# A Response to Gaigné and Larue (2024)

Dao-Zhi Zeng*

July 8, 2024

**Abstract**

In their response to Zeng (2024), Gaigné and Larue (2024) present two new results demonstrating the potential necessity of quality regulations based on their CES model. This brief note provides additional commentary on their findings.

*Key words*: CES, Quality regulations, welfare
*JEL Classification: L16, L51*

*Running Head:* A Response to Gaigné and Larue (2024)

**Acknowledgements:** The author expresses gratitude to Carl Gaigné and Tadashi Morita for fruitful discussions. Additionally, acknowledgment is made for financial support from JSPS KAKENHI of Japan (Grant numbers 20H01485 and 21K18128).

*Graduate School of Information Sciences, Tohoku University, Aoba 6-3-09, Aramaki, Aoba-ku, Sendai, Miyagi 980-8579, Japan. E-mail: `dao-zhi.zeng.d7@tohoku.ac.jp`

In Gaigné and Larue (2024), the authors present two new findings. The first is the existence of an optimal standard when all firms adopt the public standard, and the second is the ambiguity in a small and open economy. These findings are discussed in the following two sections, respectively.

## All firms adopt the public standard

Their first result builds on the model of Gaigné and Larue (2016b). In contrast to Gaigné and Larue (2016a), this model requires all firms to adopt the public standard. The authors demonstrate that the optimal public standard is higher than the lowest quality level in a laissez-faire economy. Let me use a numerical example to illustrate its implications. For simplicity, I will continue to focus on a closed economy without the homogeneous aggregate good. Let the total population be $L = 1$. I use the same parameters specified in Zeng (2024),

$$\alpha = 0.6, \beta = 0.7, \gamma = 6, \eta = 3, \epsilon = 4, f_e = 3, f = 1.$$

Figure 1 Here

Figure 1 illustrates the welfare results in this example. The horizontal axis represents the quality level. The dashed (red) line (denoted by $A$) indicates the welfare level in the laissez-faire economy, where the government does not implement any policy. The solid (black) curve shows how the welfare level changes with the public standard. The first vertical dot-dashed (blue) line, $\underline{\theta}$, represents the lowest quality level in the laissez-faire economy, while the second vertical dot-dashed (blue) line, $\theta_{\max}$, indicates the optimal public standard. Points $B$ and $C$ denote their welfare levels, respectively.

As the authors stated, $\underline{\theta}$ is smaller than the optimal standard. However, this does not imply the necessity of policy regulation. Both $B$ and $C$ are lower than $A$. It is noteworthy that in the laissez-faire economy, all firms choose their private standards, most of which are higher than $\underline{\theta}$. However, when a public standard is imposed, all firms must choose the quality level $\underline{\theta}$, which reduces efficiency in the economy. That is the reason why $B$ is lower than $A$. Although $C$ is higher than $B$, it is still below $A$. Thus, this new result from Gaigné and Larue (2024) supports my previous comment that quality regulations do not enhance welfare if CES preferences are assumed.

## Small and open economy

There are many new issues in an open economy, and it is crucial to explore these new puzzles. Assuming a small and open economy is a good idea if it leads to clear-cut results. However, in Gaigné and Larue (2024), the impact of MQS on welfare remains *a priori* ambiguous.

To demonstrate the ambiguity, numerical examples for all possible cases might be necessary. Without these examples, it is not ambiguity but simply an inability to make a judgment.

## References


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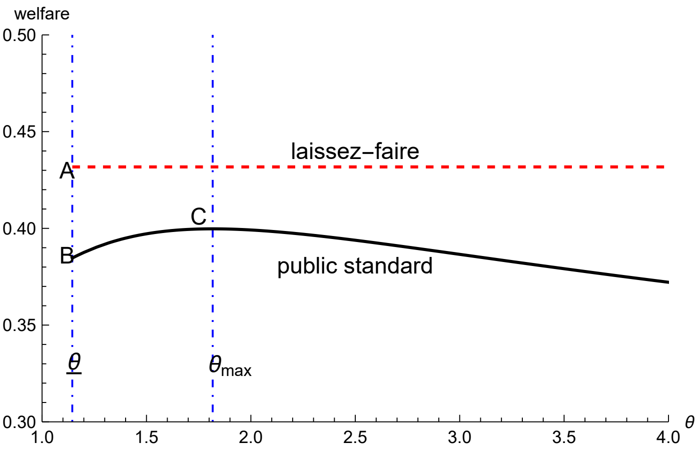


Figure 1: A numerical example