Reply to Referee #1

We thank anonymous Referee #1 for a general comment on this paper.

Referee #1:
“Make this paper super easy to understand”

Authors’ response:

As being pointed out correctly, the tariff-rate quotas (TRQs) is a complex system where not only price (tariffs) and quantity (quotas) terms are coupled together, but also their administration methods (state trading in this paper) interact with one another. In this sense, a derivation of tariff equivalents from the quantity-based instrument and the institutional factor must be a challenging task, which may make it difficult to understand.

But, we can take advantage of the theoretical derivations for tariff equivalents of the TRQs, which were well-documented and published by McCorriston and MacLaren (2005). Being heavily indebted to their creative endeavor, our paper attempted to extend their theoretical settings with a view to Korea’s actual cases. We think it is unavoidable to go through rather complicated modeling work based on theoretical foundations.

To improve readability of the paper, we have added a fundamental reference related to the estimation methods for tariff equivalent of another administrative methods and made an effort to fully explain the model equations.

1. Footnote 6 on page 6 illustrates a specific case which provides different methods to estimate the tariff equivalent of TRQs. This reference may help readers to understand the economics behind the relationship between tariff levels and quota administration methods.

2. Detailed description of equations (1) and (2).

3. Typos in the following three equations are corrected:
   
   Eq. (3): kQ^m is replaced by KQ^m
   
   Eq. (6): b(n+K)(n+1)q^m is replaced by (b+K)(n+1)q^m
   
   Eq. (12): b(n+K)(n-m)q^d is replaced by (b+k)(n-m)q^d
   
These typos occurred during conversion of MATLAB results to the text.
C1. Skully’s middle initial in bibliography.
Authors’ response: We deleted the middle initial as suggested.

C2. Consistent use of commas in bibliography.
Authors’ response: Use of commas and the order of name initials are made consistent.

Authors’ response: The term ‘aT’ is previously defined on page 2.

C4. ‘HI’ determination and its relationship with ‘End-User’.
Authors’ response: A detailed description is added to the Table note as:
“The ‘HI’ refers to allocation made in proportion to each importer’s historical performance. ‘End-users’ are mostly small-scale manufacturers who demand soybeans as raw materials to produce processed foods like tofu. Since 2009, some processors used to be ‘HI’ have been able to import soybeans directly with ‘End-users’ entitlements.”

C5. Is the release price a weighted average of the world price, 5% tariffs and much larger tariffs? If not, then why even discuss the two tariffs?
Authors’ response: The two-tiered tariff system is discussed because it is a core element of the TRQ system. However, because of STE imports and expanded in-quota amounts each year, most manufacturers are able to access to the in-quota imports. In this paper, we attempted to measure distortive effects of the STE practices in terms of their tariff equivalents.
Reply to Referee #2

We thank anonymous Referee #2 for helpful comments on our paper. These comments will improve the paper by clarifying unclear expressions. Our responses to each specific comment made by the referee follow.

R.2.1. Define ‘P’, ‘a’ and ‘b’ in Eq. (1)

Authors’ response: These terms are defined as P: domestic price, a: intercept, and b: slope.

R.2.2. Define ‘f’, ‘F’, ‘k’ and ‘K’ in Eqs. (2)-(3)

Authors’ response: Definitions are added as f and F: intercepts, and k and K: slopes.

R.2.3. The term (n+1) should be ‘2n’ and ‘K’ should be mentioned explicitly in Eqs (5)-(6). Accordingly, subsequent equations are needed to exam.

Authors’ response: We double checked these equations and found no error. Besides, McCorriston and MacLaren (2005) reports the same results.

During this revision, we found several typos and corrected them as follows.

In Eq. (3), ‘k’ must be ‘K’.

In Eq. (6): b(n+K)(n+1)q^m must be (b+K)(n+1)q^m

In Eq. (12): b(n+K)(n-m)qd must be (b+k)(n-m)qd

These typos occurred during conversion of MATLAB results to the text. In addition, a couple of references are added.