The **Journal of Banking and Finance** (JBF) publishes theoretical and empirical research papers spanning all the major research fields in finance and banking. The aim of the **Journal of Banking and Finance** is to provide an outlet for the increasing flow of scholarly research concerning financial institutions and the money and capital markets within which they function. The Journal's emphasis is on theoretical developments and their implementation, empirical, applied, and policy-oriented research in banking and other domestic and international financial institutions and markets. The Journal's purpose is to improve communications between, and within, the academic and other research communities and policymakers and operational decision makers at financial institutions - private and public, national and international, and their regulators.

The Journal is one of the largest Finance journals, with approximately 1500 new submissions per year, mainly in the following areas: Asset Management; Asset Pricing; Banking (Efficiency, Regulation, Risk Management, Solvency); Behavioural Finance; Capital Structure; Corporate Finance; Corporate Governance; Derivative Pricing and Hedging; Distribution Forecasting with Financial Applications; Entrepreneurial Finance; Empirical Finance; Financial Economics; Financial Markets (Alternative, Bonds, Currency, Commodity, Derivatives, Equity, Energy, Real Estate); FinTech; Fund Management; General Equilibrium Models; High-Frequency Trading; Intermediation; International Finance; Hedge Funds; Investments; Liquidity; Market Efficiency; Market Microstructure; Mergers and Acquisitions; Networks; Performance Analysis; Political Risk; Portfolio Optimization; Regulation of Financial Markets and Institutions; Risk Management and Analysis; Systemic Risk; Term Structure Models; Venture Capital.

**Benefits to authors**
We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our author services.

Please see our **Guide for Authors** for information on article submission. If you require any further information or help, please visit our **Support Center**

**AUDIENCE**
Financial Economists, Policy Makers in both private and public institutions.
IMPACT FACTOR

2018: 2.205 © Clarivate Analytics Journal Citation Reports 2019

ABSTRACTING AND INDEXING

UMI Data Courier
Journal of Money, Credit and Banking
Current Contents
Management Contents
ABI/Inform
Journal of Economic Literature
Social Sciences Citation Index
ABSCAN
RePEc
Scopus
ScienceDirect
Scopus
ABI/Inform

EDITORIAL BOARD

Managing Editor
Geert Bekaert, Columbia University Business School, New York, New York, United States

Co-Editors
Carol Alexander, University of Sussex, Brighton, United Kingdom
Thorsten Beck, Cass Business School, London, United Kingdom

Advisory Board
G.M. Constantinides, University of Chicago, Chicago, Illinois, United States
R. Engle, New York University, New York, New York, United States
K.R. French, Dartmouth College, Hanover, New Hampshire, United States
C.M. James, University of Florida, Gainesville, Florida, United States
F. Moshirian, University of New South Wales, Sydney, New South Wales, Australia
R.W. Roll, University of California Los Angeles, Los Angeles, California, United States

Associate Editors
L.F. Ackert, Kennesaw State University, Kennesaw, Georgia, United States
R. Albuquerque, Boston College, Chestnut Hill, Massachusetts, United States
H. Almeida, University of Illinois at Urbana-Champaign College of Business, Champaign, Illinois, United States
S.C. Andrade, University of Miami, Coral Gables, Florida, United States
M. Ayyagari, The George Washington University, Washington, District of Columbia, United States
G. Bakshi, Temple University, Philadelphia, Pennsylvania, United States
T.G. Bali, Georgetown University, Washington, District of Columbia, United States
J. Bao, University of Delaware, Newark, Delaware, United States
S. Bartram, University of Warwick, Coventry, United Kingdom
A.N. Berger, University of South Carolina, Columbia, South Carolina, United States
N.P.B. Bollen, Vanderbilt University, Nashville, Tennessee, United States
C.H.S. Bouwman, Texas A&M University College Station, College Station, Texas, United States
N. Branger, University of Münster, Munster, Germany
G. Cerqueiro, Catholic University of Portugal, Lisboa, Portugal
S. Chava, Georgia Institute of Technology, Atlanta, Georgia, United States
P. Chelley-Steeley, University of Birmingham, Birmingham, United Kingdom
T.J. Chemmanur, Boston College, Chestnut Hill, Massachusetts, United States
R.-R. Chen, Fordham University, New York, New York, United States
J. Choi, University of Illinois at Urbana-Champaign Department of Finance, Champaign, Illinois, United States
J. Colliard, HEC Paris Finance Department, Jouy en Josas, France
J. Cornaggia, Georgetown University, Washington, District of Columbia, United States
M.M. Cornett, Bentley University, Waltham, Massachusetts, United States
D.J. Cumming, Florida Atlantic University Barry Kaye College of Business, Boca Raton, Florida, United States
Z. Da, University of Notre Dame, Notre Dame, Indiana, United States
S. Datta, Wayne State University, Detroit, Michigan, United States
GUIDE FOR AUTHORS

