + 0.0410000000) = 333470.7883602166,$   $-PVPayment = \frac{CF_{1161}}{(1+0.0136015752)^{1161}} = 0.0514220537,$
- $-PV_0 = \$198738.0163918754$
- At t = 1162,
  - -g = 0.0410000000,
  - $-CF_{1162} = CF_{1161}(1 + 0.0410000000) = 347143.0906829854,$
  - $-PVPayment = \frac{CF_{1162}}{(1+0.0136015752)^{1162}} = 0.0528120311,$
  - $-PV_0 = \$198738.0692039065$
- At t = 1163,
  - -g = 0.0410000000,
  - $CF_{1163} = CF_{1162}(1 + 0.0410000000) = 361375.9574009878,$
  - $-PVPayment = \frac{CF_{1163}}{(1+0.0136015752)^{1163}} = 0.0542395807,$
  - $-PV_0 = $198738.1234434872$
- At t = 1164,
  - -g = 0.0410000000,
  - $-CF_{1164} = CF_{1163}(1 + 0.0410000000) = 376192.3716544283,$
  - $-PVPayment = \frac{CF_{1164}}{(1+0.0136015752)^{1164}} = 0.0557057180,$
  - $-PV_0 = \$198738.1791492052$
- At t = 1165,
  - g = 0.0410000000
  - $-CF_{1165} = CF_{1164}(1 + 0.0410000000) = 391616.2588922598,$
  - $-PVPayment = \frac{CF_{1165}}{(1+0.0136015752)^{1165}} = 0.0572114861,$
  - $-PV_0 = \$198738.2363606912$
- At t = 1166,
  - -q = 0.0410000000,
  - $-CF_{1166} = CF_{1165}(1 + 0.0410000000) = 407672.5255068424,$
  - $-PVPayment = \frac{CF_{1166}}{(1+0.0136015752)^{1166}} = 0.0587579562,$
  - $-PV_0 = $198738.2951186475$
- At t = 1167,
  - -g = 0.0410000000,
  - $CF_{1167} = CF_{1166}(1 + 0.0410000000) = 424387.0990526229,$
  - $-PVPayment = \frac{CF_{1167}}{(1+0.0136015752)^{1167}} = 0.0603462287,$
  - $PV_0 = \$198738.3554648761$
- At t = 1168,
  - -g = 0.0410000000,
  - $-CF_{1168} = CF_{1167}(1 + 0.0410000000) = 441786.9701137804,$

- $-PVPayment = \frac{CF_{1168}}{(1+0.0136015752)^{1168}} = 0.0619774333,$
- $-PV_0 = $198738.4174423094$
- At t = 1169,
  - -g = 0.0410000000,
  - $-CF_{1169} = CF_{1168}(1 + 0.0410000000) = 459900.2358884453,$
  - $-PVPayment = \frac{CF_{1169}}{(1+0.0136015752)^{1169}} = 0.0636527307,$
  - $-PV_0 = $198738.4810950401$
- At t = 1170,
  - -g = 0.0410000000,
  - $-CF_{1170} = CF_{1169}(1 + 0.0410000000) = 478756.1455598716,$
  - $-PVPayment = \frac{CF_{1170}}{(1+0.0136015752)^{1170}} = 0.0653733126,$
  - $-PV_0 = \$198738.5464683528$
- At t = 1171,
  - -g = 0.0410000000,
  - $-CF_{1171} = CF_{1170}(1 + 0.0410000000) = 498385.1475278263,$
  - $-PVPayment = \frac{CF_{1171}}{(1+0.0136015752)^{1171}} = 0.0671404032,$
  - $-PV_0 = $198738.6136087559$
- At t = 1172,
  - -g = 0.0410000000,
  - $-CF_{1172} = CF_{1171}(1 + 0.0410000000) = 518818.9385764671,$
  - $-PVPayment = \frac{CF_{1172}}{(1+0.0136015752)^{1172}} = 0.0689552596,$
  - $-PV_0 = $198738.6825640155$
- At t = 1173,
  - g = 0.0410000000,
  - $-CF_{1173} = CF_{1172}(1 + 0.0410000000) = 540090.5150581022,$
  - $-PVPayment = \frac{CF_{1173}}{(1+0.0136015752)^{1173}} = 0.0708191729,$
  - $-PV_0 = \$198738.7533831884$
- At t = 1174,
  - -g = 0.0410000000,
  - $-\ CF_{1174} = CF_{1173}(1 + 0.0410000000) = 562234.2261754844,$
  - $-PVPayment = \frac{CF_{1174}}{(1+0.0136015752)^{1174}} = 0.0727334692,$
  - $-PV_0 = $198738.8261166576$
- At t = 1175,
  - -g = 0.0410000000,
  - $CF_{1175} = CF_{1174}(1 + 0.0410000000) = 585285.8294486792,$
  - $-PVPayment = \frac{CF_{1175}}{(1+0.0136015752)^{1175}} = 0.0746995105,$
  - $-PV_0 = $198738.9008161681$

- At t = 1176,
  - -g = 0.0410000000,
  - $CF_{1176} = CF_{1175}(1 + 0.0410000000) = 609282.5484560750,$
  - $-PVPayment = \frac{CF_{1176}}{(1+0.0136015752)^{1176}} = 0.0767186953,$
  - $PV_0 = \$198738.9775348633$
- At t = 1177,
  - -g = 0.0410000000,
  - $-CF_{1177} = CF_{1176}(1 + 0.0410000000) = 634263.1329427741,$
  - $-PVPayment = \frac{CF_{1177}}{(1+0.0136015752)^{1177}} = 0.0787924602,$
  - $-PV_0 = $198739.0563273235$
- At t = 1178,
  - -g = 0.0410000000,
  - $-CF_{1178} = CF_{1177}(1 + 0.0410000000) = 660267.9213934278,$
  - $-PVPayment = \frac{CF_{1178}}{(1+0.0136015752)^{1178}} = 0.0809222806,$
  - $-PV_0 = $198739.1372496041$
- At t = 1179,
  - -g = 0.0410000000,
  - $-CF_{1179} = CF_{1178}(1 + 0.0410000000) = 687338.9061705583,$
  - $-PVPayment = \frac{CF_{1179}}{(1+0.0136015752)^{1179}} = 0.0831096716,$
  - $PV_0 = \$198739.2203592758$
- At t = 1180,
  - -g = 0.0410000000,
  - $-CF_{1180} = CF_{1179}(1 + 0.0410000000) = 715519.8013235511,$
  - $-PVPayment = \frac{CF_{1180}}{(1+0.0136015752)^{1180}} = 0.0853561895,$
  - $-\ PV_0 = \$198739.3057154653$
- At t = 1181,
  - -g = 0.0410000000,
  - $CF_{1181} = CF_{1180}(1 + 0.0410000000) = 744856.1131778166,$
  - $-PVPayment = \frac{CF_{1181}}{(1+0.0136015752)^{1181}} = 0.0876634325,$
  - $-PV_0 = $198739.3933788979$
- At t = 1182,
  - -g = 0.0410000000,
  - $CF_{1182} = CF_{1181}(1 + 0.0410000000) = 775395.2138181070,$
  - $-PVPayment = \frac{CF_{1182}}{(1+0.0136015752)^{1182}} = 0.0900330421,$
  - $-PV_0 = $198739.4834119400$
- At t = 1183,
  - -g = 0.0410000000,

- $-CF_{1183} = CF_{1182}(1 + 0.0410000000) = 807186.4175846494,$
- $-PVPayment = \frac{CF_{1183}}{(1+0.0136015752)^{1183}} = 0.0924667040,$
- $PV_0 = \$198739.5758786439$
- At t = 1184,
  - g = 0.0410000000
  - $-CF_{1184} = CF_{1183}(1 + 0.0410000000) = 840281.0607056200,$
  - $PV Payment = \frac{CF_{1184}}{(1+0.0136015752)^{1184}} = 0.0949661496,$
  - $-PV_0 = \$198739.6708447936$
- At t = 1185,
  - -g = 0.19000000000,
  - $-CF_{1185} = CF_{1148}(1 + 0.1900000000) = 235366.8385874861,$
  - $-PVPayment = \frac{CF_{1185}}{(1+0.0136015752)^{1185}} = 0.0262435301,$
  - $-PV_0 = \$198739.6970883236$
- At t = 1186.
  - -g = 0.0410000000,
  - $-CF_{1186} = CF_{1185}(1 + 0.0410000000) = 245016.8789695730,$
  - $-PVPayment = \frac{CF_{1186}}{(1+0.0136015752)^{1186}} = 0.0269529127,$
  - $PV_0 = \$198739.7240412363$
- At t = 1187,
  - -g = 0.0410000000,
  - $-CF_{1187} = CF_{1186}(1 + 0.0410000000) = 255062.5710073255,$
  - $-PVPayment = \frac{CF_{1187}}{(1+0.0136015752)^{1187}} = 0.0276814705,$
  - $PV_0 = \$198739.7517227068$
- At t = 1188,
  - -g = 0.0410000000,
  - $CF_{1188} = CF_{1187}(1 + 0.0410000000) = 265520.1364186258,$
  - $-PVPayment = \frac{CF_{1188}}{(1+0.0136015752)^{1188}} = 0.0284297218,$
  - $PV_0 = \$198739.7801524287$
- At t = 1189,
  - -g = 0.0410000000,
  - $-CF_{1189} = CF_{1188}(1 + 0.0410000000) = 276406.4620117895,$
  - $-PVPayment = \frac{CF_{1189}}{(1+0.0136015752)^{1189}} = 0.0291981989,$
  - $-PV_0 = $198739.8093506276$
- At t = 1190,
  - -g = 0.0410000000,
  - $CF_{1190} = CF_{1189}(1 + 0.0410000000) = 287739.1269542729,$
  - $-PVPayment = \frac{CF_{1190}}{(1+0.0136015752)^{1190}} = 0.0299874485,$

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-PV_0 = $198739.8393380761
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• At t = 1191,
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- g = 0.0410000000,
- $-CF_{1191} = CF_{1190}(1 + 0.0410000000) = 299536.4311593980,$
- $-PVPayment = \frac{CF_{1191}}{(1+0.0136015752)^{1191}} = 0.0307980322,$
- $-PV_0 = $198739.8701361083$
- At t = 1192,
  - -g = 0.0410000000,
  - $-CF_{1192} = CF_{1191}(1 + 0.0410000000) = 311817.4248369333,$
  - $-PVPayment = \frac{CF_{1192}}{(1+0.0136015752)^{1192}} = 0.0316305265,$
  - $-PV_0 = \$198739.9017666348$
- At t = 1193,
  - -g = 0.0410000000,
  - $-CF_{1193} = CF_{1192}(1 + 0.0410000000) = 324601.9392552475,$
  - $-PVPayment = \frac{CF_{1193}}{(1+0.0136015752)^{1193}} = 0.0324855238,$
  - $PV_0 = \$198739.9342521586$
- At t = 1194,
  - -q = 0.0410000000
  - $-CF_{1194} = CF_{1193}(1 + 0.0410000000) = 337910.6187647126,$
  - $-PVPayment = \frac{CF_{1194}}{(1+0.0136015752)^{1194}} = 0.0333636323,$
  - $-PV_0 = $198739.9676157909$
- At t = 1195,
  - -g = 0.0410000000,
  - $CF_{1195} = CF_{1194}(1 + 0.0410000000) = 351764.9541340658,$
  - $-PVPayment = \frac{CF_{1195}}{(1+0.0136015752)^{1195}} = 0.0342654768,$
  - $-PV_0 = $198740.0018812677$
- At t = 1196,
  - -g = 0.0410000000,
  - $-CF_{1196} = CF_{1195}(1 + 0.0410000000) = 366187.3172535625,$
  - $-PVPayment = \frac{CF_{1196}}{(1+0.0136015752)^{1196}} = 0.0351916988,$
  - $-PV_0 = \$198740.0370729665$
- At t = 1197,
  - g = 0.0410000000,
  - $-CF_{1197} = CF_{1196}(1 + 0.0410000000) = 381200.9972609585,$
  - $-PVPayment = \frac{CF_{1197}}{(1+0.0136015752)^{1197}} = 0.0361429573,$
  - $-PV_0 = $198740.0732159238$
- At t = 1198,

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-g = 0.0410000000,
-CF_{1198} = CF_{1197}(1 + 0.0410000000) = 396830.2381486578,
-PVPayment = \frac{CF_{1198}}{(1+0.0136015752)^{1198}} = 0.0371199290,
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- $-PV_0 = \$198740.1103358528$
- At t = 1199,
  - -g = 0.0410000000
  - $-CF_{1199} = CF_{1198}(1 + 0.0410000000) = 413100.2779127528,$
  - $-PVPayment = \frac{CF_{1199}}{(1+0.0136015752)^{1199}} = 0.0381233091,$
  - $PV_0 = \$198740.1484591619$
- At t = 1200,
  - -g = 0.0410000000,
  - $-CF_{1200} = CF_{1199}(1 + 0.0410000000) = 430037.3893071756,$
  - $-PVPayment = \frac{CF_{1200}}{(1+0.0136015752)^{1200}} = 0.0391538112,$
  - $-PV_0 = $198740.1876129731$
- At t = 1201,
  - -g = 0.0410000000,
  - $-CF_{1201} = CF_{1200}(1 + 0.0410000000) = 447668.9222687698,$
  - $-PVPayment = \frac{CF_{1201}}{(1+0.0136015752)^{1201}} = 0.0402121687,$
  - $PV_0 = \$198740.2278251417$
- At t = 1202,
  - g = 0.0410000000
  - $-CF_{1202} = CF_{1201}(1 + 0.0410000000) = 466023.3480817893,$
  - $-PVPayment = \frac{CF_{1202}}{(1+0.0136015752)^{1202}} = 0.0412991343,$
  - $-PV_0 = \$198740.2691242760$
- At t = 1203,
  - -q = 0.0410000000,
  - $-CF_{1203} = CF_{1202}(1 + 0.0410000000) = 485130.3053531426,$
  - $-PVPayment = \frac{CF_{1203}}{(1+0.0136015752)^{1203}} = 0.0424154814,$
  - $-PV_0 = $198740.3115397575$
- At t = 1204,
  - -g = 0.0410000000,
  - $CF_{1204} = CF_{1203}(1 + 0.0410000000) = 505020.6478726214,$
  - $-PVPayment = \frac{CF_{1204}}{(1+0.0136015752)^{1204}} = 0.0435620043,$
  - $-PV_0 = \$198740.3551017618$
- At t = 1205,
  - -q = 0.0410000000,
  - $-CF_{1205} = CF_{1204}(1 + 0.0410000000) = 525726.4944353988,$

- $-PVPayment = \frac{CF_{1205}}{(1+0.0136015752)^{1205}} = 0.0447395185,$  $-PV_0 = $198740.3998412803$
- At t = 1206,
  - -g = 0.0410000000,
  - $CF_{1206} = CF_{1205}(1 + 0.0410000000) = 547281.2807072501,$
  - $-PVPayment = \frac{CF_{1206}}{(1+0.0136015752)^{1206}} = 0.0459488619,$
  - $PV_0 = \$198740.4457901422$
- At t = 1207,
  - -g = 0.0410000000,
  - $-CF_{1207} = CF_{1206}(1 + 0.0410000000) = 569719.8132162474,$
  - $-PVPayment = \frac{CF_{1207}}{(1+0.0136015752)^{1207}} = 0.0471908947,$
  - $PV_0 = \$198740.4929810369$
- At t = 1208,
  - -g = 0.0410000000,
  - $-CF_{1208} = CF_{1207}(1 + 0.0410000000) = 593078.3255581135,$
  - $-PVPayment = \frac{CF_{1208}}{(1+0.0136015752)^{1208}} = 0.0484665007,$
  - $-PV_0 = $198740.5414475376$
- At t = 1209,
  - -g = 0.0410000000,
  - $-CF_{1209} = CF_{1208}(1 + 0.0410000000) = 617394.5369059962,$
  - $-PVPayment = \frac{CF_{1209}}{(1+0.0136015752)^{1209}} = 0.0497765872,$
  - $-PV_0 = \$198740.5912241248$
- At t = 1210,
  - g = 0.0410000000,
  - $CF_{1210} = CF_{1209}(1 + 0.0410000000) = 642707.7129191420,$
  - $-PVPayment = \frac{CF_{1210}}{(1+0.0136015752)^{1210}} = 0.0511220864,$
  - $-PV_0 = \$198740.6423462111$
- At t = 1211,
  - -g = 0.0410000000,
  - $-CF_{1211} = CF_{1210}(1 + 0.0410000000) = 669058.7291488268,$
  - $-PVPayment = \frac{CF_{1211}}{(1+0.0136015752)^{1211}} = 0.0525039554,$
  - $-PV_0 = $198740.6948501665$
- At t = 1212,
  - -g = 0.0410000000,
  - $CF_{1212} = CF_{1211}(1 + 0.0410000000) = 696490.1370439286,$
  - $-PVPayment = \frac{CF_{1212}}{(1+0.0136015752)^{1212}} = 0.0539231774,$
  - $-PV_0 = \$198740.7487733439$

