Reviews of ECONJOURNAL-D-24-00268R2

The Role of Export Credit Agencies in Trade Around the Global Financial Crisis: Evidence from G20 Countries

Round 1

Reviewer 1

The only purpose of the comments is to enhance your paper. Please kindly take the concern to the comments as follows

Introduction section.
-Remove redundant phrases and sentences. Focus on clarity and conciseness.
-Instead of general statements, provide specific examples of the impacts of the GFC and the types of stimulus packages used.
-Use transition words and phrases to create a smoother flow between paragraphs.
-While contributions are mentioned, they are not fully developed. Saying the research offers "a dynamic understanding" is vague. How does the research provide this dynamic understanding? What specific insights does it offer? The "unique feature" of the gravity model (trade route distance in hours) is mentioned but its significance is not explained. Why is this a better measure than traditional distance? What is the expected impact of using this measure?
- While the methodology is mentioned, the specific reasons for choosing the augmented gravity model and the ARDL approach are not explained. Why these models are particularly suitable for this research question needs justification. What are their advantages in this context?

Literature Review section.
-The connection to ECAs isn't clearly established early on. The discussion of the GFC's impact is also somewhat redundant.
-The review primarily summarizes existing literature rather than critically analyzing it. There's little discussion of conflicting findings, methodological limitations of previous studies, or the relative strengths and weaknesses of different approaches. For example, multiple studies are cited showing a positive ECA impact, but there's no discussion of studies with different findings or potential reasons for variations in results.
-While some economic concepts are mentioned, the review could benefit from a more explicit discussion of the theoretical underpinnings of the relationship between ECAs and trade. What are the theoretical channels through which ECAs are expected to influence exports? How do different theories explain the role of ECAs during crises?
-While the review covers relevant topics, the connection between the literature reviewed and the specific research question of the study (impact of ECAs on

G20 exports before, during, and after the GFC) is not always clear. The review should explicitly highlight how the existing literature informs the current study and what gaps it aims to fill.
-The review doesn't effectively synthesize the literature to build a coherent argument. The connections between different studies are not always clear, and the reader is left to draw their own conclusions about the overall state of knowledge. Instead of just listing studies, the review should weave them together to tell a story about the evolution of research on this topic.