**Submission Fee**
The journal charges submission fees of USD 250 for unsolicited new manuscripts and USD 150 for revisions. Note that a paper that was rejected by the editor but is later re-submitted by the author is considered a new submission. All submissions will only be considered after payment of the submission fee via SubmissionStart. After submission of your manuscript, you will receive an email with payment instructions. The submission fee is non-refundable and a paper may be rejected by the editors without being sent for review. More information is listed below under Editorial Strategy and Policies.

The proceeds of submission fees are used for the development of academic activities in the interest of the Journal's audience and for providing tokens of appreciation to those reviewers who deliver quality review reports within a given time limit. However, please note that the reimbursement is on a personal title and not transferable to an organization. Those reviewers who are not able to receive a reimbursement on a personal level are kindly requested to waive it.

**Introduction**
Authors thinking of submitting an article to the Journal of Banking and Finance (JBF) should first consider carefully whether the paper falls within the 'Aims and Scope' of the journal as described on the journal homepage http://www.journals.elsevier.com/journal-of-banking-and-finance, i.e. that it falls broadly within the fields of banking and finance. The journal homepage also includes a list of 'Main subjects covered' which may provide further guidance as to whether the paper is likely to be of interest to JBF.

In addition, authors need to bear in mind that JBF readers include not only academics but also a range of finance professionals. Therefore, authors need to be mindful that their research has non-trivial applications to the interests of professionals in the banking and finance industry. Amongst other things, this includes a clear statement of the research questions at the outset, and thereafter engaging substantially with the body of literature surrounding the questions asked. Moreover, they should ensure that the paper is likely to be of interest to a large proportion of JBF's wide-ranging readership (i.e. the paper should be neither too narrow nor too technical).

First-time authors and authors who are new to Elsevier may be interested in additional information about the process for submitting a manuscript or the process for publishing in scholarly journals, in general, please visit http://www.publishingcampus.elsevier.com

**Desk Rejection Policy**
The number of submissions to the JBF has been increasing markedly for several years and is now so great that the editorial team has implemented a desk-rejection strategy. Reasons for desk rejection are clearly explained below. Desk rejection will normally be done within 3 weeks of submission. No refund of the submission fee will be given due to the editorial time needed to make this important decision.

As the number of submissions increase, the standard of papers accepted for publication has been rising. Submitted papers that have little direct relationship to the core JBF issues, even if such papers are good, are likely to be desk rejected as 'out of scope'. In addition, papers that do address a JBF issue, but do not meet our quality standards, are also likely to be desk rejected. Problems with quality include: insufficient intellectual depth; an analysis that is inappropriate to the research question being asked, or not sufficiently rigorous; that the language, style, or grammar does not conform to accepted standards of scholarship; or that the paper is excessively long. Authors should write in a complete but concise style and, if possible, submit manuscripts that are no longer than about 40 pages, when formatted according to our preparation guidelines described below. The third reason and final reason for desk rejection is that the paper makes only a marginal contribution to the field of research.