- At t = 1213,
  - -g = 0.0410000000,
  - $-CF_{1213} = CF_{1212}(1 + 0.0410000000) = 725046.2326627297,$
  - $-PVPayment = \frac{CF_{1213}}{(1+0.0136015752)^{1213}} = 0.0553807621,$
  - $PV_0 = \$198740.8041541060$
- At t = 1214,
  - -g = 0.0410000000,
  - $-CF_{1214} = CF_{1213}(1 + 0.0410000000) = 754773.1282019016,$
  - $-PVPayment = \frac{CF_{1214}}{(1+0.0136015752)^{1214}} = 0.0568777464,$
  - $-PV_0 = \$198740.8610318524$
- At t = 1215,
  - -g = 0.0410000000,
  - $CF_{1215} = CF_{1214}(1 + 0.0410000000) = 785718.8264581795,$
  - $-PVPayment = \frac{CF_{1215}}{(1+0.0136015752)^{1215}} = 0.0584151953,$
  - $-PV_0 = \$198740.9194470478$
- At t = 1216,
  - -g = 0.0410000000,
  - $-CF_{1216} = CF_{1215}(1 + 0.0410000000) = 817933.2983429648,$
  - $-PVPayment = \frac{CF_{1216}}{(1+0.0136015752)^{1216}} = 0.0599942027,$
  - $-PV_0 = \$198740.9794412504$
- At t = 1217,
  - -g = 0.0410000000,
  - $-CF_{1217} = CF_{1216}(1 + 0.0410000000) = 851468.5635750263,$
  - $-PVPayment = \frac{CF_{1217}}{(1+0.0136015752)^{1217}} = 0.0616158918,$
  - $PV_0 = \$198741.0410571422$
- At t = 1218,
  - -g = 0.0410000000,
  - $-CF_{1218} = CF_{1217}(1 + 0.0410000000) = 886378.7746816024,$
  - $-PVPayment = \frac{CF_{1218}}{(1+0.0136015752)^{1218}} = 0.0632814164,$
  - $-PV_0 = $198741.1043385586$
- At t = 1219,
  - -g = 0.0410000000,
  - $-\ CF_{1219} = CF_{1218}(1+0.0410000000) = 922720.3044435480,$
  - $-PVPayment = \frac{CF_{1219}}{(1+0.0136015752)^{1219}} = 0.0649919614,$
  - $-PV_0 = $198741.1693305200$
- At t = 1220,
  - -g = 0.0410000000,

- $-CF_{1220} = CF_{1219}(1 + 0.0410000000) = 960551.8369257334,$
- $-PVPayment = \frac{CF_{1220}}{(1+0.0136015752)^{1220}} = 0.0667487438,$
- $PV_0 = \$198741.2360792638$
- At t = 1221,
  - g = 0.0410000000
  - $-CF_{1221} = CF_{1220}(1 + 0.0410000000) = 999934.4622396884,$
  - $PV Payment = \frac{CF_{1221}}{(1+0.0136015752)^{1221}} = 0.0685530133,$
  - $PV_0 = \$198741.3046322771$
- At t = 1222,
  - -q = 0.19000000000
  - $-CF_{1222} = CF_{1185}(1 + 0.1900000000) = 280086.5379191085,$
  - $-PVPayment = \frac{CF_{1222}}{(1+0.0136015752)^{1222}} = 0.0189443615,$
  - $-PV_0 = $198741.3235766386$
- At t = 1223.
  - -g = 0.0410000000,
  - $-CF_{1223} = CF_{1222}(1 + 0.0410000000) = 291570.0859737919,$
  - $-PVPayment = \frac{CF_{1223}}{(1+0.0136015752)^{1223}} = 0.0194564420,$
  - $-PV_0 = $198741.3430330806$
- At t = 1224,
  - -g = 0.0410000000,
  - $-CF_{1224} = CF_{1223}(1 + 0.0410000000) = 303524.4594987173,$
  - $-PVPayment = \frac{CF_{1224}}{(1+0.0136015752)^{1224}} = 0.0199823645,$
  - $PV_0 = \$198741.3630154451$
- At t = 1225,
  - -g = 0.0410000000,
  - $-CF_{1225} = CF_{1224}(1 + 0.0410000000) = 315968.9623381647,$
  - $-PVPayment = \frac{CF_{1225}}{(1+0.0136015752)^{1225}} = 0.0205225031,$
  - $-PV_0 = \$198741.3835379482$
- At t = 1226,
  - -g = 0.0410000000,
  - $-CF_{1226} = CF_{1225}(1 + 0.0410000000) = 328923.6897940295,$
  - $-PVPayment = \frac{CF_{1226}}{(1+0.0136015752)^{1226}} = 0.0210772420,$
  - $-PV_0 = $198741.4046151902$
- At t = 1227,
  - -g = 0.0410000000,
  - $-CF_{1227} = CF_{1226}(1 + 0.0410000000) = 342409.5610755846,$
  - $-PVPayment = \frac{CF_{1227}}{(1+0.0136015752)^{1227}} = 0.0216469760,$

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-PV_0 = $198741.4262621662
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• At t = 1228,
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- g = 0.0410000000,
- $-CF_{1228} = CF_{1227}(1 + 0.0410000000) = 356448.3530796836,$
- $-PVPayment = \frac{CF_{1228}}{(1+0.0136015752)^{1228}} = 0.0222321103,$
- $-PV_0 = $198741.4484942764$

### • At t = 1229,

- -g = 0.0410000000,
- $-CF_{1229} = CF_{1228}(1 + 0.0410000000) = 371062.7355559506,$
- $-PVPayment = \frac{CF_{1229}}{(1+0.0136015752)^{1229}} = 0.0228330612,$
- $-PV_0 = \$198741.4713273376$

# • At t = 1230,

- -g = 0.0410000000,
- $CF_{1230} = CF_{1229}(1 + 0.0410000000) = 386276.3077137445,$
- $-PVPayment = \frac{CF_{1230}}{(1+0.0136015752)^{1230}} = 0.0234502563,$
- $-PV_0 = $198741.4947775939$

### • At t = 1231,

- -g = 0.0410000000,
- $-CF_{1231} = CF_{1230}(1 + 0.0410000000) = 402113.6363300080,$
- $-PVPayment = \frac{CF_{1231}}{(1+0.0136015752)^{1231}} = 0.0240841346,$
- $-PV_0 = \$198741.5188617285$

#### • At t = 1232,

- -g = 0.04100000000
- $CF_{1232} = CF_{1231}(1 + 0.0410000000) = 418600.2954195383,$
- $-PVPayment = \frac{CF_{1232}}{(1+0.0136015752)^{1232}} = 0.0247351472,$
- $-PV_0 = $198741.5435968757$

# • At t = 1233,

- -g = 0.0410000000,
- $-CF_{1233} = CF_{1232}(1 + 0.0410000000) = 435762.9075317394,$
- $-PVPayment = \frac{CF_{1233}}{(1+0.0136015752)^{1233}} = 0.0254037571,$
- $-PV_0 = \$198741.5690006327$

# • At t = 1234,

- g = 0.0410000000,
- $-CF_{1234} = CF_{1233}(1 + 0.0410000000) = 453629.1867405407,$
- $-PVPayment = \frac{CF_{1234}}{(1+0.0136015752)^{1234}} = 0.0260904400,$
- $PV_0 = \$198741.5950910728$
- At t = 1235,

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\begin{array}{l} -g = 0.0410000000, \\ -CF_{1235} = CF_{1234}(1+0.0410000000) = 472227.9833969028, \\ -PVPayment = \frac{CF_{1235}}{(1+0.0136015752)^{1235}} = 0.0267956846, \end{array}
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- At t = 1236,
  - -g = 0.0410000000,
  - $-CF_{1236} = CF_{1235}(1 + 0.0410000000) = 491589.3307161758,$
  - $-PVPayment = \frac{CF_{1236}}{(1+0.0136015752)^{1236}} = 0.0275199924,$
  - $-PV_0 = \$198741.6494067497$

 $-PV_0 = $198741.6218867573$ 

- At t = 1237,
  - -g = 0.0410000000,
  - $-CF_{1237} = CF_{1236}(1 + 0.0410000000) = 511744.4932755390,$
  - $-PVPayment = \frac{CF_{1237}}{(1+0.0136015752)^{1237}} = 0.0282638788,$
  - $-PV_0 = $198741.6776706285$
- At t = 1238,
  - -g = 0.0410000000,
  - $-CF_{1238} = CF_{1237}(1 + 0.0410000000) = 532726.0174998360,$
  - $-PVPayment = \frac{CF_{1238}}{(1+0.0136015752)^{1238}} = 0.0290278730,$
  - $PV_0 = \$198741.7066985016$
- At t = 1239,
  - g = 0.0410000000
  - $-CF_{1239} = CF_{1238}(1 + 0.0410000000) = 554567.7842173292,$
  - $-PVPayment = \frac{CF_{1239}}{(1+0.0136015752)^{1239}} = 0.0298125186,$
  - $PV_0 = \$198741.7365110202$
- At t = 1240,
  - -q = 0.0410000000,
  - $-CF_{1240} = CF_{1239}(1 + 0.0410000000) = 577305.0633702397,$
  - $-PVPayment = \frac{CF_{1240}}{(1+0.0136015752)^{1240}} = 0.0306183738,$
  - $-PV_0 = $198741.7671293939$
- At t = 1241,
  - -g = 0.0410000000,
  - $CF_{1241} = CF_{1240}(1 + 0.0410000000) = 600974.5709684194,$
  - $-PVPayment = \frac{CF_{1241}}{(1+0.0136015752)^{1241}} = 0.0314460118,$
  - $PV_0 = \$198741.7985754057$
- At t = 1242,
  - -q = 0.0410000000,
  - $-CF_{1242} = CF_{1241}(1 + 0.0410000000) = 625614.5283781246,$

- $\begin{array}{l} -\ PVPayment = \frac{CF_{1242}}{(1+0.0136015752)^{1242}} = 0.0322960215, \\ -\ PV_0 = \$198741.8308714272 \end{array}$
- At t = 1243,
  - -g = 0.0410000000,
  - $CF_{1243} = CF_{1242}(1 + 0.0410000000) = 651264.7240416276,$
  - $-PVPayment = \frac{CF_{1243}}{(1+0.0136015752)^{1243}} = 0.0331690076,$
  - $-PV_0 = \$198741.8640404348$
- At t = 1244,
  - -g = 0.0410000000,
  - $-CF_{1244} = CF_{1243}(1 + 0.0410000000) = 677966.5777273343,$
  - $-PVPayment = \frac{CF_{1244}}{(1+0.0136015752)^{1244}} = 0.0340655912,$
  - $-PV_0 = \$198741.8981060261$
- At t = 1245,
  - -g = 0.0410000000,
  - $-CF_{1245} = CF_{1244}(1 + 0.0410000000) = 705763.2074141550,$
  - $-PVPayment = \frac{CF_{1245}}{(1+0.0136015752)^{1245}} = 0.0349864102,$
  - $-PV_0 = $198741.9330924363$
- At t = 1246,
  - -g = 0.0410000000,
  - $-CF_{1246} = CF_{1245}(1 + 0.0410000000) = 734699.4989181353,$
  - $-PVPayment = \frac{CF_{1246}}{(1+0.0136015752)^{1246}} = 0.0359321196,$
  - $-PV_0 = $198741.9690245558$
- At t = 1247,
  - -g = 0.0410000000,
  - $-CF_{1247} = CF_{1246}(1 + 0.0410000000) = 764822.1783737788,$
  - $-PVPayment = \frac{CF_{1247}}{(1+0.0136015752)^{1247}} = 0.0369033922,$
  - $-PV_0 = \$198742.0059279480$
- At t = 1248,
  - -g = 0.0410000000,
  - $-CF_{1248} = CF_{1247}(1 + 0.0410000000) = 796179.8876871037,$
  - $-PVPayment = \frac{CF_{1248}}{(1+0.0136015752)^{1248}} = 0.0379009191,$
  - $-PV_0 = $198742.0438288671$
- At t = 1249,
  - -g = 0.0410000000,
  - $CF_{1249} = CF_{1248}(1 + 0.0410000000) = 828823.2630822749,$
  - $-PVPayment = \frac{CF_{1249}}{(1+0.0136015752)^{1249}} = 0.0389254099,$
  - $-PV_0 = $198742.0827542770$

- At t = 1250,
  - -g = 0.0410000000,
  - $CF_{1250} = CF_{1249}(1 + 0.0410000000) = 862805.0168686481,$
  - $-PVPayment = \frac{CF_{1250}}{(1+0.0136015752)^{1250}} = 0.0399775934,$
  - $PV_0 = \$198742.1227318705$
- At t = 1251,
  - -g = 0.0410000000,
  - $-CF_{1251} = CF_{1250}(1 + 0.0410000000) = 898180.0225602626,$
  - $-PVPayment = \frac{CF_{1251}}{(1+0.0136015752)^{1251}} = 0.0410582183,$
  - $-PV_0 = \$198742.1637900888$
- At t = 1252,
  - -g = 0.0410000000,
  - $CF_{1252} = CF_{1251}(1 + 0.0410000000) = 935005.4034852333,$
  - $-PVPayment = \frac{CF_{1252}}{(1+0.0136015752)^{1252}} = 0.0421680533,$
  - $-PV_0 = $198742.2059581421$
- At t = 1253,
  - -g = 0.0410000000,
  - $-CF_{1253} = CF_{1252}(1 + 0.0410000000) = 973340.6250281278,$
  - $-PVPayment = \frac{CF_{1253}}{(1+0.0136015752)^{1253}} = 0.0433078880,$
  - $PV_0 = \$198742.2492660302$
- At t = 1254,
  - -q = 0.0410000000,
  - $-CF_{1254} = CF_{1253}(1 + 0.0410000000) = 1013247.5906542810,$
  - $-PVPayment = \frac{CF_{1254}}{(1+0.0136015752)^{1254}} = 0.0444785333,$
  - $-\ PV_0 = \$198742.2937445635$
- At t = 1255,
  - -g = 0.0410000000,
  - $-CF_{1255} = CF_{1254}(1 + 0.0410000000) = 1054790.7418711064,$
  - $-PVPayment = \frac{CF_{1255}}{(1+0.0136015752)^{1255}} = 0.0456808220,$
  - $-PV_0 = $198742.3394253856$
- At t = 1256,
  - -g = 0.0410000000,
  - $-CF_{1256} = CF_{1255}(1 + 0.0410000000) = 1098037.1622878218,$
  - $-PVPayment = \frac{CF_{1256}}{(1+0.0136015752)^{1256}} = 0.0469156096,$
  - $-PV_0 = $198742.3863409951$
- At t = 1257,
  - -g = 0.0410000000,

- $-CF_{1257} = CF_{1256}(1 + 0.0410000000) = 1143056.6859416224,$
- $-PVPayment = \frac{CF_{1257}}{(1+0.0136015752)^{1257}} = 0.0481837743,$
- $PV_0 = \$198742.4345247694$
- At t = 1258,
  - g = 0.0410000000
  - $-CF_{1258} = CF_{1257}(1 + 0.0410000000) = 1189922.0100652287,$
  - $PV Payment = \frac{CF_{1258}}{(1+0.0136015752)^{1258}} = 0.0494862185,$
  - $-PV_0 = \$198742.4840109880$
- At t = 1259,
  - -q = 0.19000000000
  - $-CF_{1259} = CF_{1222}(1 + 0.1900000000) = 333302.9801237390,$
  - $-PVPayment = \frac{CF_{1259}}{(1+0.0136015752)^{1259}} = 0.0136753261,$
  - $-PV_0 = $198742.4976863140$
- At t = 1260.
  - -g = 0.0410000000,
  - $-CF_{1260} = CF_{1259}(1 + 0.0410000000) = 346968.4023088123,$
  - $-PVPayment = \frac{CF_{1260}}{(1+0.0136015752)^{1260}} = 0.0140449806,$
  - $-PV_0 = $198742.5117312947$
- At t = 1261,
  - -g = 0.04100000000
  - $-CF_{1261} = CF_{1260}(1 + 0.0410000000) = 361194.1068034736,$
  - $-PVPayment = \frac{CF_{1261}}{(1+0.0136015752)^{1261}} = 0.0144246272,$
  - $PV_0 = \$198742.5261559218$
- At t = 1262.
  - -g = 0.0410000000,
  - $CF_{1262} = CF_{1261}(1 + 0.0410000000) = 376003.0651824160,$
  - $-PVPayment = \frac{CF_{1262}}{(1+0.0136015752)^{1262}} = 0.0148145358,$
  - $PV_0 = \$198742.5409704577$
- At t = 1263,
  - -g = 0.0410000000,
  - $-CF_{1263} = CF_{1262}(1 + 0.0410000000) = 391419.1908548950,$
  - $-PVPayment = \frac{CF_{1263}}{(1+0.0136015752)^{1263}} = 0.0152149841,$
  - $-PV_0 = $198742.5561854417$
- At t = 1264,
  - -g = 0.0410000000,
  - $-CF_{1264} = CF_{1263}(1 + 0.0410000000) = 407467.3776799457,$
  - $-PVPayment = \frac{CF_{1264}}{(1+0.0136015752)^{1264}} = 0.0156262567,$

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-PV_0 = $198742.5718116984
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- At t = 1265,
  - g = 0.0410000000,
  - $-CF_{1265} = CF_{1264}(1 + 0.0410000000) = 424173.5401648235,$
  - $-PVPayment = \frac{CF_{1265}}{(1+0.0136015752)^{1265}} = 0.0160486464,$
  - $-PV_0 = $198742.5878603448$
- At t = 1266,
  - -g = 0.0410000000,
  - $-CF_{1266} = CF_{1265}(1 + 0.0410000000) = 441564.6553115812,$
  - $-PVPayment = \frac{CF_{1266}}{(1+0.0136015752)^{1266}} = 0.0164824535,$
  - $-PV_0 = \$198742.6043427983$
- At t = 1267,
  - -g = 0.0410000000,
  - $-CF_{1267} = CF_{1266}(1 + 0.0410000000) = 459668.8061793560,$
  - $-PVPayment = \frac{CF_{1267}}{(1+0.0136015752)^{1267}} = 0.0169279868,$
  - $PV_0 = \$198742.6212707852$
- At t = 1268,
  - -q = 0.0410000000
  - $-CF_{1268} = CF_{1267}(1 + 0.0410000000) = 478515.2272327096,$
  - $-PVPayment = \frac{CF_{1268}}{(1+0.0136015752)^{1268}} = 0.0173855632,$
  - $-PV_0 = $198742.6386563484$
- At t = 1269,
  - -g = 0.0410000000,
  - $CF_{1269} = CF_{1268}(1 + 0.0410000000) = 498134.3515492507,$
  - $-PVPayment = \frac{CF_{1269}}{(1+0.0136015752)^{1269}} = 0.0178555083,$
  - $-PV_0 = $198742.6565118567$
- At t = 1270,
  - -g = 0.0410000000,
  - $-CF_{1270} = CF_{1269}(1 + 0.0410000000) = 518557.8599627699,$
  - $-PVPayment = \frac{CF_{1270}}{(1+0.0136015752)^{1270}} = 0.0183381563,$
  - $-PV_0 = $198742.6748500130$
- At t = 1271,
  - -g = 0.0410000000,
  - $-CF_{1271} = CF_{1270}(1 + 0.0410000000) = 539818.7322212434,$
  - $-PVPayment = \frac{CF_{1271}}{(1+0.0136015752)^{1271}} = 0.0188338507,$
  - $-PV_0 = $198742.6936838637$
- At t = 1272,

