

Pascal's Wager

1. The Wager.

Let us define the following positions:

Atheism—One is an atheist if, and only if, one believes that God does not exist.

Agnosticism—One is an agnostic if, and only if, one does not believe that God exists and does not believe that God does not exist.

Theism—One is a theist if, and only if, one believe that God exists.

Thus, the following is a *forced* choice—believing that God exists or not believing that God exists.

Pascal's wager can be formulated (anachronistically) as the following where $\Pr(\text{God exists}) = \Pr(\text{God does not exist}) = 0.5$ and where m, n are finite:

| | God exists | God does not exist |
|---------------|-----------------|--------------------|
| Believe | $(0.5)(\infty)$ | $(0.5)(-m)$ |
| Don't Believe | $(0.5)(-n)$ | $(0.5)(-\infty)$ |

Given the rule of Expected Utility (EU) where S_i is a state of the world and $\Pr(\bullet)$ and $U(\bullet)$ are probability and utility functions respectively,

$$EU(A) = \Pr(S_1)U(S_1) + \Pr(S_2)U(S_2) \dots + \Pr(S_n)U(S_n)$$

It follows that (provided $m = n \neq 0$),

$$EU(\text{Believe}) = (0.5)(\infty) + (0.5)(-m) = +\infty$$

$$EU(\text{Don't Believe}) = (0.5)(-n) + (0.5)(-\infty) = -\infty$$

Finally, if we accept the rule of *Maximizing Expected Utility*,

MEU—choose the action with the greatest EU

Then, it is prudential to believe that God exists.

2. Objections.

1. Our beliefs are not under our control—voluntarism is false.

Reply: Our beliefs may not be *directly* under our control. However, they are *indirectly* under our control. One can begin to go to church and eventually come to believe in God.

2. God will not reward someone who believes because of self-interest.

Reply: God does not care *why* someone believes; only *that* they believe.

3. It is assumed that the probability that God exists is 0.5. However, this is too optimistic; surely, the probably that God exists is very, very small.

Reply: Suppose that the probability that God exists is as small as you like provided that it is not 0. Even then, the wager goes through since any number multiplied by ∞ is ∞ . Similarly, if you think the probability that God exists is 0; how certain can you be of this? What argument could demonstratively show this? If there is no such argument (which there is not) then the subjective probability that God exists should be non-zero even if very small.

4. Pascal surely would not counsel the wager if it required martyrdom.

Reply: Well, yes he would. Death has at most a finite disutility. The reward of heaven is still ∞ . Remember that there are “fates worse than death”.

5. You have considered the Christian God only; but surely there are other Gods possible. If so, then the following matrix is possible:

| | God exists | God does not exist |
|---------------|----------------|--------------------|
| Believe | $(x)(-\infty)$ | $(1 - x)(-m)$ |
| Don't Believe | $(x)(-n)$ | $(1 - x)(+\infty)$ |

6. Whatever non-zero probabilities one assigns and given that m, n are finite, then it follows that one should not believe in God. This is due to the fact that God does not reward believers but rather rewards non-believers. How can one rule out such deities?

Reply: (a) Surely there is *some* evidence for the Christian God from partially checkable scripture, historical reports, religious experience, etc.

(b) One must also look at what payoffs are best and which form of damnation is worst. The Christian God would fair well on that score—the form of damnation is pretty bad and the reward is pretty swell.