Research Method section.
-While Table 1 provides variable descriptions and sources, it lacks crucial details. For example, what is the unit of measurement for each variable (besides the mention of million USD for some)? How is the "most crowded city" determined? Is population the only criterion? What specific years are used for constant 2010 US$ GDP? More details are needed for replicability. Also, explain why Saudi Arabia and Indonesia were excluded beyond simply saying "missing variables." What specific variables were missing, and were attempts made to impute the data? This raises concerns about sample selection bias.
-The justification for the log transformation is weak. Simply stating it's for "reliable and consistent estimates" is insufficient. Explain why the log transformation is appropriate in this context. Does it address issues like heteroscedasticity or non-linearity? What are the potential drawbacks of using log transformations, and are they addressed?
-The argument for using trade route distance in hours instead of airline distance is flawed. While it's true that most goods are transported by sea, using the most crowded cities as proxies for origin and destination points is a significant simplification. It assumes that all trade originates and terminates in these cities, which is unrealistic. The connection between the population of a city and the volume of exports is also questionable. A more robust measure of distance, perhaps considering major ports or economic centers, is needed.
-The definition of the GFC dummy variable is acceptable, but it's important to acknowledge that different definitions exist. Justify the chosen period (2007:Q3 - 2009:Q1) and discuss any potential sensitivity of the results to alternative definitions. Also, the Reserve Bank of Australia note cited isn't a formal academic source. A more robust citation is needed.
-The justification for the augmented gravity model is weak. Simply stating that it "increases the explanation power" is insufficient. Why are these specific variables included? What is the theoretical justification for their inclusion? What hypotheses are being tested by including them? The REER is mentioned, but its expected impact on exports is not stated.
-The justification for using the ARDL model is better than other justifications but still needs improvement. While the cited advantages are relevant, explain
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why these advantages are particularly important in this specific context. For example, why is the flexibility of handling I(0) and I(1) variables crucial here? What tests were conducted to determine the order of integration of the variables? How was the lag length (p) selected? What criteria were used?
-The discussion of endogeneity is confusing. It starts by mentioning the "concerns around the endogeneity of insured trade credits," but then states that the analysis "differs from the standard gravity model approach" because it uses aggregated data. This doesn't address the endogeneity issue. Using aggregated data might introduce other problems (e.g., aggregation bias), but it doesn't solve the fundamental problem of potential two-way causality between ECAs and exports. The reference to Brandi and Schmitz (2015) is provided, but the exact way in which their methodology is followed is not explained. How does this "modified version" address the endogeneity problem? The claim about tackling endogeneity "better" is not supported by a clear explanation.
Result and Discussion section.
-While the table is presented, the discussion primarily focuses on skewness and kurtosis without really explaining why these are important in the context of the analysis. What are the implications of the observed distributions for the model and its assumptions? The mention of logarithmic transformations and the ARDL model's ability to handle non-normality is repeated from the methodology section and doesn't add new insight here. The statement about the "strong correlation between GFC and GFCTOTECA" is a restatement of what's obvious from the data and doesn't offer any real analysis.
-The discussion of model selection is inadequate. While the AIC is mentioned, there's no explanation of why it was chosen over other criteria (like BIC or HQ). The statement about "competitive BIC and HQ scores" is vague. The actual values should be presented and discussed. The mention of the "highest log-likelihood score" is also insufficient. What does this mean in practical terms? Why is it important? The appendix is mentioned, but without specific details, it's impossible to evaluate the model selection process. What other models were considered? What were their AIC values?
-The presentation of the long- and short-term results is confusing. Table 5 presents the coefficients, but the discussion doesn't clearly explain what these coefficients mean. For example, what does a coefficient of 0.119998 for LNSTECA in the long run mean in practical terms? The interpretation focuses on percentage changes, but it's not clear why a 1% increase is used as an example. Also, the statement about "diverse relationships" is vague. Be specific. Which relationships are diverse, and how are they different?.
-Connect the findings to the existing literature and provide a theoretical explanation for the observed effects.
-Explain the implications of the COINTEQ01 term and discuss the significance (or insignificance) of the individual short-term coefficients in more detail.
-The discussion of the results for France, Italy, and Japan is descriptive but doesn't offer any real analysis. Why do these countries show different patterns

of influence? The statement about "home country's GDP (positive) and real exchange rate (negative)" is a general statement that doesn't add much to the analysis. The reference to Simakova & Prazak (2024) is provided, but its relevance is not clearly established.
-While Table 7 is presented, the ranking of countries is the main focus. Why do some countries adjust faster than others? What are the possible explanations for these differences? The exclusion of some countries from the analysis due to "statistically insignificant cointegration coefficients" needs further justification. What does "statistically insignificant" mean in this context? Does it imply that there is no relationship between the variables in these countries, or simply that the relationship is not statistically significant at the chosen level of confidence?
-The recommendations are very general and don't flow directly from the specific findings of the study. How can ECAs be used as a "dual-purpose tool"? What specific reforms are needed in developing economies? The discussion of "direct credit schemes" is relevant, but it could be more detailed.

Reviewer 2

Summary of the paper

The paper addresses the impact of export credit agencies (ECAs) on exports among G20 countries during the global financial crisis 2008 (GFC) using an augmented gravity model (ARDL estimation, 17 countries, 61 quarters, 2005–2020). The study finds that ECAs significantly impact the trade dynamics, with medium-term ECAs showing a positive impact while short-term ECAs exhibit negative long-term effects.

Contribution to the literature

The paper contributes to the literature by shedding light on the dynamic effectiveness of ECAs under different economic conditions. However, several methodological and theoretical issues need to be addressed for this paper to make a robust contribution.