- -g = 0.0410000000, $-CF_{1272} = CF_{1271}(1 + 0.0410000000) = 561951.3002423143,$
- $-PVPayment = \frac{CF_{1272}}{(1+0.0136015752)^{1272}} = 0.0193429441,$  $-PV_0 = \$198742.7130268078$
- At t = 1273,
  - g = 0.0410000000,
  - $-CF_{1273} = CF_{1272}(1 + 0.0410000000) = 584991.3035522492,$
  - $-PVPayment = \frac{CF_{1273}}{(1+0.0136015752)^{1273}} = 0.0198657986,$
  - $PV_0 = \$198742.7328926064$
- At t = 1274,
  - -g = 0.0410000000,
  - $CF_{1274} = CF_{1273}(1 + 0.0410000000) = 608975.9469978914,$
  - $-PVPayment = \frac{CF_{1274}}{(1+0.0136015752)^{1274}} = 0.0204027863,$
  - $-PV_0 = $198742.7532953927$
- At t = 1275,
  - -g = 0.0410000000,
  - $-CF_{1275} = CF_{1274}(1 + 0.0410000000) = 633943.9608248050,$
  - $-PVPayment = \frac{CF_{1275}}{(1+0.0136015752)^{1275}} = 0.0209542892,$
  - $-PV_0 = \$198742.7742496819$
- At t = 1276,
  - g = 0.0410000000,
  - $-CF_{1276} = CF_{1275}(1 + 0.0410000000) = 659935.6632186219,$
  - $-PVPayment = \frac{CF_{1276}}{(1+0.0136015752)^{1276}} = 0.0215206997,$
  - $-PV_0 = \$198742.7957703816$
- At t = 1277,
  - -q = 0.0410000000,
  - $-CF_{1277} = CF_{1276}(1 + 0.0410000000) = 686993.0254105853,$
  - $-PVPayment = \frac{CF_{1277}}{(1+0.0136015752)^{1277}} = 0.0221024206,$
  - $-PV_0 = $198742.8178728022$
- At t = 1278.
  - -g = 0.0410000000,
  - $-\ CF_{1278} = CF_{1277}(1+0.0410000000) = 715159.7394524193,$
  - $-PVPayment = \frac{CF_{1278}}{(1+0.0136015752)^{1278}} = 0.0226998659,$
  - $PV_0 = \$198742.8405726682$
- At t = 1279,
  - -q = 0.0410000000,
  - $-CF_{1279} = CF_{1278}(1 + 0.0410000000) = 744481.2887699684,$

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-PVPayment = \frac{CF_{1279}}{(1+0.0136015752)^{1279}} = 0.0233134606,
-PV_0 = $198742.8638861288
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- At t = 1280,
  - -g = 0.0410000000,
  - $CF_{1280} = CF_{1279}(1 + 0.0410000000) = 775005.0216095371,$
  - $-PVPayment = \frac{CF_{1280}}{(1+0.0136015752)^{1280}} = 0.0239436413,$
  - $-PV_0 = $198742.8878297701$
- At t = 1281,
  - -g = 0.0410000000,
  - $-CF_{1281} = CF_{1280}(1 + 0.0410000000) = 806780.2274955281,$
  - $-PVPayment = \frac{CF_{1281}}{(1+0.0136015752)^{1281}} = 0.0245908562,$
  - $-PV_0 = \$198742.9124206263$
- At t = 1282,
  - -g = 0.0410000000,
  - $CF_{1282} = CF_{1281}(1 + 0.0410000000) = 839858.2168228447,$
  - $-PVPayment = \frac{CF_{1282}}{(1+0.0136015752)^{1282}} = 0.0252555658,$
  - $-PV_0 = $198742.9376761921$
- At t = 1283,
  - -g = 0.0410000000,
  - $-CF_{1283} = CF_{1282}(1 + 0.0410000000) = 874292.4037125813,$
  - $-PVPayment = \frac{CF_{1283}}{(1+0.0136015752)^{1283}} = 0.0259382431,$
  - $-PV_0 = $198742.9636144351$
- At t = 1284,
  - -g = 0.0410000000,
  - $-CF_{1284} = CF_{1283}(1 + 0.0410000000) = 910138.3922647970,$
  - $-PVPayment = \frac{CF_{1284}}{(1+0.0136015752)^{1284}} = 0.0266393736,$
  - $-PV_0 = \$198742.9902538087$
- At t = 1285,
  - -g = 0.0410000000,
  - $-CF_{1285} = CF_{1284}(1 + 0.0410000000) = 947454.0663476536,$
  - $-PVPayment = \frac{CF_{1285}}{(1+0.0136015752)^{1285}} = 0.0273594562,$
  - $-PV_0 = $198743.0176132649$
- At t = 1286,
  - -g = 0.0410000000,
  - $CF_{1286} = CF_{1285}(1 + 0.0410000000) = 986299.6830679073,$
  - $-PVPayment = \frac{CF_{1286}}{(1+0.0136015752)^{1286}} = 0.0280990032,$
  - $-PV_0 = \$198743.0457122681$

- At t = 1287,
  - -g = 0.0410000000,
  - $-CF_{1287} = CF_{1286}(1 + 0.0410000000) = 1026737.9700736915,$
  - $-PVPayment = \frac{CF_{1287}}{(1+0.0136015752)^{1287}} = 0.0288585407,$
  - $PV_0 = \$198743.0745708089$
- At t = 1288,
  - g = 0.0410000000
  - $-CF_{1288} = CF_{1287}(1 + 0.0410000000) = 1068834.2268467126,$
  - $-PVPayment = \frac{CF_{1288}}{(1+0.0136015752)^{1288}} = 0.0296386091,$
  - $-PV_0 = $198743.1042094180$
- At t = 1289,
  - -g = 0.0410000000,
  - $-CF_{1289} = CF_{1288}(1 + 0.0410000000) = 1112656.4301474278,$
  - $-PVPayment = \frac{CF_{1289}}{(1+0.0136015752)^{1289}} = 0.0304397634,$
  - $-PV_0 = \$198743.1346491813$
- At t = 1290,
  - -g = 0.0410000000,
  - $-CF_{1290} = CF_{1289}(1 + 0.0410000000) = 1158275.3437834722,$
  - $-PVPayment = \frac{CF_{1290}}{(1+0.0136015752)^{1290}} = 0.0312625734,$
  - $-PV_0 = \$198743.1659117547$
- At t = 1291,
  - -q = 0.0410000000,
  - $-CF_{1291} = CF_{1290}(1 + 0.0410000000) = 1205764.6328785946,$
  - $-PVPayment = \frac{CF_{1291}}{(1+0.0136015752)^{1291}} = 0.0321076246,$
  - $PV_0 = \$198743.1980193794$
- At t = 1292,
  - -g = 0.0410000000,
  - $-CF_{1292} = CF_{1291}(1 + 0.0410000000) = 1255200.9828266168,$
  - $-PVPayment = \frac{CF_{1292}}{(1+0.0136015752)^{1292}} = 0.0329755183,$
  - $-PV_0 = $198743.2309948977$
- At t = 1293,
  - -g = 0.0410000000,
  - $-CF_{1293} = CF_{1292}(1 + 0.0410000000) = 1306664.2231225080,$
  - $-PVPayment = \frac{CF_{1293}}{(1+0.0136015752)^{1293}} = 0.0338668717,$
  - $-PV_0 = $198743.2648617694$
- At t = 1294,
  - -g = 0.0410000000,

- $-CF_{1294} = CF_{1293}(1 + 0.0410000000) = 1360237.4562705308,$
- $-PVPayment = \frac{CF_{1294}}{(1+0.0136015752)^{1294}} = 0.0347823191,$
- $PV_0 = \$198743.2996440885$
- At t = 1295,
  - g = 0.0410000000
  - $-CF_{1295} = CF_{1294}(1 + 0.0410000000) = 1416007.1919776225,$
  - $PV Payment = \frac{CF_{1295}}{(1+0.0136015752)^{1295}} = 0.0357225118,$
  - $-PV_0 = \$198743.3353666003$
- At t = 1296,
  - -q = 0.19000000000
  - $-CF_{1296} = CF_{1259}(1 + 0.1900000000) = 396630.5463472495,$
  - $-PVPayment = \frac{CF_{1296}}{(1+0.0136015752)^{1296}} = 0.0098717787,$
  - $-PV_0 = $198743.3452383789$
- At t = 1297,
  - -g = 0.0410000000,
  - $-CF_{1297} = CF_{1296}(1 + 0.0410000000) = 412892.3987474866,$
  - $-PVPayment = \frac{CF_{1297}}{(1+0.0136015752)^{1297}} = 0.0101386204,$
  - $-PV_0 = $198743.3553769993$
- At t = 1298,
  - -g = 0.0410000000,
  - $-CF_{1298} = CF_{1297}(1 + 0.0410000000) = 429820.9870961336,$
  - $-PVPayment = \frac{CF_{1298}}{(1+0.0136015752)^{1298}} = 0.0104126751,$
  - $-PV_0 = \$198743.3657896744$
- At t = 1299.
  - -g = 0.0410000000,
  - $-CF_{1299} = CF_{1298}(1 + 0.0410000000) = 447443.6475670750,$
  - $-PVPayment = \frac{CF_{1299}}{(1+0.0136015752)^{1299}} = 0.0106941376,$
  - $-PV_0 = $198743.3764838120$
- At t = 1300,
  - -g = 0.0410000000,
  - $-CF_{1300} = CF_{1299}(1 + 0.0410000000) = 465788.8371173251,$
  - $-PVPayment = \frac{CF_{1300}}{(1+0.0136015752)^{1300}} = 0.0109832083,$
  - $-PV_0 = $198743.3874670203$
- At t = 1301,
  - -g = 0.0410000000,
  - $CF_{1301} = CF_{1300}(1 + 0.0410000000) = 484886.1794391354,$
  - $-PVPayment = \frac{CF_{1301}}{(1+0.0136015752)^{1301}} = 0.0112800928,$

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-PV_0 = $198743.3987471131
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- At t = 1302,
  - g = 0.0410000000,
  - $-CF_{1302} = CF_{1301}(1 + 0.0410000000) = 504766.5127961399,$
  - $-PVPayment = \frac{CF_{1302}}{(1+0.0136015752)^{1302}} = 0.0115850024,$
  - $-PV_0 = \$198743.4103321155$
- At t = 1303,
  - -g = 0.0410000000,
  - $-CF_{1303} = CF_{1302}(1 + 0.0410000000) = 525461.9398207816,$
  - $-PVPayment = \frac{CF_{1303}}{(1+0.0136015752)^{1303}} = 0.0118981538,$
  - $-PV_0 = \$198743.4222302693$
- At t = 1304,
  - -g = 0.0410000000,
  - $-CF_{1304} = CF_{1303}(1 + 0.0410000000) = 547005.8793534336,$
  - $-PVPayment = \frac{CF_{1304}}{(1+0.0136015752)^{1304}} = 0.0122197700,$
  - $PV_0 = \$198743.4344500393$
- At t = 1305,
  - -q = 0.0410000000
  - $-CF_{1305} = CF_{1304}(1 + 0.0410000000) = 569433.1204069244,$
  - $-PVPayment = \frac{CF_{1305}}{(1+0.0136015752)^{1305}} = 0.0125500797,$
  - $-PV_0 = $198743.4470001190$
- At t = 1306,
  - -g = 0.04100000000
  - $-CF_{1306} = CF_{1305}(1 + 0.0410000000) = 592779.8783436082,$
  - $-PVPayment = \frac{CF_{1306}}{(1+0.0136015752)^{1306}} = 0.0128893180,$
  - $-PV_0 = $198743.4598894370$
- At t = 1307,
  - -g = 0.0410000000,
  - $CF_{1307} = CF_{1306}(1 + 0.0410000000) = 617083.8533556961,$
  - $-PVPayment = \frac{CF_{1307}}{(1+0.0136015752)^{1307}} = 0.0132377261,$
  - $-PV_0 = $198743.4731271630$
- At t = 1308,
  - g = 0.0410000000,
  - $-CF_{1308} = CF_{1307}(1 + 0.0410000000) = 642384.2913432795,$
  - $-PVPayment = \frac{CF_{1308}}{(1+0.0136015752)^{1308}} = 0.0135955519,$
  - $-PV_0 = $198743.4867227150$
- At t = 1309,

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-g = 0.0410000000,

-CF_{1309} = CF_{1308}(1 + 0.0410000000) = 668722.0472883539,
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- $-PVPayment = \frac{CF_{1309}}{(1+0.0136015752)^{1309}} = 0.0139630501,$
- $-PV_0 = \$198743.5006857650$
- At t = 1310,
  - -g = 0.0410000000,
  - $-CF_{1310} = CF_{1309}(1 + 0.0410000000) = 696139.6512271764,$
  - $-PVPayment = \frac{CF_{1310}}{(1+0.0136015752)^{1310}} = 0.0143404820,$
  - $PV_0 = \$198743.\hat{5}150262470$
- At t = 1311,
  - -g = 0.0410000000,
  - $-CF_{1311} = CF_{1310}(1 + 0.0410000000) = 724681.3769274906,$
  - $-PVPayment = \frac{CF_{1311}}{(1+0.0136015752)^{1311}} = 0.0147281162,$
  - $-PV_0 = $198743.5297543632$
- At t = 1312,
  - -g = 0.0410000000,
  - $CF_{1312} = CF_{1311}(1 + 0.0410000000) = 754393.3133815177,$
  - $-PVPayment = \frac{CF_{1312}}{(1+0.0136015752)^{1312}} = 0.0151262284,$
  - $PV_0 = \$198743.5448805916$
- At t = 1313,
  - g = 0.0410000000
  - $-CF_{1313} = CF_{1312}(1 + 0.0410000000) = 785323.4392301599,$
  - $-PVPayment = \frac{CF_{1313}}{(1+0.0136015752)^{1313}} = 0.0155351019,$
  - $-PV_0 = \$198743.5604156935$
- At t = 1314,
  - -q = 0.0410000000,
  - $-CF_{1314} = CF_{1313}(1 + 0.0410000000) = 817521.7002385963,$
  - $-PVPayment = \frac{CF_{1314}}{(1+0.0136015752)^{1314}} = 0.0159550276,$
  - $-PV_0 = $198743.5763707210$
- At t = 1315,
  - -g = 0.0410000000,
  - $-CF_{1315} = CF_{1314}(1 + 0.0410000000) = 851040.0899483787,$
  - $-PVPayment = \frac{CF_{1315}}{(1+0.0136015752)^{1315}} = 0.0163863041,$
  - $PV_0 = \$198743.5927570252$
- At t = 1316,
  - -g = 0.0410000000,
  - $-CF_{1316} = CF_{1315}(1 + 0.0410000000) = 885932.7336362622,$

- $-PVPayment = \frac{CF_{1316}}{(1+0.0136015752)^{1316}} = 0.0168292385,$
- $-PV_0 = \$198743.6095862637$
- At t = 1317,
  - -g = 0.0410000000,
  - $-CF_{1317} = CF_{1316}(1 + 0.0410000000) = 922255.9757153490,$
  - $-PVPayment = \frac{CF_{1317}}{(1+0.0136015752)^{1317}} = 0.0172841456,$
  - $-PV_0 = $198743.6268704093$
- At t = 1318,
  - -g = 0.0410000000,
  - $-CF_{1318} = CF_{1317}(1 + 0.0410000000) = 960068.4707196782,$
  - $-PVPayment = \frac{CF_{1318}}{(1+0.0136015752)^{1318}} = 0.0177513493,$
  - $-PV_0 = \$198743.6446217586$
- At t = 1319,
  - -g = 0.0410000000,
  - $-CF_{1319} = CF_{1318}(1 + 0.0410000000) = 999431.2780191849,$
  - $-PVPayment = \frac{CF_{1319}}{(1+0.0136015752)^{1319}} = 0.0182311818,$
  - $-PV_0 = $198743.6628529404$
- At t = 1320,
  - -g = 0.0410000000,
  - $-CF_{1320} = CF_{1319}(1 + 0.0410000000) = 1040407.9604179715,$
  - $-PVPayment = \frac{CF_{1320}}{(1+0.0136015752)^{1320}} = 0.0187239846,$
  - $-PV_0 = $198743.6815769250$
- At t = 1321,
  - -g = 0.0410000000,
  - $-CF_{1321} = CF_{1320}(1 + 0.0410000000) = 1083064.6867951083,$
  - $-PVPayment = \frac{CF_{1321}}{(1+0.0136015752)^{1321}} = 0.0192301082,$
  - $-PV_0 = \$198743.7008070332$
- At t = 1322,
  - -g = 0.0410000000,
  - $-CF_{1322} = CF_{1321}(1 + 0.0410000000) = 1127470.3389537076,$
  - $-PVPayment = \frac{CF_{1322}}{(1+0.0136015752)^{1322}} = 0.0197499127,$
  - $-PV_0 = $198743.7205569459$
- At t = 1323,
  - -g = 0.0410000000,
  - $-CF_{1323} = CF_{1322}(1 + 0.0410000000) = 1173696.6228508095,$
  - $-PVPayment = \frac{CF_{1323}}{(1+0.0136015752)^{1323}} = 0.0202837679,$
  - $-PV_0 = \$198743.7408407138$

