I am thankful to Jan Ott (2022) for replying to my criticism (Murphy 2022) of his objection (Ott 2018) to the methodology used in Economic Freedom of the World index of economic freedom, a project which I am directly involved in. In retrospect, I feel that my treatment of the main issues was not as clear and simple as it could have been. The exchange has helped me to understand the discourse, and with that new insight I rejoin briefly here.

Ott uses Cronbach’s alpha to recommend dropping size-of-government from the index. That kind of objection would only be pertinent for what is called a reflective construct, as opposed to a formative construct, which is what the index is. I wrote my comment on Ott on the supposition that he did not understand that.

I’d like to start fresh, with simple examples.

Imagine we were constructing a performance review metric for a fast-food company wishing to evaluate its workers. It is judged that in order to be a good employee you must be able to (1) make change quickly and accurately, (2) arrive on time, and (3) get along well with your coworkers. These things could be positively correlated with one another. But they may not be correlated with one another. The entire question of correlation is irrelevant. If we want to create a good tool for assessing performance of fast-food employees, we need to include things that employers deem to be constitutive of employee performance. To bring in Cronbach’s alpha, meant to assess convergent validity, to the problem is inappropriate and impertinent. If making change quickly, arriving on time, and getting along with coworkers are not correlated, that does not change our idea of good job performance. To suggest that getting along with coworkers should be dropped...
from the metric because doing so increases the Cronbach’s alpha score would be a complete non sequitur. A researcher or consultant may believe that employers should not feel that getting along with coworkers is important; the research might mount a body of argument as to why their construct of job performance should not include getting along with coworkers. But Cronbach’s alpha would not have any place in that body of argument.

Ott (2018) calls for dropping government size from the Economic Freedom of the World Index. One of the arguments he gives for doing so is based on Cronbach’s alpha results; that is not a pertinent argument for dropping government size. The liberal, or at least classical liberal, idea of freedom in economic affairs concerns not being taxed or interfered with by the government. Government size is a conceptually suitable metric because big government subsists on taxation, privileges, and restrictions that sustain government’s big-player status and guard its operations from competition. Ott does not mount any argument against government size being a conceptually suitable metric for a formative construct of the classical liberal notion of freedom in economic affairs. That is what he would need to do to provide a pertinent reason for dropping government size from the index.

Studying classical-liberal freedom does not preclude studying other things. A proper attitude is to hope that numerous interpretations of freedom are explored. There are different ways of making sense of the world, and they should compete freely and openly with one another. The classical liberal tradition has developed distinctive ways of making sense of the world, and central to that sense-making is the tradition’s idea of liberty as not being taxed or interfered with by government, or, as Adam Smith put it, “allowing every man to pursue his own interest his own way, upon the liberal plan of equality, liberty and justice” (1976/1776, 664).

Does Ott oppose our studying of classical-liberal freedom? It’s unclear, but it seems so. He seems to suggest that there is only one way to interpret freedom, namely, “as the actual possibility to choose” (2022, 58), and that therefore the classical-liberal interpretation, which is something else, should not be studied and discussed. Removing government size from the index would impair our investigation of classical-liberal freedom. Again, big government subsists on taxation and on privileges and restrictions that are rooted in coercion. Ott’s apparent suggestion is analogous to a consultant urging employers to take ‘getting along with coworkers’ out of their construct of job performance, because he has the only right conception of ‘job performance’ and it does not include ‘getting along with coworkers.’ After all, why is Ott criticizing our inclusion of government size when other projects, such as the Human Development Index, seem already to represent what Ott seeks, a formative construct of “the actual possibility to choose”?

A formative construct stands in contradistinction to a reflective construct. That is where Cronbach’s alpha is pertinent. When you build a reflective construct,
you look for signs that the variables you include are all picking up on the same latent, unobservable concept. Assessing that question is one purpose of using tools like predictive validity or convergent validity. Suppose we wanted to construct a math test assessing whether a student understands a particular concept. You can create a set of questions which seem to address the same concept, but you can’t actually observe whether the concept is understood. The way you can get around that is to see whether performance in one kind of question is predictive of performance in another question. If the questions are all actually testing the same concept, then performance across those questions should highly correlate.

**Figure 1. Reflective construct**

![Reflective Construct Diagram](image1)

**Figure 2. Formative construct**

![Formative Construct Diagram](image2)

In my initial critique of Ott (Murphy 2022), I did not include the standard diagrams for distinguishing between formative and reflective constructs, but I have adapted a simplified version of the diagrams above in Figure 1 (for reflective constructs) and Figure 2 (for formative constructs), using the examples of a math test and an employee performance review. In Figure 1, there is the unobserved

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2. These appear in almost any elaboration of formative and reflective constructs (e.g., Bagozzi 2011, 270).
variable, which is the student knowledge of the concept we wish to test. We can indirectly observe student knowledge by seeing it reflected in other variables: her answers to the test questions. Note that the direction of the arrows goes from the latent variable to the observables; the latent variable is being reflected.

In Figure 2, the situation is reversed. The constituent parts are what forms the basis for the formative construct, in this case employee performance. Punctuality, making change accurately, and getting along with co-workers are how we define high levels of employee performance. If you remove one of these dimensions of employee performance, you end up with a worse measure of performance, regardless of their correlation. Using predictive and convergent validity in this context would be impertinent.

That also holds for economic freedom. The intuition for the Economic Freedom of the World index is that of the formative construct, not the reflective construct. Our definition of what to include in defining economic freedom is well-grounded in the literature. I provided several citations establishing that conceptualizing economic freedom in terms of a small size of government (in addition to the other variables we use) is well aligned with the classical liberalism associated with, say, Adam Smith. If Ott wishes to argue that the Economic Freedom of the World index should stop being an empirical project focused on and rooted in the Smithian liberal idea of freedom in economic affairs, he would need to give an argument for that. In doing so, Cronbach’s alpha would not be relevant.

References


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