Major comments

1. Justification of using aggregate ECA data instead of bilateral data
Using total ECA finance instead of bilateral trade data is a significant methodological decision, but its justification is not sufficiently robust. While using total ECA support captures more variation, it introduces aggregation bias because not all industries or trading partners receive equal support from ECAs. Some destinations receive higher support due to factors such as political risk, strategic alliances, or default concerns, which may significantly bias the estimated outcomes. Furthermore, the paper assumes that ECA-financed trade

is the primary driving factor of exports, although many firms also utilize private trade finance, bank loans, or letters of credit. Conducting a robustness check comparing ECA-financed and non-ECA-financed trade flows would strengthen the argument and validate the findings.

2. Gravity model vs. modified Gravity model

The authors use an aggregated country-level approach instead of the bilateral gravity model, which may result in the loss of micro-level insights and potential model misspecification. The gravity model is widely used because it effectively captures trade costs between two countries, including tariffs, distance, and economic size. Aggregating data at the destination-country level may hide the bilateral trading dynamics. The paper is not clear about whether it uses the multilateral resistance terms (MRTs), which are required in modern gravity models to control for omitted variables like trade agreements, exchange rate, and third-country effect. A key question is: Does aggregation hide the heterogeneous effects of trade credit across different trade partners? I would suggest that the authors test whether MRT adjustments invalidate their findings.

3. Dealing with endogeneity issues

The authors acknowledge endogeneity concerns regarding ECA variables but do not specify how they are addressed. The discussion lacks depth and does not explain whether instrumental variables (IV), Generalized Method of Moments (GMM), or Difference-in Differences (DiD) methods were considered. Given that trade finance and trade flows are likely determined simultaneously, only relying on a model specification change may not adequately control for endogeneity. At minimum, the authors should justify why standard techniques like IV, GMM, or DiD were not used, or provide alternative tests (e.g., Hausman test) to confirm robustness.

4. Estimation strategy and ARDL concerns

Stationarity and Cointegration: The authors state that the variables are I(0) and I(1). However, they do not explain which stationarity tests were done (e.g., Augmented Dickey Fuller (ADF), Phillips-Perron (PP)). Given that the ARDL model needs to be cointegrated, the class of Bounds test should be reported to justify its use. Model selection criterion: The paper uses the Akaike information criterion (AIC) to select the model. Though AIC is proper, it should be supplemented with other criteria (e.g., Bayesian information criterion (BIC), Hannan-Quinn criterion (HQ)) to ensure robustness. Error Correction Model: The ECM provides insight into the speed of adjustment toward long-run equilibrium, but the policy implications of these results are not well-developed

Minor comments

• Alternative panel econometric techniques like Poisson pseudo-maximum likelihood (PPML), fixed effect (FE), or GMM should be explored and compared with the ARDL findings.

• The theoretical explanation for the negative effect of ECA on trade in the long run is underdeveloped. Possible mechanisms such as market distortions, moral hazard, or crowding out of private financing should be explored.
• Heterogeneous effects: The paper shows that ECA effects are heterogeneous across countries but does not explain why some countries are more affected than others. Institutional differences, trade openness, and financial development should be discussed.

Conclusion/recommendation

The study addresses an important policy question; however, several methodological weaknesses need to be addressed to provide credible answers. The main concerns are:
• Adaptation of the Gravity Model: Aggregation may obscure important bilateral trade dynamics.
• Overreliance on ARDL Estimation: ARDL is not typically used in trade models.
• Failure to Address Endogeneity Issues: This may bias the results.
• Lack of Robustness Checks: The study does not include alternative estimators and control variable.

Recommendation

To improve the paper's contributions to trade finance and crisis resilience, the authors should:
-Address endogeneity with more rigor.
-Include robustness checks with alternative estimators like PPML and FE.
- Include institutional and financial determinants of ECA effectiveness.
- Provide theoretical justification for the long-run negative effect of ECAs.

If these issues are resolved, the paper should be able to make a significant and valuable contribution to the literature.