- At t = 1324,
  - -g = 0.0410000000,
  - $-CF_{1324} = CF_{1323}(1 + 0.0410000000) = 1221818.1843876925,$
  - $-PVPayment = \frac{CF_{1324}}{(1+0.0136015752)^{1324}} = 0.0208320537,$
  - $PV_0 = \$198743.7616727675$
- At t = 1325,
  - -g = 0.0410000000,
  - $-CF_{1325} = CF_{1324}(1 + 0.0410000000) = 1271912.7299475877,$
  - $-PVPayment = \frac{CF_{1325}}{(1+0.0136015752)^{1325}} = 0.0213951600,$
  - $-PV_0 = $198743.7830679275$
- At t = 1326,
  - -g = 0.0410000000,
  - $-CF_{1326} = CF_{1325}(1 + 0.0410000000) = 1324061.1518754386,$
  - $-PVPayment = \frac{CF_{1326}}{(1+0.0136015752)^{1326}} = 0.0219734875,$
  - $-PV_0 = \$198743.8050414150$
- At t = 1327,
  - -g = 0.0410000000,
  - $-CF_{1327} = CF_{1326}(1 + 0.0410000000) = 1378347.6591023316,$
  - $-PVPayment = \frac{CF_{1327}}{(1+0.0136015752)^{1327}} = 0.0225674477,$
  - $-PV_0 = \$198743.8276088626$
- At t = 1328,
  - -q = 0.0410000000,
  - $-CF_{1328} = CF_{1327}(1 + 0.0410000000) = 1434859.9131255271,$
  - $-PVPayment = \frac{CF_{1328}}{(1+0.0136015752)^{1328}} = 0.0231774630,$
  - $PV_0 = \$198743.8507863256$
- At t = 1329,
  - -g = 0.0410000000,
  - $-CF_{1329} = CF_{1328}(1 + 0.0410000000) = 1493689.1695636737,$
  - $-PVPayment = \frac{CF_{1329}}{(1+0.0136015752)^{1329}} = 0.0238039675,$
  - $-PV_0 = $198743.8745902932$
- At t = 1330,
  - -g = 0.0410000000,
  - $-CF_{1330} = CF_{1329}(1 + 0.0410000000) = 1554930.4255157842,$
  - $-PVPayment = \frac{CF_{1330}}{(1+0.0136015752)^{1330}} = 0.0244474070,$
  - $-PV_0 = $198743.8990377001$
- At t = 1331,
  - -g = 0.0410000000,

- $-CF_{1331} = CF_{1330}(1 + 0.0410000000) = 1618682.5729619311,$
- $-PVPayment = \frac{CF_{1331}}{(1+0.0136015752)^{1331}} = 0.0251082390,$
- $PV_0 = \$198743.9241459392$
- At t = 1332,
  - -g = 0.0410000000,
  - $-CF_{1332} = CF_{1331}(1 + 0.0410000000) = 1685048.5584533701,$
  - $PV Payment = \frac{CF_{1332}}{(1+0.0136015752)^{1332}} = 0.0257869339,$
  - $-PV_0 = \$198743.9499328731$
- At t = 1333,
  - g = 0.1900000000
  - $-CF_{1333} = CF_{1296}(1 + 0.1900000000) = 471990.3501532269,$
  - $-PVPayment = \frac{CF_{1333}}{(1+0.0136015752)^{1333}} = 0.0071261200,$
  - $-PV_0 = \$198743.9570589931$
- At t = 1334,
  - -g = 0.0410000000,
  - $-CF_{1334} = CF_{1333}(1 + 0.0410000000) = 491341.9545095091,$
  - $-PVPayment = \frac{CF_{1334}}{(1+0.0136015752)^{1334}} = 0.0073187444,$
  - $-PV_0 = $198743.9643777375$
- At t = 1335,
  - -g = 0.04100000000
  - $CF_{1335} = CF_{1334}(1 + 0.0410000000) = 511486.9746443990,$
  - $-PVPayment = \frac{CF_{1335}}{(1+0.0136015752)^{1335}} = 0.0075165757,$
  - $-PV_0 = \$198743.9718943132$
- At t = 1336,
  - -g = 0.0410000000,
  - $-CF_{1336} = CF_{1335}(1 + 0.0410000000) = 532457.9406048193,$
  - $-PVPayment = \frac{CF_{1336}}{(1+0.0136015752)^{1336}} = 0.0077197545,$
  - $PV_0 = \$198743.9796140677$
- At t = 1337,
  - -g = 0.0410000000,
  - $-CF_{1337} = CF_{1336}(1 + 0.0410000000) = 554288.7161696169,$
  - $-PVPayment = \frac{CF_{1337}}{(1+0.0136015752)^{1337}} = 0.0079284253,$
  - $-PV_0 = $198743.9875424930$
- At t = 1338,
  - -g = 0.0410000000,
  - $-CF_{1338} = CF_{1337}(1 + 0.0410000000) = 577014.5535325712,$
  - $-PVPayment = \frac{CF_{1338}}{(1+0.0136015752)^{1338}} = 0.0081427367,$

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-PV_0 = $198743.9956852297
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• At t = 1339,
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- g = 0.0410000000,
- $-CF_{1339} = CF_{1338}(1 + 0.0410000000) = 600672.1502274065,$
- $-PVPayment = \frac{CF_{1339}}{(1+0.0136015752)^{1339}} = 0.0083628411,$
- $-PV_0 = $198744.0040480708$

### • At t = 1340,

- -g = 0.0410000000,
- $-CF_{1340} = CF_{1339}(1 + 0.0410000000) = 625299.7083867302,$
- $-PVPayment = \frac{CF_{1340}}{(1+0.0136015752)^{1340}} = 0.0085888951,$
- $-PV_0 = \$198744.0126369659$

# • At t = 1341,

- -g = 0.0410000000,
- $-CF_{1341} = CF_{1340}(1 + 0.0410000000) = 650936.9964305861,$
- $-PVPayment = \frac{CF_{1341}}{(1+0.0136015752)^{1341}} = 0.0088210595,$
- $PV_0 = \$198744.0214580254$

### • At t = 1342,

- -q = 0.0410000000
- $-CF_{1342} = CF_{1341}(1 + 0.0410000000) = 677625.4132842401,$
- $-PVPayment = \frac{CF_{1342}}{(1+0.0136015752)^{1342}} = 0.0090594995,$
- $-PV_0 = \$198744.0305175249$

#### • At t = 1343,

- -g = 0.0410000000,
- $CF_{1343} = CF_{1342}(1 + 0.0410000000) = 705408.0552288939,$
- $-PVPayment = \frac{CF_{1343}}{(1+0.0136015752)^{1343}} = 0.0093043847,$
- $-PV_0 = $198744.0398219096$

# • At t = 1344,

- -g = 0.0410000000,
- $-CF_{1344} = CF_{1343}(1 + 0.0410000000) = 734329.7854932785,$
- $-PVPayment = \frac{CF_{1344}}{(1+0.0136015752)^{1344}} = 0.0095558893,$
- $-PV_0 = \$198744.0493777989$

## • At t = 1345,

- -g = 0.0410000000,
- $-CF_{1345} = CF_{1344}(1 + 0.0410000000) = 764437.3066985029,$
- $-PVPayment = \frac{CF_{1345}}{(1+0.0136015752)^{1345}} = 0.0098141923,$
- $-PV_0 = \$198744.0591919911$
- At t = 1346,

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-g = 0.0410000000,

-CF_{0.00} = CF_{0.00}(1 + 0.0410000000) = 705
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- $-CF_{1346} = CF_{1345}(1 + 0.0410000000) = 795779.2362731415,$
- $-PVPayment = \frac{CF_{1346}}{(1+0.0136015752)^{1346}} = 0.0100794774,$
- $-PV_0 = $198744.0692714685$
- At t = 1347,
  - g = 0.0410000000,
  - $-CF_{1347} = CF_{1346}(1 + 0.0410000000) = 828406.1849603401,$
  - $-PVPayment = \frac{CF_{1347}}{(1+0.0136015752)^{1347}} = 0.0103519334,$
  - $PV_0 = \$198744.0796234019$
- At t = 1348,
  - -g = 0.0410000000,
  - $CF_{1348} = CF_{1347}(1 + 0.0410000000) = 862370.8385437140,$
  - $-PVPayment = \frac{CF_{1348}}{(1+0.0136015752)^{1348}} = 0.0106317540,$
  - $-PV_0 = $198744.0902551559$
- At t = 1349,
  - -g = 0.0410000000,
  - $-CF_{1349} = CF_{1348}(1 + 0.0410000000) = 897728.0429240062,$
  - $-PVPayment = \frac{CF_{1349}}{(1+0.0136015752)^{1349}} = 0.0109191385,$
  - $PV_0 = \$198744.1011742944$
- At t = 1350,
  - -g = 0.0410000000,
  - $-CF_{1350} = CF_{1349}(1 + 0.0410000000) = 934534.8926838904,$
  - $-PVPayment = \frac{CF_{1350}}{(1+0.0136015752)^{1350}} = 0.0112142911,$
  - $-PV_0 = $198744.1123885855$
- At t = 1351,
  - -q = 0.0410000000,
  - $-CF_{1351} = CF_{1350}(1 + 0.0410000000) = 972850.8232839298,$
  - $-PVPayment = \frac{CF_{1351}}{(1+0.0136015752)^{1351}} = 0.0115174220,$
  - $-PV_0 = $198744.1239060074$
- At t = 1352.
  - -g = 0.0410000000,
  - $-CF_{1352} = CF_{1351}(1 + 0.0410000000) = 1012737.7070385709,$
  - $-PVPayment = \frac{CF_{1352}}{(1+0.0136015752)^{1352}} = 0.0118287467,$
  - $PV_0 = \$198744.1357347541$
- At t = 1353,
  - -q = 0.0410000000,
  - $-CF_{1353} = CF_{1352}(1 + 0.0410000000) = 1054259.9530271522,$

- $-PVPayment = \frac{CF_{1353}}{(1+0.0136015752)^{1353}} = 0.0121484867,$
- $PV_0 = \$198744.1478832408$
- At t = 1354,
  - -g = 0.0410000000,
  - $-CF_{1354} = CF_{1353}(1 + 0.0410000000) = 1097484.6111012653,$
  - $-PVPayment = \frac{CF_{1354}}{(1+0.0136015752)^{1354}} = 0.0124768696,$
  - $-PV_0 = $198744.1603601104$
- At t = 1355,
  - -g = 0.0410000000,
  - $-CF_{1355} = CF_{1354}(1 + 0.0410000000) = 1142481.4801564170,$
  - $-PVPayment = \frac{CF_{1355}}{(1+0.0136015752)^{1355}} = 0.0128141289,$
  - $PV_0 = \$198744.1731742393$
- At t = 1356,
  - -g = 0.0410000000,
  - $-CF_{1356} = CF_{1355}(1 + 0.0410000000) = 1189323.2208428299,$
  - $-PVPayment = \frac{CF_{1356}}{(1+0.0136015752)^{1356}} = 0.0131605046,$
  - $-PV_0 = $198744.1863347440$
- At t = 1357,
  - -g = 0.0410000000,
  - $-CF_{1357} = CF_{1356}(1 + 0.0410000000) = 1238085.4728973859,$
  - $-PVPayment = \frac{CF_{1357}}{(1+0.0136015752)^{1357}} = 0.0135162431,$
  - $-PV_0 = $198744.1998509871$
- At t = 1358,
  - -g = 0.0410000000,
  - $-CF_{1358} = CF_{1357}(1 + 0.0410000000) = 1288846.9772861786,$
  - $-PVPayment = \frac{CF_{1358}}{(1+0.0136015752)^{1358}} = 0.0138815975,$
  - $-PV_0 = \$198744.2137325845$
- At t = 1359.
  - -g = 0.0410000000,
  - $-CF_{1359} = CF_{1358}(1 + 0.0410000000) = 1341689.7033549119,$
  - $-PVPayment = \frac{CF_{1359}}{(1+0.0136015752)^{1359}} = 0.0142568277,$
  - $-PV_0 = \$198744.2279894122$
- At t = 1360,
  - -g = 0.0410000000,
  - $-CF_{1360} = CF_{1359}(1 + 0.0410000000) = 1396698.9811924631,$
  - $-PVPayment = \frac{CF_{1360}}{(1+0.0136015752)^{1360}} = 0.0146422006,$
  - $-PV_0 = $198744.2426316128$

- At t = 1361,
  - -g = 0.0410000000,
  - $-CF_{1361} = CF_{1360}(1 + 0.0410000000) = 1453963.6394213540,$
  - $-PVPayment = \frac{CF_{1361}}{(1+0.0136015752)^{1361}} = 0.0150379905,$
  - $-PV_0 = \$198744.2576696032$
- At t = 1362,
  - -g = 0.0410000000,
  - $-CF_{1362} = CF_{1361}(1 + 0.0410000000) = 1513576.1486376293,$
  - $-PVPayment = \frac{CF_{1362}}{(1+0.0136015752)^{1362}} = 0.0154444788,$
  - $-PV_0 = $198744.2731140821$
- At t = 1363,
  - -g = 0.0410000000,
  - $-CF_{1363} = CF_{1362}(1 + 0.0410000000) = 1575632.7707317721,$
  - $-PVPayment = \frac{CF_{1363}}{(1+0.0136015752)^{1363}} = 0.0158619549,$
  - $-PV_0 = \$198744.2889760370$
- At t = 1364,
  - -g = 0.0410000000,
  - $-CF_{1364} = CF_{1363}(1 + 0.0410000000) = 1640233.7143317745,$
  - $-PVPayment = \frac{CF_{1364}}{(1+0.0136015752)^{1364}} = 0.0162907157,$
  - $PV_0 = \$198744.3052667526$
- At t = 1365,
  - -q = 0.0410000000,
  - $-CF_{1365} = CF_{1364}(1 + 0.0410000000) = 1707483.2966193771,$
  - $-PVPayment = \frac{CF_{1365}}{(1+0.0136015752)^{1365}} = 0.0167310661,$
  - $PV_0 = \$198744.3219978188$
- At t = 1366,
  - -g = 0.0410000000,
  - $-CF_{1366} = CF_{1365}(1 + 0.0410000000) = 1777490.1117807715,$
  - $-PVPayment = \frac{CF_{1366}}{(1+0.0136015752)^{1366}} = 0.0171833196,$
  - $-PV_0 = $198744.3391811384$
- At t = 1367,
  - -g = 0.0410000000,
  - $-CF_{1367} = CF_{1366}(1 + 0.0410000000) = 1850367.2063637830,$
  - $-PVPayment = \frac{CF_{1367}}{(1+0.0136015752)^{1367}} = 0.0176477979,$
  - $-PV_0 = $198744.3568289363$
- At t = 1368,
  - g = 0.0410000000,

- $-CF_{1368} = CF_{1367}(1 + 0.0410000000) = 1926232.2618246980,$
- $-PVPayment = \frac{CF_{1368}}{(1+0.0136015752)^{1368}} = 0.0181248313,$
- $PV_0 = \$198744.3749537676$
- At t = 1369,
  - -g = 0.0410000000,
  - $-CF_{1369} = CF_{1368}(1 + 0.0410000000) = 2005207.7845595104,$
  - $PV Payment = \frac{CF_{1369}}{(1+0.0136015752)^{1369}} = 0.0186147594,$
  - $-PV_0 = \$198744.3935685270$
- At t = 1370,
  - -q = 0.19000000000
  - $-CF_{1370} = CF_{1333}(1 + 0.1900000000) = 561668.5166823399,$
  - $-PVPayment = \frac{CF_{1370}}{(1+0.0136015752)^{1370}} = 0.0051441171,$
  - $-PV_0 = $198744.3987126441$
- At t = 1371,
  - -g = 0.0410000000,
  - $-CF_{1371} = CF_{1370}(1 + 0.0410000000) = 584696.9258663158,$
  - $-PVPayment = \frac{CF_{1371}}{(1+0.0136015752)^{1371}} = 0.0052831665,$
  - $-PV_0 = $198744.4039958107$
- At t = 1372,
  - -g = 0.04100000000,
  - $-CF_{1372} = CF_{1371}(1 + 0.0410000000) = 608669.4998268348,$
  - $-PVPayment = \frac{CF_{1372}}{(1+0.0136015752)^{1372}} = 0.0054259746,$
  - $-PV_0 = $198744.4094217853$
- At t = 1373,
  - -g = 0.0410000000,
  - $CF_{1373} = CF_{1372}(1 + 0.0410000000) = 633624.9493197349,$
  - $-PVPayment = \frac{CF_{1373}}{(1+0.0136015752)^{1373}} = 0.0055726428,$
  - $PV_0 = \$198744.4149944281$
- At t = 1374,
  - -g = 0.0410000000,
  - $-CF_{1374} = CF_{1373}(1 + 0.0410000000) = 659603.5722418440,$
  - $-PVPayment = \frac{CF_{1374}}{(1+0.0136015752)^{1374}} = 0.0057232756,$
  - $-PV_0 = $198744.4207177037$
- At t = 1375,
  - -g = 0.0410000000,
  - $-CF_{1375} = CF_{1374}(1 + 0.0410000000) = 686647.3187037596,$
  - $-PVPayment = \frac{CF_{1375}}{(1+0.0136015752)^{1375}} = 0.0058779801,$

