

Reply to Referee report

I am deeply grateful to the referee for his insightful comments and suggestions, which will be very useful for revising the paper. As the review is very detailed and I entirely approve of all these four suggestions, so I will revise the paper in accordance with the referee's advices. The detailed answers to the referee's advices are as follows.

1. The discussion following Proposition 2 on page 5 seems the wrong way round. The Proposition says that, if $EX = EY$, and X dominates Y by SSD, then does not dominates Y by ε -AFSD for any $\varepsilon < 0.5$. However, what is stated, namely that, when the two variables have the same expectation, SSD leads to AFSD, is just the contrary of this.

Reply: I agree with the referee's opinion. In the second paragraph from bottom on page 5, the sentence "The answer will be yes if they have the same mathematical expectations, otherwise will be no" is really wrong way round. And I will revise it as "The answer will be yes if they have different mathematical expectations, otherwise will be no".

2. For Theorem 1, let A denote the proposition that $m(X)$ dominates $n(X)$ by ε -AFSD, and let B denote the condition of the theorem, namely that $\int_T [n(x) - m(x)]f(x)dx \leq \varepsilon \int_a^b |m(x) - n(x)|f(x)dx$. Saying " A if B " means that B implies A . This is proved as the "only if" part of the theorem, but it is in fact the "if" part. Saying " A only if B " means that A implies B , or, equivalently, that not- B implies not- A . This is proved as the "if" part. Thus the names of the two parts of the proof should be interchanged. Similarly, in the paragraph that immediately precedes Corollary 1, the "only if" part should in fact be the "if" part.

Reply: Thank you very much for pointing out this mistake. I am deeply sorry for making such low-level mistake. And I will correct this mistake by exactly following the referee's suggestion.

3. Just below Corollary 1, "no any" should be just "no".

Reply: I agree with your opinion and I will replace the words "no any" with "no".

4. First paragraph of section 4, line 4: "practice application" –> "practical application".

Reply: I agree with your opinion and I will replace the word "practice application" with "practical application". Certainly, "practical application" is a more appropriate expression in the context.