

710 23 3  
Views CrossRef citations to date Altmetric

Articles

# Financial openness and financial development: an analysis using indices

Zeynep Ozkok

Pages 620-649 | Received 02 May 2014, Accepted 27 Apr 2015, Published online: 22 Jun 2015

Cite this article <https://doi.org/10.1080/02692171.2015.1054366>

Check for updates

Sample our  
Economics, Finance,  
Business & Industry Journals  
>> [Sign in here](#) to start your access  
to the latest two volumes for 14 days

Full Article Figures & data References Citations Metrics Reprints & Permissions

Read this article

## Abstract

This paper examines the link between financial openness and financial development through panel data analysis on advanced and emerging market countries. Using indices, financial openness together with institutional and educational variables explains a large part of the variation in financial development across countries and over time. Our analysis demonstrates that different indexing strategies serve to find better measures for financial openness and financial development in

### We Care About Your Privacy

We and our 854 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting "I Accept" enables tracking technologies to support the purposes shown under "we and our partners process data to provide," whereas selecting "Reject All" or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the ["privacy preferences"] link on the bottom of the webpage [or the floating icon on the bottom-left of the webpage, if applicable]. Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Here](#)

We and our partners process data to provide:

Use precise geolocation data. Actively scan device characteristics for identification. Store and/or access information on a device.

I Accept

Reject All

Show Purposes

nt-type financial

ne lag structure

component analysis

analysis of the

teful to Klaus

do Mora, Carlos

Velasco and Ulrich Wagner for useful comments and suggestions. I would also like to thank the editor and the anonymous referee for many helpful comments.

## Disclosure statement

No potential conflict of interest was reported by the author.

## Notes

1. Non-debt-creating portfolio equity flows are defined as the sum of country funds, depository receipts, and direct purchases of shares by foreign investors (World Bank [2007](#)).
2. The literature suggests the use of gross foreign direct investment, gross private capital flows, and some de jure type indices as measures of financial openness. Gross private capital flows are excluded from our analysis and are replaced by portfolio investment flows due to their discontinuity by the World Bank.
3. We only report the results for one of the most frequently used de jure type indices; the Chinn and Ito index of capital openness, for comparison reasons. We believe that these results guide in demonstrating the strength of our de facto type financial openness index in comparison with the individual de facto measures by the literature.
4. Chinn and Ito ([2006](#)) argue that the logarithm of GDP per capita is important in accentuating the link between financial deepening and rising income levels.
5. Given the close linkages between different dimensions of financial openness, excluding some variables and choosing one individual variable to portray a relationship can severely bias the coefficients of the estimated regression (Draher [2006](#)). The need for an overall measure of financial openness is emphasized by Chinn and Ito ([2008](#)).
6. By using a principal component analysis, we can reduce the dimensionality of financial openness variables. Chinn and Ito ([2008](#)) use a principal component analysis to express the relationship between financial openness and economic growth. For the complex relationship between financial openness and economic growth, we use a principal component analysis to reduce the dimensionality of financial openness variables.
7. For the principal component analysis, we use the first principal component as the overall measure of financial openness. The first principal component is the weighted sum of the variables. The weights are determined by the variance-covariance matrix of the variables. The first principal component is the weighted sum of the variables. The weights are determined by the variance-covariance matrix of the variables.
8. We report the results for the first principal component. The first principal component is the weighted and uncorrelated sum of the variables. Furthermore, the first principal component is similar results. The first principal component is the weighted and uncorrelated sum of the variables. Furthermore, the first principal component is similar results.
9. For a detailed discussion of the principal component analysis, see Jackson ([1991](#)), Duntemper...

10. The principal component methodology of Bo and Woo (2008) is similar to that proposed by the United Nations Conference on Trade and Development (UNCTAD) for constructing the Trade and Development Index (UNCTAD 2005). Bo and Woo (2008, 2010), Nagar and Basu (2002) and Klein and Ozmuur (2002/2003) provide different approaches in constructing indices analogous to the Trade and Development Index (TDI) with minor alterations.
11. This method makes use of all eigenvectors and proposes to use weights depending on the eigenvectors and eigenvalues.
12. We restrain from using the system GMM estimator due to the weak instruments problem. The number of instruments used in the estimations is large enough to create weak results for the serial correlation tests and the Sargan test of overidentification when using the system GMM estimator. Therefore, we rely on our first difference GMM estimates.
13. Any influence of financial openness is now conditioned on the history controlled by the first differenced lagged dependent variable (Huang 2006). This model is a restricted version of the static fixed effects specification and it includes dynamic effects through the lagged dependent variable that is included as a right-hand-side regressor.
14. To test for overidentifying restrictions we perform Sargan tests. We do not include the lag of the dependent variable as an instrument. We utilize the Arellano-Bond two-step estimator to avoid any panel-specific autocorrelation and to obtain better diagnostics results.
15. In the benchmark dynamic GMM estimations, all variables other than the lags of the dependent variable are treated as exogenous.
16. The missing observations for bond market development indicators could be the reason behind the non-significant results.
17. Similarly, the missing observations for the bond market development index could explain the negative coefficient for the financial openness index. The variation in the banking sector can directly affect the... deviation... be a res...  
18. We v... have po...  
19. T... link b...  
20. Hua... construc... sector a...  
21. One... in the case with equally weighted indices.



22. Depending on the choice of the individual banking sector development indicators, Baltagi, Demetriades, and Law (2007) find altering coefficients for the interaction term. This agrees with our finding of a positive coefficient using comprehensive indices, which are composed of various individual measures used in the literature for financial openness and banking sector development.

23. The same partial derivative evaluated at the minimum level of financial openness index is 0.005, and evaluated at the maximum value is 0.006. Alternatively at the minimum level of trade openness, the partial derivative of financial development index with respect to financial openness index is 0.48 and it is 0.489 at the maximum level of trade openness.

24. The long-run coefficient for financial openness using the banking sector development index is 0.643. The coefficients for financial openness using the bond and stock market development indices are 0.505 and 0.107 whereas for the overall financial development index, the coefficient is 0.715.

25. The results are available upon request.

26. We rely on the World Bank's income group definition when splitting our data set into developing and advanced countries.

27. Comparing the results from our developing country sample with those of the advanced countries, financial openness is found to be positive and significant for most cases with the exception of the banking sector development for advanced countries.

28. The results are available upon request. Comparisons to the literature should be taken with caution for a variety of reasons. Both the models used in estimations, the choice of years and the countries widely differ across studies. The underlying research materials for this article can be accessed at <<https://docs.google.com/viewer?>

[a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbX6ZXluZXBvemtva3xneDo2NTM2OTkwZDU3N2RkMThk](https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbX6ZXluZXBvemtva3xneDo2NTM2OTkwZDU3N2RkMThk)>

Relate



Information for

Authors

R&D professionals

Editors

Librarians

Societies

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Help and information

Help and contact


Newsroom

All journals

Books

Keep up to date

Register to receive personalised research and resources by email

 Sign me up