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-PV_0 = $198744.4265956838
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- At t = 1376,
  - g = 0.0410000000,
  - $-CF_{1376} = CF_{1375}(1 + 0.0410000000) = 714799.8587706137,$
  - $-PVPayment = \frac{CF_{1376}}{(1+0.0136015752)^{1376}} = 0.0060368664,$
  - $-PV_0 = $198744.4326325502$
- At t = 1377,
  - -g = 0.0410000000,
  - $-CF_{1377} = CF_{1376}(1 + 0.0410000000) = 744106.6529802087,$
  - $-PVPayment = \frac{CF_{1377}}{(1+0.0136015752)^{1377}} = 0.0062000475,$
  - $-PV_0 = $198744.4388325977$
- At t = 1378,
  - -g = 0.0410000000,
  - $-CF_{1378} = CF_{1377}(1 + 0.0410000000) = 774615.0257523973,$
  - $-PVPayment = \frac{CF_{1378}}{(1+0.0136015752)^{1378}} = 0.0063676395,$
  - $PV_0 = \$198744.4452002372$
- At t = 1379,
  - -q = 0.0410000000
  - $-CF_{1379} = CF_{1378}(1 + 0.0410000000) = 806374.2418082455,$
  - $-PVPayment = \frac{CF_{1379}}{(1+0.0136015752)^{1379}} = 0.0065397617,$
  - $-PV_0 = \$198744.4517399989$
- At t = 1380,
  - -g = 0.0410000000,
  - $CF_{1380} = CF_{1379}(1 + 0.0410000000) = 839435.5857223836,$
  - $-PVPayment = \frac{CF_{1380}}{(1+0.0136015752)^{1380}} = 0.0067165364,$
  - $-PV_0 = $198744.4584565354$
- At t = 1381,
  - -g = 0.0410000000,
  - $-CF_{1381} = CF_{1380}(1 + 0.0410000000) = 873852.4447370012,$
  - $-PVPayment = \frac{CF_{1381}}{(1+0.0136015752)^{1381}} = 0.0068980896,$
  - $-PV_0 = $198744.4653546250$
- At t = 1382,
  - -g = 0.0410000000,
  - $-CF_{1382} = CF_{1381}(1 + 0.0410000000) = 909680.3949712182,$
  - $-PVPayment = \frac{CF_{1382}}{(1+0.0136015752)^{1382}} = 0.0070845502,$
  - $-PV_0 = $198744.4724391752$
- At t = 1383,

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\begin{array}{l} -\ g = 0.0410000000, \\ -\ CF_{1383} = CF_{1382}(1+0.0410000000) = 946977.2911650381, \\ -\ PVPayment = \frac{CF_{1383}}{(1+0.0136015752)^{1383}} = 0.0072760510, \\ -\ PV_0 = \$198744.4797152261 \end{array}
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- At t = 1384,
  - g = 0.0410000000
  - $-CF_{1384} = CF_{1383}(1 + 0.0410000000) = 985803.3601028046,$
  - $-PVPayment = \frac{CF_{1384}}{(1+0.0136015752)^{1384}} = 0.0074727282,$
  - $PV_0 = \$198744.4871879543$
- At t = 1385,
  - -g = 0.0410000000,
  - $-CF_{1385} = CF_{1384}(1 + 0.0410000000) = 1026221.2978670195,$
  - $-PVPayment = \frac{CF_{1385}}{(1+0.0136015752)^{1385}} = 0.0076747218,$
  - $-PV_0 = $198744.4948626761$
- At t = 1386,
  - -g = 0.0410000000,
  - $-CF_{1386} = CF_{1385}(1 + 0.0410000000) = 1068296.3710795674,$
  - $-PVPayment = \frac{CF_{1386}}{(1+0.0136015752)^{1386}} = 0.0078821754,$
  - $PV_0 = \$198744.5027448515$
- At t = 1387,
  - g = 0.0410000000,
  - $-CF_{1387} = CF_{1386}(1 + 0.0410000000) = 1112096.5222938296,$
  - $-PVPayment = \frac{CF_{1387}}{(1+0.0136015752)^{1387}} = 0.0080952366,$
  - $-PV_0 = \$198744.5108400880$
- At t = 1388,
  - -q = 0.0410000000,
  - $-CF_{1388} = CF_{1387}(1 + 0.0410000000) = 1157692.4797078765,$
  - $-PVPayment = \frac{CF_{1388}}{(1+0.0136015752)^{1388}} = 0.0083140570,$
  - $-PV_0 = $198744.5191541450$
- At t = 1389.
  - -g = 0.0410000000,
  - $-CF_{1389} = CF_{1388}(1 + 0.0410000000) = 1205157.8713758993,$
  - $-PVPayment = \frac{CF_{1389}}{(1+0.0136015752)^{1389}} = 0.0085387923,$
  - $PV_0 = \$198744.5276929374$
- At t = 1390,
  - -q = 0.0410000000,
  - $-CF_{1390} = CF_{1389}(1 + 0.0410000000) = 1254569.3441023112,$

- $-PVPayment = \frac{CF_{1390}}{(1+0.0136015752)^{1390}} = 0.0087696024,$  $-PV_0 = $198744.5364625397$
- $-PV_0 = 5198744.330402339$
- At t = 1391,
  - -g = 0.0410000000,
  - $-CF_{1391} = CF_{1390}(1 + 0.0410000000) = 1306006.6872105058,$
  - $-PVPayment = \frac{CF_{1391}}{(1+0.0136015752)^{1391}} = 0.0090066514,$
  - $-PV_0 = $198744.5454691912$
- At t = 1392,
  - -g = 0.0410000000,
  - $-CF_{1392} = CF_{1391}(1 + 0.0410000000) = 1359552.9613861365,$
  - $-PVPayment = \frac{CF_{1392}}{(1+0.0136015752)^{1392}} = 0.0092501081,$
  - $PV_0 = \$198744.\overline{5547192993}$
- At t = 1393,
  - -g = 0.0410000000,
  - $-CF_{1393} = CF_{1392}(1 + 0.0410000000) = 1415294.6328029679,$
  - $-PVPayment = \frac{CF_{1393}}{(1+0.0136015752)^{1393}} = 0.0095001456,$
  - $-PV_0 = $198744.5642194449$
- At t = 1394,
  - -g = 0.0410000000,
  - $-CF_{1394} = CF_{1393}(1 + 0.0410000000) = 1473321.7127478896,$
  - $-PVPayment = \frac{CF_{1394}}{(1+0.0136015752)^{1394}} = 0.0097569418,$
  - $-PV_0 = $198744.5739763867$
- At t = 1395,
  - g = 0.0410000000,
  - $-CF_{1395} = CF_{1394}(1 + 0.0410000000) = 1533727.9029705529,$
  - $-PVPayment = \frac{CF_{1395}}{(1+0.0136015752)^{1395}} = 0.0100206794,$
  - $-PV_0 = \$198744.5839970660$
- At t = 1396.
  - -g = 0.0410000000,
  - $-CF_{1396} = CF_{1395}(1 + 0.0410000000) = 1596610.7469923454,$
  - $-PVPayment = \frac{CF_{1396}}{(1+0.0136015752)^{1396}} = 0.0102915460,$
  - $-PV_0 = \$198744.5942886120$
- At t = 1397,
  - -g = 0.0410000000,
  - $-CF_{1397} = CF_{1396}(1 + 0.0410000000) = 1662071.7876190315,$
  - $-PVPayment = \frac{CF_{1397}}{(1+0.0136015752)^{1397}} = 0.0105697343,$
  - $-PV_0 = $198744.6048583464$

- At t = 1398,
  - -g = 0.0410000000,
  - $-CF_{1398} = CF_{1397}(1 + 0.0410000000) = 1730216.7309114116,$
  - $-PVPayment = \frac{CF_{1398}}{(1+0.0136015752)^{1398}} = 0.0108554423,$
  - $PV_0 = \$198744.6157137887$
- At t = 1399.
  - -g = 0.0410000000,
  - $-CF_{1399} = CF_{1398}(1 + 0.0410000000) = 1801155.6168787794,$
  - $-PVPayment = \frac{CF_{1399}}{(1+0.0136015752)^{1399}} = 0.0111488732,$
  - $-PV_0 = \$198744.6268626619$
- At t = 1400,
  - -g = 0.0410000000,
  - $-CF_{1400} = CF_{1399}(1 + 0.0410000000) = 1875002.9971708092,$
  - $-PVPayment = \frac{CF_{1400}}{(1+0.0136015752)^{1400}} = 0.0114502358,$
  - $-PV_0 = \$198744.6383128977$
- At t = 1401,
  - -g = 0.0410000000,
  - $-CF_{1401} = CF_{1400}(1 + 0.0410000000) = 1951878.1200548122,$
  - $-PVPayment = \frac{CF_{1401}}{(1+0.0136015752)^{1401}} = 0.0117597444,$
  - $PV_0 = \$198744.6500726421$
- At t = 1402,
  - -q = 0.0410000000,
  - $-CF_{1402} = CF_{1401}(1 + 0.0410000000) = 2031905.1229770593,$
  - $-PVPayment = \frac{CF_{1402}}{(1+0.0136015752)^{1402}} = 0.0120776193,$
  - $PV_0 = \$198744.6621502614$
- At t = 1403,
  - -g = 0.0410000000,
  - $-CF_{1403} = CF_{1402}(1 + 0.0410000000) = 2115213.2330191187,$
  - $-PVPayment = \frac{CF_{1403}}{(1+0.0136015752)^{1403}} = 0.0124040866,$
  - $-PV_0 = $198744.6745543480$
- At t = 1404,
  - -g = 0.0410000000,
  - $-CF_{1404} = CF_{1403}(1 + 0.0410000000) = 2201936.9755729022,$
  - $-PVPayment = \frac{CF_{1404}}{(1+0.0136015752)^{1404}} = 0.0127393785,$
  - $-PV_0 = $198744.6872937265$
- At t = 1405,
  - -g = 0.04100000000,

- $-CF_{1405} = CF_{1404}(1 + 0.0410000000) = 2292216.3915713909,$
- $-PVPayment = \frac{CF_{1405}}{(1+0.0136015752)^{1405}} = 0.0130837336,$
- $PV_0 = \$198744.7003774601$
- At t = 1406,
  - -g = 0.0410000000,
  - $-CF_{1406} = CF_{1405}(1 + 0.0410000000) = 2386197.2636258178,$
  - $PV Payment = \frac{CF_{1406}}{(1+0.0136015752)^{1406}} = 0.0134373969,$
  - $-PV_0 = \$198744.7138148570$
- At t = 1407,
  - -q = 0.19000000000
  - $-CF_{1407} = CF_{1370}(1 + 0.1900000000) = 668385.5348519845,$
  - $-PVPayment = \frac{CF_{1407}}{(1+0.0136015752)^{1407}} = 0.0037133729,$
  - $-PV_0 = $198744.7175282300$
- At t = 1408,
  - -g = 0.0410000000,
  - $-CF_{1408} = CF_{1407}(1 + 0.0410000000) = 695789.3417809157,$
  - $-PVPayment = \frac{CF_{1408}}{(1+0.0136015752)^{1408}} = 0.0038137482,$
  - $PV_0 = \$198744.7213419782$
- At t = 1409,
  - -g = 0.04100000000
  - $-CF_{1409} = CF_{1408}(1 + 0.0410000000) = 724316.7047939332,$
  - $-PVPayment = \frac{CF_{1409}}{(1+0.0136015752)^{1409}} = 0.0039168368,$
  - $PV_0 = \$198744.7252588150$
- At t = 1410,
  - -g = 0.0410000000,
  - $-CF_{1410} = CF_{1409}(1 + 0.0410000000) = 754013.6896904844,$
  - $-PVPayment = \frac{CF_{1410}}{(1+0.0136015752)^{1410}} = 0.0040227119,$
  - $-PV_0 = $198744.7292815269$
- At t = 1411,
  - -g = 0.0410000000,
  - $-CF_{1411} = CF_{1410}(1 + 0.0410000000) = 784928.2509677942,$
  - $-PVPayment = \frac{CF_{1411}}{(1+0.0136015752)^{1411}} = 0.0041314488,$
  - $-PV_0 = $198744.7334129757$
- At t = 1412,
  - -q = 0.0410000000,
  - $-CF_{1412} = CF_{1411}(1 + 0.0410000000) = 817110.3092574737,$
  - $-PVPayment = \frac{CF_{1412}}{(1+0.0136015752)^{1412}} = 0.0042431251,$

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-PV_0 = $198744.7376561008
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- At t = 1413,
  - g = 0.0410000000,
  - $-CF_{1413} = CF_{1412}(1 + 0.0410000000) = 850611.8319370301,$
  - $-PVPayment = \frac{CF_{1413}}{(1+0.0136015752)^{1413}} = 0.0043578200,$
  - $-PV_0 = $198744.7420139207$
- At t = 1414,
  - -g = 0.0410000000,
  - $-CF_{1414} = CF_{1413}(1 + 0.0410000000) = 885486.9170464482,$
  - $-PVPayment = \frac{CF_{1414}}{(1+0.0136015752)^{1414}} = 0.0044756152,$
  - $-PV_0 = \$198744.7464895359$
- At t = 1415,
  - -g = 0.0410000000,
  - $-CF_{1415} = CF_{1414}(1 + 0.0410000000) = 921791.8806453525,$
  - $-PVPayment = \frac{CF_{1415}}{(1+0.0136015752)^{1415}} = 0.0045965945,$
  - $-PV_0 = $198744.7510861304$
- At t = 1416,
  - -q = 0.0410000000
  - $-CF_{1416} = CF_{1415}(1 + 0.0410000000) = 959585.3477518120,$
  - $-PVPayment = \frac{CF_{1416}}{(1+0.0136015752)^{1416}} = 0.0047208439,$
  - $-PV_0 = $198744.7558069743$
- At t = 1417,
  - -g = 0.0410000000,
  - $-CF_{1417} = CF_{1416}(1 + 0.0410000000) = 998928.3470096362,$
  - $-PVPayment = \frac{CF_{1417}}{(1+0.0136015752)^{1417}} = 0.0048484519,$
  - $-PV_0 = $198744.7606554262$
- At t = 1418,
  - -g = 0.0410000000,
  - $-CF_{1418} = CF_{1417}(1 + 0.0410000000) = 1039884.4092370312,$
  - $-PVPayment = \frac{CF_{1418}}{(1+0.0136015752)^{1418}} = 0.0049795093,$
  - $-PV_0 = $198744.7656349355$
- At t = 1419,
  - -g = 0.0410000000,
  - $-CF_{1419} = CF_{1418}(1 + 0.0410000000) = 1082519.6700157495,$
  - $-PVPayment = \frac{CF_{1419}}{(1+0.0136015752)^{1419}} = 0.0051141092,$
  - $PV_0 = \$198744.7707490448$
- At t = 1420,

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-g = 0.0410000000,
-CF_{1420} = CF_{1419}(1 + 0.0410000000) = 1126902.9764863951,
-PVPayment = \frac{CF_{1420}}{(1+0.0136015752)^{1420}} = 0.0052523475,
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- $-PV_0 = \$198744.7760013923$
- At t = 1421,
  - -g = 0.0410000000,
  - $-CF_{1421} = CF_{1420}(1 + 0.0410000000) = 1173105.9985223373,$
  - $-PVPayment = \frac{CF_{1421}}{(1+0.0136015752)^{1421}} = 0.0053943225,$
  - $-PV_0 = \$198744.7813957148$
- At t = 1422,
  - -g = 0.0410000000,
  - $-CF_{1422} = CF_{1421}(1 + 0.0410000000) = 1221203.3444617530,$
  - $-PVPayment = \frac{CF_{1422}}{(1+0.0136015752)^{1422}} = 0.0055401351,$
  - $-PV_0 = $198744.7869358499$
- At t = 1423,
  - -g = 0.0410000000,
  - $-CF_{1423} = CF_{1422}(1 + 0.0410000000) = 1271272.6815846849,$
  - $-PVPayment = \frac{CF_{1423}}{(1+0.0136015752)^{1423}} = 0.0056898892,$
  - $PV_0 = \$198744.7926257392$
- At t = 1424,
  - g = 0.0410000000,
  - $-CF_{1424} = CF_{1423}(1 + 0.0410000000) = 1323394.8615296569,$
  - $-PVPayment = \frac{CF_{1424}}{(1+0.0136015752)^{1424}} = 0.0058436913,$
  - $-PV_0 = \$198744.7984694304$
- At t = 1425,
  - -q = 0.0410000000,
  - $-CF_{1425} = CF_{1424}(1 + 0.0410000000) = 1377654.0508523728,$
  - $-PVPayment = \frac{CF_{1425}}{(1+0.0136015752)^{1425}} = 0.0060016507,$
  - $-PV_0 = $198744.8044710811$
- At t = 1426.
  - -g = 0.0410000000,
  - $-CF_{1426} = CF_{1425}(1 + 0.0410000000) = 1434137.8669373200,$
  - $-PVPayment = \frac{CF_{1426}}{(1+0.0136015752)^{1426}} = 0.0061638799,$
  - $-PV_0 = $198744.8106349610$
- At t = 1427,
  - -g = 0.0410000000,
  - $-CF_{1427} = CF_{1426}(1 + 0.0410000000) = 1492937.5194817500,$

- $-PVPayment = \frac{CF_{1427}}{(1+0.0136015752)^{1427}} = 0.0063304943,$  $-PV_0 = $198744.8169654553$
- At t = 1428,
  - -g = 0.0410000000,
  - $-CF_{1428} = CF_{1427}(1 + 0.0410000000) = 1554147.9577805016,$
  - $-PVPayment = \frac{CF_{1428}}{(1+0.0136015752)^{1428}} = 0.0065016124,$
  - $-PV_0 = $198744.8234670677$
- At t = 1429,
  - -g = 0.0410000000,
  - $-CF_{1429} = CF_{1428}(1 + 0.0410000000) = 1617868.0240495021,$
  - $-PVPayment = \frac{CF_{1429}}{(1+0.0136015752)^{1429}} = 0.0066773559,$
  - $-PV_0 = \$198744.8301444237$
- At t = 1430,
  - -g = 0.0410000000,
  - $CF_{1430} = CF_{1429}(1 + 0.0410000000) = 1684200.6130355315,$
  - $-PVPayment = \frac{CF_{1430}}{(1+0.0136015752)^{1430}} = 0.0068578500,$
  - $-PV_0 = $198744.8370022736$
- At t = 1431,
  - -g = 0.0410000000,
  - $-CF_{1431} = CF_{1430}(1 + 0.0410000000) = 1753252.8381699882,$
  - $-PVPayment = \frac{CF_{1431}}{(1+0.0136015752)^{1431}} = 0.0070432229,$
  - $-PV_0 = $198744.8440454965$
- At t = 1432,
  - g = 0.0410000000,
  - $-CF_{1432} = CF_{1431}(1 + 0.0410000000) = 1825136.2045349577,$
  - $-PVPayment = \frac{CF_{1432}}{(1+0.0136015752)^{1432}} = 0.0072336066,$
  - $-PV_0 = \$198744.8512791031$
- At t = 1433,
  - -g = 0.0410000000,
  - $-CF_{1433} = CF_{1432}(1 + 0.0410000000) = 1899966.7889208908,$
  - $-PVPayment = \frac{CF_{1433}}{(1+0.0136015752)^{1433}} = 0.0074291365,$
  - $-PV_0 = \$198744.8587082397$
- At t = 1434,
  - -g = 0.0410000000,
  - $CF_{1434} = CF_{1433}(1 + 0.0410000000) = 1977865.4272666471,$
  - $-PVPayment = \frac{CF_{1434}}{(1+0.0136015752)^{1434}} = 0.0076299517,$
  - $-PV_0 = $198744.8663381914$

