Referee Report on

"Fiscal Divergence and Monetary integration in West Africa: What to draw from Darvas et al. (2005)?"

Submitted to Economics

Manuscript Number: Economics-3372-1

Content of the Paper

The paper studies the effect of the fiscal divergences among 15 West African countries that are in transition to establish a monetary union (ECOWAS) on their business cycles synchronization. It uses the methodology proposed by Darvas et al. (2005). The authors find that a 1% decrease in fiscal divergence is associated on average with a better coherence of the business cycle by 0.105%. They also propose some indirect and direct fiscal mechanisms to reduce the existing fiscal divergence among these West African countries.

Major Comments

While the paper makes a significant contribution to the existing literature, before publication some crucial issues need to be resolved.

- 1. I am concerned about the short time period of only one decade underlying the empirical analysis (2007-16). In comparison, Darvas et al. (2005) look at four decades and use decade-averages variables in their regressions. The authors justify the chosen starting year of 2007 with the effect respectively the structural break potentially caused by the Global Financial Crisis (GFC). However, if the authors really want to start after the GFC disruption they should start in 2008 or even in 2009, which would reduce the sample period even further. To avoid this problem, I suggest to choose a starting year as early as possible (driven by data availability) and also to extend the sample period up to 2018 (the 2017 data seems already been used in Figure 3). If sufficient data before the GFC is available, the authors might even split up the sample in before and after the GFC and test explicitly for the existence of the structural break they claim.
- 2. The short sample period is also a big problem for the business cycle extraction, for which the authors use a HP-filter with two alternative smoothing parameters. I recommend the following.
 - a. It is well known that the HP filter suffers from the problem of start and end point sensitivity. Therefore, the authors should extend the data sample (as proposed in the previous point) at least for the purpose business of cycle extraction in order to reduce the problem start and end point sensitivity.
 - b. The authors should employ an alternative filter (like Baxter-King Band-Pass Filter) for additional robustness.
- 3. The authors use the government fiscal balance relative to GDP for measuring fiscal divergence. They should additionally use the primary deficit (cyclically adjusted, if available) for robustness (as reasoned by Darvas et al. (2005)).
- 4. The authors refer to "the theory of Darvas et al. (2005)" (see -among others- page 6/7). However, in their seminal paper Darvas et al. (2005) do not provide a "theory" on the link between fiscal divergence and business cycle synchronization. It is a pure empirical paper. In contrast, Darvas et al. even state that they do not want to provide an explicit theory because theoretically the link between fiscal convergence and business cycle coherence is ambiguous. They provide causal arguments of why the relationship could be in two different directions and conclude (quote, p.4): "... From a theoretical viewpoint then, the matter is ambiguous. ... The question is thus ultimately empirical". The authors should also frame their analysis like that.
- 5. I recommend a modification of the title. It is quite uncommon to explicitly include a referenced paper in the title unless it is a direct comment or a discussion of the respective paper. Since the authors explicitly provide Darvas et al. (2005) as their main reference they should also carefully check and complete this reference. The number of the Darvas et al. (2005) NBER working paper is missing in the reference (it is no.11580), and it is not a technical paper as indicated by the authors. It also has

- been published in: NBER International Seminar on Macroeconomics (2007), edited by Frankel and Pissarides. This might be a better reference than the NBER working paper.
- 6. The policy recommendations are very general and, thus, too superficial. I recommend to exclude it from the paper and to (just) form a paragraph in the conclusions pointing out some potential avenues/measures for reducing fiscal divergence.

Minor Comments:

- 1. I recommend to avoid labelling the approach as "gravity model", because this might be misleading to the readers since one immediately thinks of bilateral trade flows being involved.
- 2. Avoid the Arabic numerals in parenthesis when the numeral is already expressed in verbal terms (e.g. "... five (05) steps ...")
- 3. Page 1: "... dropping the steps of common market and economic union ...": Will these steps really be completely dropped (i.e., the characteristics will not be realized explicitly by intention), or is it that a currency union (ECOWAS) is supposed to potentially lead to a common market and an economic union later on, so that the order of integration steps is changed?
- 4. Although Darvas et al. (2005) is a very influential contribution, I would not consider it as a "famous paper" as done by the authors (see page 2). I rather suggest referring to it as the "seminal paper" instead.
- 5. Page 3: Please correct "...if this assumption is validated, the paper cans ...". Also write "hypothesis" instead of "assumption" (also change this on page 9 in the conclusions).
- 6. Figure 1 (right column): indicate that these figures are annual averages of the sample period 2007-16.
- 7. Figure 2: indicate that tax rates are expressed in percentage.

Recommendation

Major Revision