Overall recommendation: Major revision required

Reviewer 3

This paper examines the efficacy of Export Credit Agency (ECA) activities in affecting total exports of the G20 countries over the period from 2005 to 2020. Such activities may affect export performance through insurance and lending facilities to exporting firms in each country. The paper employs an augmented gravity model with autoregressive distributed lag structure to capture both short-term and long-term effects of ECA's, with special emphasis placed on the period corresponding to the Global Financial Crisis (GFC).

Comments:

1. I didn't like the terminology "the effect of ECA's". Do the agencies affect trade flows and total exports or do their activities such as insurance services and lending to firms have the effect? Perhaps the title could be "The role of export credit agencies on the trade …"
2. However, if the modification is made, then the narrative in the abstract and the paper should also be changed to eliminate phrases such as "ECAs have a significant influence on long-term trade dynamics, with medium-term ECAs showing a positive impact while short-term ECAs exhibit negative long-term effects." Is it the ECA's that are having these effects or their activities?
3. The role of ECA's is made clear in the Literature Review, with statements such as "Some ECAs restrict their services to providing insurance or guarantees, while others extend their offerings to include loans. In some cases, they provide both services." However, the authors appear to have adopted a shorthand of describing these roles as "the effects of ECA's", which I did not find satisfactory.
4. The specification of the econometric framework is quite cumbersome and unclear. We are first presented with equation 92), which is the augmented gravity model. However, the authors argue that the variables may be I(0) or I(1), suggesting that the extension to a cointegration framework in equation (3). Here, however, variables such as LnGDPPt-1 appear with a single lag but the summation ruans from i=0, …p! I believe this is an incorrect specification which confuses the shrt-term and long-term effects.
5. Furthermore, the notation βi(i= 4, 4, 4, 4, 4, 4, 4, 4, 4) and βji(j = 4, 4, 4, 4, 4, 4, 4, 4, 4) was unclear to me. I thought the dynamic effects were captured through the lagged terms of the individual variables which run with lags t-1-i, i=0….p. Do the authors restrict the maximum lag to be 4, in which case they have an ARDL(4,4,4,4,4,4,4,4,4). Is this what they are referring to on lines 266 and 267?
6. Finally, the left-hand side variable does not even have a t subscript on it.
7. In Tables 4 and 5, we are provided with some descriptive statistics. Are all of these variables I(0) or nonstationary? Otherwise, sample moments such as means, medians, correlations would not be well defined.

Minor Comments:
1. The variable GFCTOTECA is not defined in Table 1. Presumably it is an interaction variable.
2. Tinbergen is misspelled on line 222.
3. Does SEARATES refer to a commercial application or data set on line 230? If so, it should be referenced appropriately.

Round 2

Reviewer 1

Dear Author,

Thank you for your submission. It is an acceptable revision, but please review and correct any grammatical errors.

For example in your abstract:

1. "Exhibit adverse long-term effects" - The word "adverse" is fine, but "negative" may flow better with the rest of the sentence and match the earlier use.
2. "Total insured export credit instruments had a negative impact during the short-term" - The phrase "during the short-term" is awkward and a bit redundant. I suggest using "in the short term" instead.
3. Semicolon use - The semicolon before "it provides valuable insights..." could be replaced with a period. This change would enhance clarity and improve readability.

These suggestions are only from your abstract, so please check the whole paper and make similar adjustments where necessary.

Thank you!

Reviewer 5

Reviewer Feedback: Language and Clarity Improvement Needed: Thank you for addressing the previous comments and implementing the required corrections. The revised version shows clear progress in terms of structure and content alignment. However, the manuscript would benefit significantly from further improvement in its language quality and overall readability.
Recommendation: I recommend a careful language revision to bring the manuscript up to the standard required for publication. Once the language issues are addressed, the paper will be much more accessible to readers and reviewers alike.

Round 3

Editor

Dear Dr. Jahangir,

Thank you for submitting your manuscript to Economics.
I am pleased to inform you that your manuscript has been accepted for publication.
Your accepted manuscript will now be transferred to our production department. If we need additional information from you during the production process, we will contact you directly.
We appreciate you submitting your manuscript to Economics and hope you will consider us again for future submissions.

M. Sraieb
Co-editor