- At t = 1435,
  - -g = 0.0410000000,
  - $-CF_{1435} = CF_{1434}(1 + 0.0410000000) = 2058957.9097845794,$
  - $-PVPayment = \frac{CF_{1435}}{(1+0.0136015752)^{1435}} = 0.0078361952,$
  - $PV_0 = \$198744.8741743866$
- At t = 1436,
  - -g = 0.0410000000,
  - $-CF_{1436} = CF_{1435}(1 + 0.0410000000) = 2143375.1840857472,$
  - $-PVPayment = \frac{CF_{1436}}{(1+0.0136015752)^{1436}} = 0.0080480135,$
  - $-PV_0 = \$198744.8822224001$
- At t = 1437,
  - -g = 0.0410000000,
  - $-CF_{1437} = CF_{1436}(1 + 0.0410000000) = 2231253.5666332627,$
  - $-PVPayment = \frac{CF_{1437}}{(1+0.0136015752)^{1437}} = 0.0082655575,$
  - $-PV_0 = \$198744.8904879575$
- At t = 1438,
  - -g = 0.0410000000,
  - $-CF_{1438} = CF_{1437}(1 + 0.0410000000) = 2322734.9628652264,$
  - $-PVPayment = \frac{CF_{1438}}{(1+0.0136015752)^{1438}} = 0.0084889818,$
  - $-PV_0 = \$198744.8989769393$
- At t = 1439,
  - -q = 0.0410000000,
  - $-CF_{1439} = CF_{1438}(1 + 0.0410000000) = 2417967.0963427005,$
  - $-PVPayment = \frac{CF_{1439}}{(1+0.0136015752)^{1439}} = 0.0087184455,$
  - $PV_0 = \$198744.9076953848$
- At t = 1440,
  - -g = 0.0410000000,
  - $-CF_{1440} = CF_{1439}(1 + 0.0410000000) = 2517103.7472927510,$
  - $-PVPayment = \frac{CF_{1440}}{(1+0.0136015752)^{1440}} = 0.0089541117,$
  - $-PV_0 = $198744.9166494965$
- At t = 1441,
  - -g = 0.0410000000,
  - $-CF_{1441} = CF_{1440}(1 + 0.0410000000) = 2620305.0009317538,$
  - $-PVPayment = \frac{CF_{1441}}{(1+0.0136015752)^{1441}} = 0.0091961482,$
  - $-PV_0 = $198744.9258456446$
- At t = 1442,
  - -g = 0.0410000000,

- $-CF_{1442} = CF_{1441}(1 + 0.0410000000) = 2727737.5059699556,$
- $-PVPayment = \frac{CF_{1442}}{(1+0.0136015752)^{1442}} = 0.0094447271,$
- $PV_0 = \$198744.9352903717$
- At t = 1443,
  - -g = 0.0410000000,
  - $-CF_{1443} = CF_{1442}(1 + 0.0410000000) = 2839574.7437147237,$
  - $PV Payment = \frac{CF_{1443}}{(1+0.0136015752)^{1443}} = 0.0097000253,$
  - $PV_0 = \$198744.9449903970$
- At t = 1444,
  - -q = 0.19000000000
  - $-CF_{1444} = CF_{1407}(1 + 0.1900000000) = 795378.7864738614,$
  - $-PVPayment = \frac{CF_{1444}}{(1+0.0136015752)^{1444}} = 0.0026805647,$
  - $-PV_0 = $198744.9476709616$
- At t = 1445,
  - -g = 0.0410000000,
  - $-CF_{1445} = CF_{1444}(1 + 0.0410000000) = 827989.3167192896,$
  - $-PVPayment = \frac{CF_{1445}}{(1+0.0136015752)^{1445}} = 0.0027530224,$
  - $-PV_0 = $198744.9504239840$
- At t = 1446,
  - -g = 0.0410000000,
  - $-CF_{1446} = CF_{1445}(1 + 0.0410000000) = 861936.8787047805,$
  - $-PVPayment = \frac{CF_{1446}}{(1+0.0136015752)^{1446}} = 0.0028274387,$
  - $-PV_0 = $198744.9532514226$
- At t = 1447,
  - -g = 0.0410000000,
  - $CF_{1447} = CF_{1446}(1 + 0.0410000000) = 897276.2907316764,$
  - $-PVPayment = \frac{CF_{1447}}{(1+0.0136015752)^{1447}} = 0.0029038665,$
  - $-PV_0 = $198744.9561552891$
- At t = 1448,
  - -g = 0.0410000000,
  - $-CF_{1448} = CF_{1447}(1 + 0.0410000000) = 934064.6186516751,$
  - $-PVPayment = \frac{CF_{1448}}{(1+0.0136015752)^{1448}} = 0.0029823602,$
  - $-PV_0 = $198744.9591376494$
- At t = 1449,
  - -g = 0.0410000000,
  - $-CF_{1449} = CF_{1448}(1 + 0.0410000000) = 972361.2680163936,$
  - $-PVPayment = \frac{CF_{1449}}{(1+0.0136015752)^{1449}} = 0.0030629757,$

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-PV_0 = $198744.9622006251
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- At t = 1450,
  - g = 0.0410000000,
  - $-CF_{1450} = CF_{1449}(1 + 0.0410000000) = 1012228.0800050657,$
  - $-PVPayment = \frac{CF_{1450}}{(1+0.0136015752)^{1450}} = 0.0031457703,$
  - $-PV_0 = $198744.9653463953$
- At t = 1451,
  - -g = 0.0410000000,
  - $-CF_{1451} = CF_{1450}(1 + 0.0410000000) = 1053729.4312852733,$
  - $-PVPayment = \frac{CF_{1451}}{(1+0.0136015752)^{1451}} = 0.0032308028,$
  - $-PV_0 = \$198744.9685771982$
- At t = 1452,
  - -g = 0.0410000000,
  - $-CF_{1452} = CF_{1451}(1 + 0.0410000000) = 1096932.3379679695,$
  - $-PVPayment = \frac{CF_{1452}}{(1+0.0136015752)^{1452}} = 0.0033181339,$
  - $-PV_0 = $198744.9718953321$
- At t = 1453,
  - -q = 0.0410000000
  - $-CF_{1453} = CF_{1452}(1 + 0.0410000000) = 1141906.5638246562,$
  - $-PVPayment = \frac{CF_{1453}}{(1+0.0136015752)^{1453}} = 0.0034078256,$
  - $-PV_0 = \$198744.9753031577$
- At t = 1454,
  - -g = 0.0410000000,
  - $-CF_{1454} = CF_{1453}(1 + 0.0410000000) = 1188724.7329414671,$
  - $-PVPayment = \frac{CF_{1454}}{(1+0.0136015752)^{1454}} = 0.0034999417,$
  - $-PV_0 = $198744.9788030994$
- At t = 1455,
  - -g = 0.0410000000,
  - $-CF_{1455} = CF_{1454}(1 + 0.0410000000) = 1237462.4469920672,$
  - $-PVPayment = \frac{CF_{1455}}{(1+0.0136015752)^{1455}} = 0.0035945478,$
  - $-PV_0 = \$198744.9823976472$
- At t = 1456,
  - g = 0.0410000000,
  - $-CF_{1456} = CF_{1455}(1 + 0.0410000000) = 1288198.4073187418,$
  - $-PVPayment = \frac{CF_{1456}}{(1+0.0136015752)^{1456}} = 0.0036917112,$
  - $-PV_0 = $198744.9860893584$
- At t = 1457,

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-g = 0.0410000000,

-CF_{1457} = CF_{1456}(1 + 0.0410000000) = 1341014.5420188101,
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 $-PVPayment = \frac{CF_{1457}}{(1+0.0136015752)^{1457}} = 0.0037915010,$ 

- $-PV_0 = \$198744.9898808594$
- At t = 1458,
  - g = 0.0410000000
  - $-CF_{1458} = CF_{1457}(1 + 0.0410000000) = 1395996.1382415812,$
  - $-PVPayment = \frac{CF_{1458}}{(1+0.0136015752)^{1458}} = 0.0038939881,$
  - $-PV_0 = \$198744.9937748476$
- At t = 1459,
  - -g = 0.0410000000,
  - $-CF_{1459} = CF_{1458}(1 + 0.0410000000) = 1453231.9799094859,$
  - $-PVPayment = \frac{CF_{1459}}{(1+0.0136015752)^{1459}} = 0.0039992456,$
  - $-PV_0 = $198744.9977740932$
- At t = 1460,
  - -g = 0.0410000000,
  - $-CF_{1460} = CF_{1459}(1 + 0.0410000000) = 1512814.4910857747,$
  - $-PVPayment = \frac{CF_{1460}}{(1+0.0136015752)^{1460}} = 0.0041073483,$
  - $PV_0 = \$198745.0018814415$
- At t = 1461,
  - g = 0.0410000000
  - $-CF_{1461} = CF_{1460}(1 + 0.0410000000) = 1574839.8852202913,$
  - $-PVPayment = \frac{CF_{1461}}{(1+0.0136015752)^{1461}} = 0.0042183730,$
  - $-PV_0 = \$198745.0060998145$
- At t = 1462,
  - -q = 0.0410000000,
  - $-CF_{1462} = CF_{1461}(1 + 0.0410000000) = 1639408.3205143232,$
  - $-PVPayment = \frac{CF_{1462}}{(1+0.0136015752)^{1462}} = 0.0043323989,$
  - $-PV_0 = $198745.0104322134$
- At t = 1463,
  - -g = 0.0410000000,
  - $-CF_{1463} = CF_{1462}(1 + 0.0410000000) = 1706624.0616554103,$
  - $-PVPayment = \frac{CF_{1463}}{(1+0.0136015752)^{1463}} = 0.0044495069,$
  - $-PV_0 = $198745.0148817203$
- At t = 1464,
  - -g = 0.0410000000,
  - $-CF_{1464} = CF_{1463}(1 + 0.0410000000) = 1776595.6481832820,$

- $-PVPayment = \frac{CF_{1464}}{(1+0.0136015752)^{1464}} = 0.0045697805,$
- $PV_0 = \$198745.0194515008$
- At t = 1465,
  - -g = 0.0410000000,
  - $-CF_{1465} = CF_{1464}(1 + 0.0410000000) = 1849436.0697587964,$
  - $-PVPayment = \frac{CF_{1465}}{(1+0.0136015752)^{1465}} = 0.0046933052,$
  - $-PV_0 = $198745.0241448060$
- At t = 1466,
  - -g = 0.0410000000,
  - $-CF_{1466} = CF_{1465}(1 + 0.0410000000) = 1925262.9486189068,$
  - $-PVPayment = \frac{CF_{1466}}{(1+0.0136015752)^{1466}} = 0.0048201688,$
  - $PV_0 = \$198745.0289649748$
- At t = 1467,
  - -g = 0.0410000000,
  - $-CF_{1467} = CF_{1466}(1 + 0.0410000000) = 2004198.7295122817,$
  - $-PVPayment = \frac{CF_{1467}}{(1+0.0136015752)^{1467}} = 0.0049504616,$
  - $-PV_0 = $198745.0339154365$
- At t = 1468,
  - -g = 0.0410000000,
  - $-CF_{1468} = CF_{1467}(1 + 0.0410000000) = 2086370.8774222850,$
  - $-PVPayment = \frac{CF_{1468}}{(1+0.0136015752)^{1468}} = 0.0050842764,$
  - $-PV_0 = $198745.0389997129$
- At t = 1469,
  - -g = 0.0410000000,
  - $-CF_{1469} = CF_{1468}(1 + 0.0410000000) = 2171912.0833965987,$
  - $-PVPayment = \frac{CF_{1469}}{(1+0.0136015752)^{1469}} = 0.0052217083,$
  - $-PV_0 = \$198745.0442214212$
- At t = 1470,
  - -g = 0.0410000000,
  - $-CF_{1470} = CF_{1469}(1 + 0.0410000000) = 2260960.4788158592,$
  - $-PVPayment = \frac{CF_{1470}}{(1+0.0136015752)^{1470}} = 0.0053628550,$
  - $-PV_0 = $198745.0495842762$
- At t = 1471,
  - -g = 0.0410000000,
  - $-CF_{1471} = CF_{1470}(1 + 0.0410000000) = 2353659.8584473091,$
  - $-PVPayment = \frac{CF_{1471}}{(1+0.0136015752)^{1471}} = 0.0055078171,$
  - $-PV_0 = \$198745.0550920933$

- At t = 1472,
  - -g = 0.0410000000,
  - $-CF_{1472} = CF_{1471}(1 + 0.0410000000) = 2450159.9126436487,$
  - $-PVPayment = \frac{CF_{1472}}{(1+0.0136015752)^{1472}} = 0.0056566976,$
  - $PV_0 = \$198745.0607487909$
- At t = 1473,
  - -g = 0.0410000000,
  - $-CF_{1473} = CF_{1472}(1 + 0.0410000000) = 2550616.4690620382,$
  - $-PVPayment = \frac{CF_{1473}}{(1+0.0136015752)^{1473}} = 0.0058096025,$
  - $-PV_0 = \$198745.0665583934$
- At t = 1474,
  - -g = 0.0410000000,
  - $-CF_{1474} = CF_{1473}(1 + 0.0410000000) = 2655191.7442935817,$
  - $-PVPayment = \frac{CF_{1474}}{(1+0.0136015752)^{1474}} = 0.0059666405,$
  - $PV_0 = \$198745.0725250338$
- At t = 1475,
  - -g = 0.0410000000,
  - $-CF_{1475} = CF_{1474}(1 + 0.0410000000) = 2764054.6058096183,$
  - $-PVPayment = \frac{CF_{1475}}{(1+0.0136015752)^{1475}} = 0.0061279233,$
  - $-PV_0 = \$198745.0786529572$
- At t = 1476,
  - -q = 0.0410000000,
  - $-CF_{1476} = CF_{1475}(1 + 0.0410000000) = 2877380.8446478122,$
  - $-PVPayment = \frac{CF_{1476}}{(1+0.0136015752)^{1476}} = 0.0062935658,$
  - $PV_0 = \$198745.0849465229$
- At t = 1477,
  - -g = 0.0410000000,
  - $-CF_{1477} = CF_{1476}(1 + 0.0410000000) = 2995353.4592783721,$
  - $-PVPayment = \frac{CF_{1477}}{(1+0.0136015752)^{1477}} = 0.0064636856,$
  - $-PV_0 = $198745.0914102086$
- At t = 1478,
  - -g = 0.0410000000,
  - $-CF_{1478} = CF_{1477}(1 + 0.0410000000) = 3118162.9511087853,$
  - $-PVPayment = \frac{CF_{1478}}{(1+0.0136015752)^{1478}} = 0.0066384040,$
  - $-PV_0 = $198745.0980486126$
- At t = 1479,
  - -g = 0.0410000000,

- $-CF_{1479} = CF_{1478}(1 + 0.0410000000) = 3246007.6321042455,$
- $-PVPayment = \frac{CF_{1479}}{(1+0.0136015752)^{1479}} = 0.0068178451,$
- $PV_0 = \$198745.1048664577$
- At t = 1480,
  - g = 0.0410000000
  - $-CF_{1480} = CF_{1479}(1 + 0.0410000000) = 3379093.9450205192,$
  - $PV Payment = \frac{CF_{1480}}{(1+0.0136015752)^{1480}} = 0.0070021367,$
  - $PV_0 = \$198745.1118685944$
- At t = 1481,
  - -q = 0.19000000000
  - $-CF_{1481} = CF_{1444}(1 + 0.1900000000) = 946500.7559038950,$
  - $-PVPayment = \frac{CF_{1481}}{(1+0.0136015752)^{1481}} = 0.0019350135,$
  - $-PV_0 = $198745.1138036080$
- At t = 1482,
  - -g = 0.0410000000,
  - $-CF_{1482} = CF_{1481}(1 + 0.0410000000) = 985307.2868959546,$
  - $-PVPayment = \frac{CF_{1482}}{(1+0.0136015752)^{1482}} = 0.0019873184,$
  - $-PV_0 = $198745.1157909264$
- At t = 1483,
  - g = 0.0410000000,
  - $-CF_{1483} = CF_{1482}(1 + 0.0410000000) = 1025704.8856586887,$
  - $-PVPayment = \frac{CF_{1483}}{(1+0.0136015752)^{1483}} = 0.0020410372,$
  - $-PV_0 = $198745.1178319636$
- At t = 1484.
  - -g = 0.0410000000,
  - $-CF_{1484} = CF_{1483}(1 + 0.0410000000) = 1067758.7859706949,$
  - $-PVPayment = \frac{CF_{1484}}{(1+0.0136015752)^{1484}} = 0.0020962080,$
  - $-PV_0 = \$198745.1199281715$
- At t = 1485,
  - -g = 0.0410000000,
  - $-CF_{1485} = CF_{1484}(1 + 0.0410000000) = 1111536.8961954932,$
  - $-PVPayment = \frac{CF_{1485}}{(1+0.0136015752)^{1485}} = 0.0021528701,$
  - $-PV_0 = $198745.1220810416$
- At t = 1486,
  - -g = 0.0410000000,
  - $-CF_{1486} = CF_{1485}(1 + 0.0410000000) = 1157109.9089395083,$
  - $-PVPayment = \frac{CF_{1486}}{(1+0.0136015752)^{1486}} = 0.0022110638,$