**Resubmitting a Rejected Paper**
It is against the journal policy to submit a previously rejected paper. Please note that your paper may be withdrawn if it has previously been rejected by the Editors and you did not receive a Reject and Resubmit decision, in this case the submission fee is non-refundable.
Review Process
Submitted papers are first considered by the Editors and then allocated to a Handling Editor, which may be the Editor or an Associate Editor who is a specialist on that topic. Papers that are not desk rejected are then typically sent out to two referees. If one or more of these turns down the invitation to provide a review, other referees will subsequently be appointed. Normally, at least two authoritative reviews are needed before the Handling Editor can make a decision (or recommendation to the Editor, if the Handling Editor is an Associate Editor) as to whether to accept, reject, or ask for a revision of the submitted paper. However, in some cases only one review will be obtained and it is up to the Editor in charge of that manuscript to make a final decision.

As of 2013, no more than two major revisions will be allowed for each paper, followed by a minor revision (which entails such things as removing typos, clarifying meanings, updating references, etc). Major revisions must be resubmitted within 25 weeks from request for revision and minor revisions should not take more than 2 weeks, unless there are mitigating circumstances. All major revisions that are not submitted within the expected time frame will be 'dropped' and are considered as new submission, should they be submitted at a later stage. All papers that do not make it to the minor-revisions-only stage after two major revisions will be rejected.

Appeals
Appeals against a Managing Editor's decision can be made for a fee of 650 USD via https://submissionstart.elsevier.com/?journal=JBFDF . Once the appeal fee is paid, we will return your original manuscript to you so you can resubmit. Any such appeal should take the form of a document describing the errors that you perceive in the review process and an explanation of how their resolution could change the editor's decision. The rejected manuscript should also be included, without any changes or edits, along with the cover letter and a response to reviewers regarding any perceived errors. This document, your paper and all its reviews and related decisions will then be sent to one independent referee whose decision will be final and cannot be appealed against.

Special Issues/Sections
JBF welcomes publication of Special Issues, or a shorter Special Section version. Thematic issues are strongly preferred to a group of loosely connected papers from a conference on a fairly standard subject.

Special Issues/Sections can fulfill a number of important functions, such as: bringing together and integrating work on a specific theme (for instance, bringing together theoretical and empirical work, or work based on different methodological approaches); opening up a previously under-researched area (or one that has perhaps struggled with a rather conservative peer review process in its efforts to achieve recognition); or constructing a bridge between formerly rather separate research communities, who have been focusing on similar or related topics.

Proposals should be submitted at jbf@elsevier.com. All proposals are being reviewed by the Managing Editorial Team on the basis of certain criteria that include: the novelty, importance and topicality of the theme; whether the papers will form an integrated whole; the standing of the authors; the experience of the proposed/assigned Guest Editors in handling a task of this magnitude; and the overall 'added value' of a Special Issue or Section (as compared with publishing these papers separately in 'normal' issues).

It is now JBF policy to exclude papers written by Guest Editors from their Special Issues. The exception is when the Manager Editor(s) request a review-type or similar introductory lead article for the SI. However, JBF does not exclude submissions from members of the conference committee (where the SI is associated with a conference). Submissions that pose any conflict of interest (e.g. through co-authorship, personal relation, supervision/teaching, or institutional affiliation) should be notified to the Managing Editor in charge, who will decide how to handle the submission.

Submission checklist
You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:
• E-mail address
• Full postal address

All necessary files have been uploaded:

**Manuscript:**
- Include keywords
- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
- Ensure all figure and table citations in the text match the files provided
- Indicate clearly if color should be used for any figures in print

**Graphical Abstracts / Highlights files** (where applicable)

**Supplemental files** (where applicable)

Further considerations
- Manuscript has been 'spell checked' and 'grammar checked'
- All references mentioned in the Reference List are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Internet)
- A competing interests statement is provided, even if the authors have no competing interests to declare
- Journal policies detailed in this guide have been reviewed
- Referee suggestions and contact details provided, based on journal requirements

For further information, visit our Support Center.

