The Lotto Case (or Hitting the Jackpot)

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Bob, Chad and Dylan had been dreaming of this day for the past six years; ever since they first met in an introductory economics course in college. For several years they had been pooling their money and buying Arizona Lottery tickets dreaming that one day they would win big. They realized that the lottery was considered by many to be a voluntary tax on the statistically challenged. But miraculously they now sat at their favorite local "watering hole" holding the winning ticket that meant they would split "The Pick" jackpot of $6 million. What a great feeling! Now they just needed to decide if they wanted to take their winnings as a lump sum now or to be paid over the next twenty in installments.

Bob had been a political science major in college but things hadn't worked out as he anticipated when he was a student. He had entered the job market at what looked now to be the bottom of the economic downturn following the housing crisis in the U.S. Bob believes he did not start his job search soon enough and found suitable openings virtually nonexistent. He was currently working part-time at an organic farm and still living at home which cramped his style considerably. He has $150,000 in college related loans (7% interest rate) which he cannot service based on his annual taxable income of $15,000. His share of the jackpot would allow him to be debt free and change his life for the better without doubt.

Chad had been more fortunate than Bob. He had applied himself in college and earned a master of accounting degree with an emphasis in taxation. After graduation he immediately went to work for one of the international accounting firms and was now earning a taxable income of $100,000 in spite of the economic issues facing his friend Bob and the country as a whole. He too had debt but not from student loans. Chad had purchased a very nice home in Anthem, Arizona for approximately 50% of what it had sold for three years earlier when built. He had a $250,000 mortgage on the home, at a 4% interest rate, which he saw little reason to pay off since he anticipated significant inflation in the near future.

Of the three friends Dylan was by far the most successful. Dylan had majored in finance and had excelled. When he graduated, although he had several attractive offers in the financial services industry, he decided to go into the family business. The company which his father and uncle had started nearly 50 years ago had done amazingly well in the downturn and since he was the only child/nephew they were rewarding him handsomely. He had been reluctant to tell Bob but he was on track to receive total compensation (including bonuses) that yielded a taxable income of $300,000 this year. Unlike his friend Bob, Dylan was frugal and had taken on zero debt. He was pleased with the trio's good fortune but he didn't think the windfall would change his life all that much.

A few days later when the euphoria of winning was subsiding the three friends met again at the same establishment. All were obviously in good spirits and were looking forward to presenting their winning ticket to Arizona Lottery officials. Chad started the conversation by telling Bob

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and Dylan that he had taken the initiative of doing some basic research on how "The Pick" worked and what the payout options were. Bob, proud of his forethought, produced an article he had saved years earlier from the *Arizona Daily Star* with the headline "Lump-sum Lotto Payout is Best, Experts Say." Bob excitedly told his buddies that the experts were local CPAs and that clearly the lump-sum payout was "the way to go." Dylan said he wanted to hear what Chad had found out since he had gone to the effort of looking into the specifics.

Chad (being a tax accountant) had prepared a summary of his research which follows:

> *A percentage of the proceeds from the sale of Lotto tickets are allocated to a prize pool. The size of the Jackpot that is prominently advertised, six million dollars in this instance, is actually only an estimate. The advertised amount is the sum of the* ***estimated*** *annuity*[1] *payments, without consideration of the time value of money, which Lotto officials believe can be purchased from the prize pool. If the winner chooses the annuity payout multiple insurance companies submit bids. Officials award the bid to the insurance company that offers the largest annual payments in return for the prize pool amount. The insurance company with the best bid typically offers a rate that is near the long-term U.S. Treasury Bonds rate (currently 3%). If the winner chooses the Lump Sum payout they simply receive the prize pool amount; the amount that would have been used to buy the annuity.*

After reading the summary Bob said he didn't see how this related to the decision that had to be made since he didn't see anything that changed the preferred option being that the lump-sum payout is best. Chad acknowledged that Bob was probably correct but he still wanted to "run the numbers" and suggested that Bob and Dylan should do the same.

Chad reminded them that they needed to consider the tax consequences of the payout schema and then provided the following schedule of federal income tax rates and reminded them that the state tax rate was an additional 5%.

Taxable Income Bracket*			Federal Tax Rate
$0	to	$ 8,500	10%
8,500	to	34,500	15%
34,500	to	83,600	25%
83,600	to	174,400	28%
174,400	to	379,150	33%
379,150	to	and over	35%
* Assumes individual filing status			

[1] The term annuity is actually a misnomer. Since the payments are made by the insurance company at the beginning of each of twenty periods it is an annuity due.

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Bob rolled his eyes but said he would get right on it. Dylan thanked Chad for the information and they agreed to meet again tomorrow to decide on the best course of action.

Questions:

1. Is there necessarily one best decision for the group regarding the payout options? If so what is it and why?
2. What might be the reason(s) that Chad does not want to pay off his debt? Do you concur?
3. Prepare a personal analysis of the payout options for Bob, Chad and Dylan. Designate the preferred option for each individual and explain why.
4. What non-financial factors might enter into the decision for the winners?

References

Atkins, Allen B. and Edward A. Dyl, "The LOTTO Jackpot: Should You Take the Lump Sum or the Annuity?" *Financial Practice and Education*, Vol. 5, No. 2, Fall/Winter, 1995, 107-111.

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