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-PV_0 = $198745.1242921053
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- At t = 1487,
  - g = 0.0410000000,
  - $-CF_{1487} = CF_{1486}(1 + 0.0410000000) = 1204551.4152060279,$
  - $-PVPayment = \frac{CF_{1487}}{(1+0.0136015752)^{1487}} = 0.0022708305,$
  - $-PV_0 = $198745.1265629359$
- At t = 1488,
  - -g = 0.0410000000,
  - $-CF_{1488} = CF_{1487}(1 + 0.0410000000) = 1253938.0232294749,$
  - $-PVPayment = \frac{CF_{1488}}{(1+0.0136015752)^{1488}} = 0.0023322128,$
  - $-PV_0 = \$198745.1288951487$
- At t = 1489,
  - -g = 0.0410000000,
  - $-CF_{1489} = CF_{1488}(1 + 0.0410000000) = 1305349.4821818832,$
  - $-PVPayment = \frac{CF_{1489}}{(1+0.0136015752)^{1489}} = 0.0023952543,$
  - $-PV_0 = \$198745.1312904030$
- At t = 1490,
  - -q = 0.0410000000
  - $-CF_{1490} = CF_{1489}(1 + 0.0410000000) = 1358868.8109513402,$
  - $-PVPayment = \frac{CF_{1490}}{(1+0.0136015752)^{1490}} = 0.0024599999,$
  - $-PV_0 = $198745.1337504028$
- At t = 1491,
  - -g = 0.0410000000,
  - $-CF_{1491} = CF_{1490}(1 + 0.0410000000) = 1414582.4322003450,$
  - $-PVPayment = \frac{CF_{1491}}{(1+0.0136015752)^{1491}} = 0.0025264955,$
  - $-PV_0 = $198745.1362768984$
- At t = 1492,
  - -g = 0.0410000000,
  - $-CF_{1492} = CF_{1491}(1 + 0.0410000000) = 1472580.3119205590,$
  - $-PVPayment = \frac{CF_{1492}}{(1+0.0136015752)^{1492}} = 0.0025947886,$
  - $-PV_0 = $198745.1388716870$
- At t = 1493,
  - g = 0.0410000000,
  - $-CF_{1493} = CF_{1492}(1 + 0.0410000000) = 1532956.1047093018,$
  - $-PVPayment = \frac{CF_{1493}}{(1+0.0136015752)^{1493}} = 0.0026649278,$
  - $-PV_0 = \$198745.1415366147$
- At t = 1494,

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-g = 0.0410000000,

-CF_{1494} = CF_{1493}(1 + 0.0410000000) = 1595807.3050023832,
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 $-PVPayment = \frac{CF_{1494}}{(1+0.0136015752)^{1494}} = 0.0027369628,$ 

 $-PV_0 = \$198745.1442735775$ 

- At t = 1495,
  - -g = 0.0410000000,
  - $-CF_{1495} = CF_{1494}(1 + 0.0410000000) = 1661235.4045074808,$
  - $-PVPayment = \frac{CF_{1495}}{(1+0.0136015752)^{1495}} = 0.0028109450,$
  - $-PV_0 = \$198745.1470845225$
- At t = 1496,
  - -g = 0.0410000000,
  - $-CF_{1496} = CF_{1495}(1 + 0.0410000000) = 1729346.0560922874,$
  - $-PVPayment = \frac{CF_{1496}}{(1+0.0136015752)^{1496}} = 0.0028869270,$
  - $-PV_0 = $198745.1499714495$
- At t = 1497,
  - -g = 0.0410000000,
  - $-CF_{1497} = CF_{1496}(1 + 0.0410000000) = 1800249.2443920712,$
  - $-PVPayment = \frac{CF_{1497}}{(1+0.0136015752)^{1497}} = 0.0029649628,$
  - $PV_0 = \$198745.1529364123$
- At t = 1498,
  - g = 0.0410000000
  - $-CF_{1498} = CF_{1497}(1 + 0.0410000000) = 1874059.4634121459,$
  - $-PVPayment = \frac{CF_{1498}}{(1+0.0136015752)^{1498}} = 0.0030451080,$
  - $-PV_0 = \$198745.1559815203$
- At t = 1499,
  - -q = 0.0410000000,
  - $-CF_{1499} = CF_{1498}(1 + 0.0410000000) = 1950895.9014120437,$
  - $-PVPayment = \frac{CF_{1499}}{(1+0.0136015752)^{1499}} = 0.0031274196,$
  - $-PV_0 = $198745.1591089399$
- At t = 1500.
  - -g = 0.0410000000,
  - $-CF_{1500} = CF_{1499}(1 + 0.0410000000) = 2030882.6333699373,$
  - $-PVPayment = \frac{CF_{1500}}{(1+0.0136015752)^{1500}} = 0.0032119562,$
  - $PV_0 = \$198745.1623208961$
- At t = 1501,
  - -q = 0.0410000000,
  - $-CF_{1501} = CF_{1500}(1 + 0.0410000000) = 2114148.8213381045,$

- $-PVPayment = \frac{CF_{1501}}{(1+0.0136015752)^{1501}} = 0.0032987778,$  $-PV_0 = $198745.1656196738$
- At t = 1502,
  - -g = 0.0410000000,
  - $-CF_{1502} = CF_{1501}(1 + 0.0410000000) = 2200828.9230129668,$
  - $-PVPayment = \frac{CF_{1502}}{(1+0.0136015752)^{1502}} = 0.0033879463,$
  - $-PV_0 = $198745.1690076201$
- At t = 1503,
  - -g = 0.0410000000,
  - $-CF_{1503} = CF_{1502}(1 + 0.0410000000) = 2291062.9088564981,$
  - $-PVPayment = \frac{CF_{1503}}{(1+0.0136015752)^{1503}} = 0.0034795250,$
  - $-PV_0 = \$198745.1724871451$
- At t = 1504,
  - -g = 0.0410000000,
  - $-CF_{1504} = CF_{1503}(1 + 0.0410000000) = 2384996.4881196143,$
  - $-PVPayment = \frac{CF_{1504}}{(1+0.0136015752)^{1504}} = 0.0035735793,$
  - $PV_0 = \$198745.1760607244$
- At t = 1505,
  - -g = 0.0410000000,
  - $-CF_{1505} = CF_{1504}(1 + 0.0410000000) = 2482781.3441325184,$
  - $-PVPayment = \frac{CF_{1505}}{(1+0.0136015752)^{1505}} = 0.0036701758,$
  - $-PV_0 = $198745.1797309002$
- At t = 1506,
  - -g = 0.0410000000,
  - $-CF_{1506} = CF_{1505}(1 + 0.0410000000) = 2584575.3792419513,$
  - $-PVPayment = \frac{CF_{1506}}{(1+0.0136015752)^{1506}} = 0.0037693835,$
  - $-PV_0 = \$198745.1835002837$
- At t = 1507,
  - -g = 0.0410000000,
  - $-CF_{1507} = CF_{1506}(1 + 0.0410000000) = 2690542.9697908713,$
  - $-PVPayment = \frac{CF_{1507}}{(1+0.0136015752)^{1507}} = 0.0038712728,$
  - $-PV_0 = \$198745.1873715566$
- At t = 1508,
  - -g = 0.0410000000,
  - $-CF_{1508} = CF_{1507}(1 + 0.0410000000) = 2800855.2315522968,$
  - $-PVPayment = \frac{CF_{1508}}{(1+0.0136015752)^{1508}} = 0.0039759163,$
  - $-PV_0 = $198745.1913474728$

- At t = 1509.
  - -g = 0.0410000000,
  - $-CF_{1509} = CF_{1508}(1 + 0.0410000000) = 2915690.2960459408,$
  - $-PVPayment = \frac{CF_{1509}}{(1+0.0136015752)^{1509}} = 0.0040833883,$
  - $PV_0 = \$198745.1954308611$
- At t = 1510,
  - -g = 0.0410000000,
  - $-CF_{1510} = CF_{1509}(1 + 0.0410000000) = 3035233.5981838242,$
  - $-PVPayment = \frac{CF_{1510}}{(1+0.0136015752)^{1510}} = 0.0041937654,$
  - $-PV_0 = \$198745.1996246266$
- At t = 1511,
  - -g = 0.0410000000,
  - $-CF_{1511} = CF_{1510}(1 + 0.0410000000) = 3159678.1757093607,$
  - $-PVPayment = \frac{CF_{1511}}{(1+0.0136015752)^{1511}} = 0.0043071261,$
  - $PV_0 = \$198745.2039317527$
- At t = 1512,
  - -g = 0.0410000000,
  - $-CF_{1512} = CF_{1511}(1 + 0.0410000000) = 3289224.9809134444,$
  - $-PVPayment = \frac{CF_{1512}}{(1+0.0136015752)^{1512}} = 0.0044235510,$
  - $-PV_0 = \$198745.2083553037$
- At t = 1513,
  - -q = 0.0410000000,
  - $-CF_{1513} = CF_{1512}(1 + 0.0410000000) = 3424083.2051308956,$
  - $-PVPayment = \frac{CF_{1513}}{(1+0.0136015752)^{1513}} = 0.0045431230,$
  - $PV_0 = \$198745.2128984267$
- At t = 1514,
  - -g = 0.0410000000,
  - $-CF_{1514} = CF_{1513}(1 + 0.0410000000) = 3564470.6165412623,$
  - $-PVPayment = \frac{CF_{1514}}{(1+0.0136015752)^{1514}} = 0.0046659271,$
  - $-PV_0 = $198745.2175643537$
- At t = 1515,
  - -g = 0.0410000000,
  - $-CF_{1515} = CF_{1514}(1 + 0.0410000000) = 3710613.9118194538,$
  - $-PVPayment = \frac{CF_{1515}}{(1+0.0136015752)^{1515}} = 0.0047920506,$
  - $-PV_0 = $198745.2223564044$
- At t = 1516,
  - -g = 0.0410000000,

- $-CF_{1516} = CF_{1515}(1 + 0.0410000000) = 3862749.0822040513,$
- $-PVPayment = \frac{CF_{1516}}{(1+0.0136015752)^{1516}} = 0.0049215834,$
- $PV_0 = \$198745.2272779878$
- At t = 1517,
  - -g = 0.0410000000,
  - $-CF_{1517} = CF_{1516}(1 + 0.0410000000) = 4021121.7945744172,$
  - $PV Payment = \frac{CF_{1517}}{(1+0.0136015752)^{1517}} = 0.0050546176,$
  - $-PV_0 = \$198745.2323326054$
- At t = 1518,
  - -g = 0.19000000000,
  - $-CF_{1518} = CF_{1481}(1 + 0.1900000000) = 1126335.8995256349,$
  - $-PVPayment = \frac{CF_{1518}}{(1+0.0136015752)^{1518}} = 0.0013968241,$
  - $-PV_0 = \$198745.2337294295$
- At t = 1519,
  - -g = 0.0410000000,
  - $-CF_{1519} = CF_{1518}(1 + 0.0410000000) = 1172515.6714061860,$
  - $-PVPayment = \frac{CF_{1519}}{(1+0.0136015752)^{1519}} = 0.0014345813,$
  - $-PV_0 = $198745.2351640109$
- At t = 1520,
  - -g = 0.0410000000,
  - $-CF_{1520} = CF_{1519}(1 + 0.0410000000) = 1220588.8139338396,$
  - $-PVPayment = \frac{CF_{1520}}{(1+0.0136015752)^{1520}} = 0.0014733592,$
  - $PV_0 = \$198745.2366373700$
- At t = 1521,
  - -g = 0.0410000000,
  - $-CF_{1521} = CF_{1520}(1 + 0.0410000000) = 1270632.9553051270,$
  - $-PVPayment = \frac{CF_{1521}}{(1+0.0136015752)^{1521}} = 0.0015131852,$
  - $-PV_0 = \$198745.2381505553$
- At t = 1522,
  - -g = 0.0410000000,
  - $-CF_{1522} = CF_{1521}(1 + 0.0410000000) = 1322728.9064726371,$
  - $-PVPayment = \frac{CF_{1522}}{(1+0.0136015752)^{1522}} = 0.0015540878,$
  - $-PV_0 = $198745.2397046430$
- At t = 1523,
  - -g = 0.0410000000,
  - $-CF_{1523} = CF_{1522}(1 + 0.0410000000) = 1376960.7916380151,$
  - $-PVPayment = \frac{CF_{1523}}{(1+0.0136015752)^{1523}} = 0.0015960959,$

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-PV_0 = $198745.2413007389
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• At t = 1524,
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- g = 0.0410000000,
- $-CF_{1524} = CF_{1523}(1 + 0.0410000000) = 1433416.1840951736,$
- $-PVPayment = \frac{CF_{1524}}{(1+0.0136015752)^{1524}} = 0.0016392396,$
- $-PV_0 = $198745.2429399786$
- At t = 1525,
  - -g = 0.0410000000,
  - $-CF_{1525} = CF_{1524}(1 + 0.0410000000) = 1492186.2476430757,$
  - $-PVPayment = \frac{CF_{1525}}{(1+0.0136015752)^{1525}} = 0.0016835495,$
  - $-PV_0 = \$198745.2446235281$
- At t = 1526,
  - g = 0.0410000000,
  - $-CF_{1526} = CF_{1525}(1 + 0.0410000000) = 1553365.8837964416,$
  - $-PVPayment = \frac{CF_{1526}}{(1+0.0136015752)^{1526}} = 0.0017290571,$
  - $PV_0 = \$198745.2463525852$
- At t = 1527,
  - -q = 0.0410000000
  - $-CF_{1527} = CF_{1526}(1 + 0.0410000000) = 1617053.8850320955,$
  - $-PVPayment = \frac{CF_{1527}}{(1+0.0136015752)^{1527}} = 0.0017757949,$
  - $-PV_0 = \$198745.2481283801$
- At t = 1528,
  - -g = 0.0410000000,
  - $-CF_{1528} = CF_{1527}(1 + 0.0410000000) = 1683353.0943184113,$
  - $-PVPayment = \frac{CF_{1528}}{(1+0.0136015752)^{1528}} = 0.0018237960,$
  - $-PV_0 = $198745.2499521761$
- At t = 1529,
  - -g = 0.0410000000,
  - $-CF_{1529} = CF_{1528}(1 + 0.0410000000) = 1752370.5711854661,$
  - $-PVPayment = \frac{CF_{1529}}{(1+0.0136015752)^{1529}} = 0.0018730946,$
  - $-PV_0 = \$198745.2518252707$
- At t = 1530,
  - -g = 0.0410000000,
  - $-CF_{1530} = CF_{1529}(1 + 0.0410000000) = 1824217.7646040702,$
  - $-PVPayment = \frac{CF_{1530}}{(1+0.0136015752)^{1530}} = 0.0019237258,$
  - $-PV_0 = \$198745.2537489965$
- At t = 1531,

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-g = 0.0410000000,
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- $-CF_{1531} = CF_{1530}(1 + 0.0410000000) = 1899010.6929528369,$
- $-PVPayment = \frac{CF_{1531}}{(1+0.0136015752)^{1531}} = 0.0019757255,$
- $PV_0 = \$198745.2557247220$
- At t = 1532,
  - -g = 0.0410000000,
  - $-CF_{1532} = CF_{1531}(1 + 0.0410000000) = 1976870.1313639029,$
  - $-PVPayment = \frac{CF_{1532}}{(1+0.0136015752)^{1532}} = 0.0020291309,$
  - $-PV_0 = \$198745.2577538529$
- At t = 1533,
  - -g = 0.0410000000,
  - $-CF_{1533} = CF_{1532}(1 + 0.0410000000) = 2057921.8067498228,$
  - $-PVPayment = \frac{CF_{1533}}{(1+0.0136015752)^{1533}} = 0.0020839799,$
  - $-PV_0 = $198745.2598378328$
- At t = 1534,
  - -g = 0.0410000000,
  - $-CF_{1534} = CF_{1533}(1 + 0.0410000000) = 2142296.6008265652,$
  - $-PVPayment = \frac{CF_{1534}}{(1+0.0136015752)^{1534}} = 0.0021403114,$
  - $PV_0 = \$198745.2619781442$
- At t = 1535,
  - g = 0.0410000000
  - $-CF_{1535} = CF_{1534}(1 + 0.0410000000) = 2230130.7614604542,$
  - $-PVPayment = \frac{CF_{1535}}{(1+0.0136015752)^{1535}} = 0.0021981657,$
  - $-PV_0 = \$198745.2641763099$
- At t = 1536,
  - -q = 0.0410000000,
  - $-CF_{1536} = CF_{1535}(1 + 0.0410000000) = 2321566.1226803325,$
  - $-PVPayment = \frac{CF_{1536}}{(1+0.0136015752)^{1536}} = 0.0022575838,$
  - $-PV_0 = $198745.2664338937$
- At t = 1537,
  - -g = 0.0410000000,
  - $-CF_{1537} = CF_{1536}(1 + 0.0410000000) = 2416750.3337102258,$
  - $-PVPayment = \frac{CF_{1537}}{(1+0.0136015752)^{1537}} = 0.0023186080,$
  - $PV_0 = \$198745.2687525017$
- At t = 1538,
  - -q = 0.0410000000,
  - $-CF_{1538} = CF_{1537}(1 + 0.0410000000) = 2515837.0973923448,$

- $\begin{array}{l} -\ PVPayment = \frac{CF_{1538}}{(1+0.0136015752)^{1538}} = 0.0023812817, \\ -\ PV_0 = \$198745.2711337834 \end{array}$
- At t = 1539,
  - -g = 0.0410000000,
  - $-CF_{1539} = CF_{1538}(1 + 0.0410000000) = 2618986.4183854307,$
  - $-PVPayment = \frac{CF_{1539}}{(1+0.0136015752)^{1539}} = 0.0024456496,$
  - $-PV_0 = $198745.2735794330$
- At t = 1540,
  - -g = 0.0410000000,
  - $-CF_{1540} = CF_{1539}(1 + 0.0410000000) = 2726364.8615392330,$
  - $-PVPayment = \frac{CF_{1540}}{(1+0.0136015752)^{1540}} = 0.0025117574,$
  - $PV_0 = \$198745.2760911903$
- At t = 1541,
  - -g = 0.0410000000,
  - $-CF_{1541} = CF_{1540}(1 + 0.0410000000) = 2838145.8208623412,$
  - $-PVPayment = \frac{CF_{1541}}{(1+0.0136015752)^{1541}} = 0.0025796521,$
  - $-PV_0 = $198745.2786708424$
- At t = 1542,
  - -g = 0.0410000000,
  - $-CF_{1542} = CF_{1541}(1 + 0.0410000000) = 2954509.7995176972,$
  - $-PVPayment = \frac{CF_{1542}}{(1+0.0136015752)^{1542}} = 0.0026493821,$
  - $-PV_0 = $198745.2813202245$
- At t = 1543,
  - g = 0.0410000000,
  - $-CF_{1543} = CF_{1542}(1 + 0.0410000000) = 3075644.7012979225,$
  - $-PVPayment = \frac{CF_{1543}}{(1+0.0136015752)^{1543}} = 0.0027209969,$
  - $-PV_0 = \$198745.2840412214$
- At t = 1544,
  - -g = 0.0410000000,
  - $-CF_{1544} = CF_{1543}(1 + 0.0410000000) = 3201746.1340511371,$
  - $-PVPayment = \frac{CF_{1544}}{(1+0.0136015752)^{1544}} = 0.0027945475,$
  - $-PV_0 = $198745.2868357689$
- At t = 1545,
  - -g = 0.0410000000,
  - $CF_{1545} = CF_{1544}(1 + 0.0410000000) = 3333017.7255472336,$
  - $-PVPayment = \frac{CF_{1545}}{(1+0.0136015752)^{1545}} = 0.0028700863,$
  - $-PV_0 = $198745.2897058551$

- At t = 1546,
  - -g = 0.0410000000,
  - $-CF_{1546} = CF_{1545}(1 + 0.0410000000) = 3469671.4522946700,$
  - $-PVPayment = \frac{CF_{1546}}{(1+0.0136015752)^{1546}} = 0.0029476669,$
  - $PV_0 = \$198745.2926535220$
- At t = 1547,
  - -g = 0.0410000000,
  - $-CF_{1547} = CF_{1546}(1 + 0.0410000000) = 3611927.9818387511,$
  - $-PVPayment = \frac{CF_{1547}}{(1+0.0136015752)^{1547}} = 0.0030273446,$
  - $-PV_0 = \$198745.2956808666$
- At t = 1548,
  - -g = 0.0410000000,
  - $-CF_{1548} = CF_{1547}(1 + 0.0410000000) = 3760017.0290941396,$
  - $-PVPayment = \frac{CF_{1548}}{(1+0.0136015752)^{1548}} = 0.0031091760,$
  - $PV_0 = \$198745.2987900426$
- At t = 1549,
  - -g = 0.0410000000,
  - $-CF_{1549} = CF_{1548}(1 + 0.0410000000) = 3914177.7272869991,$
  - $-PVPayment = \frac{CF_{1549}}{(1+0.0136015752)^{1549}} = 0.0031932194,$
  - $PV_0 = \$198745.3019832620$
- At t = 1550,
  - -q = 0.0410000000,
  - $-CF_{1550} = CF_{1549}(1 + 0.0410000000) = 4074659.0141057656,$
  - $-PVPayment = \frac{CF_{1550}}{(1+0.0136015752)^{1550}} = 0.0032795346,$
  - $PV_0 = \$198745.3052627966$
- At t = 1551,
  - -g = 0.04100000000
  - $-CF_{1551} = CF_{1550}(1 + 0.0410000000) = 4241720.0336841019,$
  - $-PVPayment = \frac{CF_{1551}}{(1+0.0136015752)^{1551}} = 0.0033681829,$
  - $-PV_0 = $198745.3086309794$
- At t = 1552,
  - -g = 0.0410000000,
  - $-CF_{1552} = CF_{1551}(1 + 0.0410000000) = 4415630.5550651494,$
  - $-PVPayment = \frac{CF_{1552}}{(1+0.0136015752)^{1552}} = 0.0034592274,$
  - $-PV_0 = $198745.3120902069$
- At t = 1553,
  - g = 0.0410000000,

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-CF_{1553} = CF_{1552}(1 + 0.0410000000) = 4596671.4078228204,
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- $-PVPayment = \frac{CF_{1553}}{(1+0.0136015752)^{1553}} = 0.0035527330,$
- $PV_0 = \$198745.3156429399$
- At t = 1554,
  - -g = 0.0410000000,
  - $-CF_{1554} = CF_{1553}(1 + 0.0410000000) = 4785134.9355435558,$
  - $PV Payment = \frac{CF_{1554}}{(1+0.0136015752)^{1554}} = 0.0036487661,$
  - $-PV_0 = \$198745.3192917060$
- At t = 1555,
  - -q = 0.19000000000
  - $-CF_{1555} = CF_{1518}(1 + 0.1900000000) = 1340339.7204355055,$
  - $-PVPayment = \frac{CF_{1555}}{(1+0.0136015752)^{1555}} = 0.0010083225,$
  - $-PV_0 = \$198745.3203000285$
- At t = 1556.
  - -g = 0.0410000000,
  - $-CF_{1556} = CF_{1555}(1 + 0.0410000000) = 1395293.6489733611,$
  - $-PVPayment = \frac{CF_{1556}}{(1+0.0136015752)^{1556}} = 0.0010355782,$
  - $-PV_0 = $198745.3213356067$
- At t = 1557,
  - -g = 0.04100000000
  - $-CF_{1557} = CF_{1556}(1 + 0.0410000000) = 1452500.6885812688,$
  - $-PVPayment = \frac{CF_{1557}}{(1+0.0136015752)^{1557}} = 0.0010635707,$
  - $-PV_0 = $198745.3223991773$
- At t = 1558,
  - -g = 0.0410000000,
  - $-CF_{1558} = CF_{1557}(1 + 0.0410000000) = 1512053.2168131007,$
  - $-PVPayment = \frac{CF_{1558}}{(1+0.0136015752)^{1558}} = 0.0010923198,$
  - $-PV_0 = \$198745.3234914971$
- At t = 1559,
  - -g = 0.0410000000,
  - $-CF_{1559} = CF_{1558}(1 + 0.0410000000) = 1574047.3987024378,$
  - $-PVPayment = \frac{CF_{1559}}{(1+0.0136015752)^{1559}} = 0.0011218460,$
  - $-PV_0 = $198745.3246133431$
- At t = 1560,
  - -g = 0.0410000000,
  - $-CF_{1560} = CF_{1559}(1 + 0.0410000000) = 1638583.3420492376,$
  - $-PVPayment = \frac{CF_{1560}}{(1+0.0136015752)^{1560}} = 0.0011521704,$

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-PV_0 = $198745.3257655135
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- At t = 1561,
  - g = 0.0410000000,
  - $-CF_{1561} = CF_{1560}(1 + 0.0410000000) = 1705765.2590732563,$
  - $-PVPayment = \frac{CF_{1561}}{(1+0.0136015752)^{1561}} = 0.0011833144,$
  - $-PV_0 = $198745.3269488279$
- At t = 1562,
  - -g = 0.0410000000,
  - $-CF_{1562} = CF_{1561}(1 + 0.0410000000) = 1775701.6346952596,$
  - $-PVPayment = \frac{CF_{1562}}{(1+0.0136015752)^{1562}} = 0.0012153003,$
  - $PV_0 = \$198745.3281641283$
- At t = 1563,
  - -g = 0.0410000000,
  - $-CF_{1563} = CF_{1562}(1 + 0.0410000000) = 1848505.4017177650,$
  - $-PVPayment = \frac{CF_{1563}}{(1+0.0136015752)^{1563}} = 0.0012481508,$
  - $-PV_0 = \$198745.3294122791$
- At t = 1564,
  - -q = 0.0410000000
  - $-CF_{1564} = CF_{1563}(1 + 0.0410000000) = 1924294.1231881932,$
  - $-PVPayment = \frac{CF_{1564}}{(1+0.0136015752)^{1564}} = 0.0012818893,$
  - $-PV_0 = \$198745.3306941684$
- At t = 1565,
  - -g = 0.0410000000,
  - $-CF_{1565} = CF_{1564}(1 + 0.0410000000) = 2003190.1822389090,$
  - $-PVPayment = \frac{CF_{1565}}{(1+0.0136015752)^{1565}} = 0.0013165397,$
  - $-PV_0 = $198745.3320107081$
- At t = 1566,
  - -g = 0.0410000000,
  - $-CF_{1566} = CF_{1565}(1 + 0.0410000000) = 2085320.9797107042,$
  - $-PVPayment = \frac{CF_{1566}}{(1+0.0136015752)^{1566}} = 0.0013521268,$
  - $-PV_0 = \$198745.3333628350$
- At t = 1567,
  - -g = 0.0410000000,
  - $-CF_{1567} = CF_{1566}(1 + 0.0410000000) = 2170819.1398788430,$
  - $-PVPayment = \frac{CF_{1567}}{(1+0.0136015752)^{1567}} = 0.0013886758,$
  - $-PV_0 = \$198745.3347515108$
- At t = 1568,

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-g = 0.0410000000,
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- $-CF_{1568} = CF_{1567}(1 + 0.0410000000) = 2259822.7246138752,$
- $-PVPayment = \frac{CF_{1568}}{(1+0.0136015752)^{1568}} = 0.0014262128,$
- $-PV_0 = $198745.3361777236$
- At t = 1569,
  - -g = 0.0410000000,
  - $-CF_{1569} = CF_{1568}(1 + 0.0410000000) = 2352475.4563230439,$
  - $-PVPayment = \frac{CF_{1569}}{(1+0.0136015752)^{1569}} = 0.0014647644,$
  - $-PV_0 = \$198745.3376424880$
- At t = 1570,
  - -g = 0.0410000000,
  - $-CF_{1570} = CF_{1569}(1 + 0.0410000000) = 2448926.9500322887,$
  - $-PVPayment = \frac{CF_{1570}}{(1+0.0136015752)^{1570}} = 0.0015043581,$
  - $-PV_0 = $198745.3391468461$
- At t = 1571,
  - -g = 0.0410000000,
  - $-CF_{1571} = CF_{1570}(1 + 0.0410000000) = 2549332.9549836125,$
  - $-PVPayment = \frac{CF_{1571}}{(1+0.0136015752)^{1571}} = 0.0015450221,$
  - $-PV_0 = \$198745.3406918682$
- At t = 1572,
  - g = 0.0410000000
  - $-CF_{1572} = CF_{1571}(1 + 0.0410000000) = 2653855.6061379407,$
  - $-PVPayment = \frac{CF_{1572}}{(1+0.0136015752)^{1572}} = 0.0015867852,$
  - $-PV_0 = \$198745.3422786534$
- At t = 1573,
  - -q = 0.0410000000,
  - $-CF_{1573} = CF_{1572}(1 + 0.0410000000) = 2762663.6859895959,$
  - $-PVPayment = \frac{CF_{1573}}{(1+0.0136015752)^{1573}} = 0.0016296772,$
  - $-PV_0 = $198745.3439083306$
- At t = 1574,
  - -g = 0.0410000000,
  - $-CF_{1574} = CF_{1573}(1 + 0.0410000000) = 2875932.8971151691,$
  - $-PVPayment = \frac{CF_{1574}}{(1+0.0136015752)^{1574}} = 0.0016737286,$
  - $PV_0 = \$198745.3455820593$
- At t = 1575,
  - -g = 0.0410000000,
  - $-CF_{1575} = CF_{1574}(1 + 0.0410000000) = 2993846.1458968907,$

- $-PVPayment = \frac{CF_{1575}}{(1+0.0136015752)^{1575}} = 0.0017189708,$
- $PV_0 = \$198745.3473010301$
- At t = 1576,
  - -g = 0.0410000000,
  - $-CF_{1576} = CF_{1575}(1 + 0.0410000000) = 3116593.8378786631,$
  - $-PVPayment = \frac{CF_{1576}}{(1+0.0136015752)^{1576}} = 0.0017654359,$
  - $-PV_0 = $198745.3490664659$
- At t = 1577,
  - -g = 0.0410000000,
  - $-CF_{1577} = CF_{1576}(1 + 0.0410000000) = 3244374.1852316880,$
  - $-PVPayment = \frac{CF_{1577}}{(1+0.0136015752)^{1577}} = 0.0018131570,$
  - $-PV_0 = \$198745.3508796229$
- At t = 1578,
  - -g = 0.0410000000,
  - $-CF_{1578} = CF_{1577}(1 + 0.0410000000) = 3377393.5268261870,$
  - $-PVPayment = \frac{CF_{1578}}{(1+0.0136015752)^{1578}} = 0.0018621680,$
  - $-PV_0 = $198745.3527417909$
- At t = 1579,
  - -g = 0.0410000000,
  - $-CF_{1579} = CF_{1578}(1 + 0.0410000000) = 3515866.6614260604,$
  - $-PVPayment = \frac{CF_{1579}}{(1+0.0136015752)^{1579}} = 0.0019125038,$
  - $-PV_0 = $198745.3546542947$
- At t = 1580,
  - -g = 0.04100000000,
  - $-CF_{1580} = CF_{1579}(1 + 0.0410000000) = 3660017.1945445286,$
  - $-PVPayment = \frac{CF_{1580}}{(1+0.0136015752)^{1580}} = 0.0019642003,$
  - $-PV_0 = \$198745.3566184950$
- At t = 1581,
  - -g = 0.0410000000,
  - $-CF_{1581} = CF_{1580}(1 + 0.0410000000) = 3810077.8995208540,$
  - $-PVPayment = \frac{CF_{1581}}{(1+0.0136015752)^{1581}} = 0.0020172941,$
  - $-PV_0 = \$198745.3586357891$
- At t = 1582,
  - -g = 0.0410000000,
  - $-CF_{1582} = CF_{1581}(1 + 0.0410000000) = 3966291.0934012085,$
  - $-PVPayment = \frac{CF_{1582}}{(1+0.0136015752)^{1582}} = 0.0020718231,$
  - $-PV_0 = \$198745.3607076122$

- At t = 1583,
  - -g = 0.0410000000,
  - $-CF_{1583} = CF_{1582}(1 + 0.0410000000) = 4128909.0282306578,$
  - $-PVPayment = \frac{CF_{1583}}{(1+0.0136015752)^{1583}} = 0.0021278260,$
  - $PV_0 = \$198745.3628354382$
- At t = 1584,
  - -g = 0.0410000000,
  - $-CF_{1584} = CF_{1583}(1 + 0.0410000000) = 4298194.2983881142,$
  - $-PVPayment = \frac{CF_{1584}}{(1+0.0136015752)^{1584}} = 0.0021853428,$
  - $-PV_0 = $198745.3650207810$
- At t = 1585,
  - -g = 0.0410000000,
  - $-CF_{1585} = CF_{1584}(1 + 0.0410000000) = 4474420.2646220261,$
  - $-PVPayment = \frac{CF_{1585}}{(1+0.0136015752)^{1585}} = 0.0022444143,$
  - $-PV_0 = \$198745.3672651953$
- At t = 1586,
  - -g = 0.0410000000,
  - $-CF_{1586} = CF_{1585}(1 + 0.0410000000) = 4657871.4954715287,$
  - $-PVPayment = \frac{CF_{1586}}{(1+0.0136015752)^{1586}} = 0.0023050825,$
  - $-PV_0 = \$198745.3695702778$
- At t = 1587.
  - -q = 0.0410000000,
  - $-CF_{1587} = CF_{1586}(1 + 0.0410000000) = 4848844.2267858610,$
  - $-PVPayment = \frac{CF_{1587}}{(1+0.0136015752)^{1587}} = 0.0023673907,$
  - $PV_0 = \$198745.3719376685$
- At t = 1588,
  - -g = 0.0410000000,
  - $-CF_{1588} = CF_{1587}(1 + 0.0410000000) = 5047646.8400840806,$
  - $-PVPayment = \frac{CF_{1588}}{(1+0.0136015752)^{1588}} = 0.0024313831,$
  - $-PV_0 = $198745.3743690515$
- At t = 1589,
  - -g = 0.0410000000,
  - $-CF_{1589} = CF_{1588}(1 + 0.0410000000) = 5254600.3605275275,$
  - $-PVPayment = \frac{CF_{1589}}{(1+0.0136015752)^{1589}} = 0.0024971052,$
  - $-PV_0 = $198745.3768661567$
- At t = 1590,
  - -g = 0.0410000000,

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- CF_{1590} = CF_{1589}(1 + 0.0410000000) = 5470038.9753091559,

- PVPayment = \frac{CF_{1590}}{(1+0.0136015752)^{1590}} = 0.0025646039,

- PV_0 = \$198745.3794307606
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- At t = 1591,
  - -g = 0.0410000000,
  - $-CF_{1591} = CF_{1590}(1 + 0.0410000000) = 5694310.5732968310,$
  - $-PVPayment = \frac{CF_{1591}}{(1+0.0136015752)^{1591}} = 0.0026339271,$
  - $-PV_0 = \$198745.3820646876$
- At t = 1592,
  - -g = 0.19000000000,
  - $-CF_{1592} = CF_{1555}(1 + 0.1900000000) = 1595004.2673182515,$
  - $-PVPayment = \frac{CF_{1592}}{(1+0.0136015752)^{1592}} = 0.0007278756,$
  - $-PV_0 = \$198745.3827925632$

Hence,  $PV_0 = $198745.3827925632$ .