**BEFORE YOU BEGIN**

Please check carefully that your manuscript complies with the Scope of the IJPE.

**Ethics in publishing**

Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

**Declaration of interest**

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted.

2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

**Submission declaration and verification**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

**Use of inclusive language**

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').
**Author contributions**

For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example

**Changes to authorship**

Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

**Article transfer service**

This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. More information.

**Copyright**

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (more information). Permitted third party reuse of gold open access articles is determined by the author's choice of user license.

**Author rights**

As an author you (or your employer or institution) have certain rights to reuse your work. More information.

Elsevier supports responsible sharing

Find out how you can share your research published in Elsevier journals.

**Role of the funding source**

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

**Open access**

Please visit our Open Access page from the Journal Homepage for more information.
An adapted embargo period of 12 months will apply for UK researchers who are grant recipient from the Research Council UK, Wellcome Trust, Higher Education Funding Council for England, and who wish to self-archive their accepted author manuscript. For more information, please follow this link.

**Elsevier Researcher Academy**

Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

**Language (usage and editing services)**

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's Author Services.

**Submission**

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

**Submit your article**

Please submit your article via [http://ees.elsevier.com/jbf](http://ees.elsevier.com/jbf)

**PREPARATION**

**Peer review**

This journal operates a double blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of one independent expert reviewer to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor’s decision is final. More information on types of peer review.

**Double-blind review**

This journal uses double-blind review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:

- **Title page (with author details):** This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.
- **Blinded manuscript (no author details):** The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors’ names or affiliations.

**Use of word processing software**

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

The paper text must be double spaced in times new roman 12 font with one inch margins. Smaller fonts and/or less than double spacing is not acceptable. Similar types of fonts and spacing should be used with scientific word processors.
Remove names, affiliations, and acknowledgment footnote from the cover page. That is, the paper uploaded should be an anonymous draft for review.

**LaTeX**

You are recommended to use the Elsevier article class `elsarticle.cls` to prepare your manuscript and `BibTeX` to generate your bibliography. Our [LaTeX site](https://www.elsevier.com/locate/jbf) has detailed submission instructions, templates and other information.

**Article structure**

**Subdivision - numbered sections**

Section heading style examples (all flush left):

3. **Methodology and data: An explanation** (Level 1. 12 font in **bold**. Period after number.)

3.1. **Empirical methods** (Level 2. Subheading in *italics* **NOT** bold. Periods after numbers.)

3.1.1. **Testing vectors** (Level 3. This subheading in *italics** NOT bold. Periods after numbers.)

Use this numbering also for internal cross-referencing: do not just refer to "the text". Any subsection may be given a brief heading. Each heading should appear on its own separate line.

**Introduction**

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

**Material and methods**

Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

**Theory/calculation**

A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

**Results**

Results should be clear and concise.

**Conclusions**

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

**Appendices**

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

**Essential title page information**

(Appplies only to drafts at the editorial review stages)

- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a "Present address" (or "Permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.
Highlights
Highlights are optional yet highly encouraged for this journal, as they increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

Abstract
A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

The abstract should not be more than 100-150 words.

Keywords
Immediately after the abstract, provide a maximum of 10 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Classification codes
Please provide up to 6 standard JEL codes. The available codes may be accessed at JEL.

Cover page style
(Example)

Efficiency in emerging markets: Evidence from emerging markets

This version: Current date here

Abstract
This paper investigates the weak-form efficiency market hypothesis in relation to its theoretical underpinnings in emerging stock markets. We first aggregate the results of various analyses into a market liberalization index. We then analyze the impact of market liberalization on market efficiency. The results suggest market efficiency increases with market liberalization. This result is supported by additional Granger causality tests.

JEL classification: G14; G15; O16
Keywords: Emerging markets; Efficiency; Granger causality tests

Abbreviations
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article. Because of the international character of the journal, no rigid rules concerning notation or abbreviation need to be observed by the authors but each paper should be self-consistent as to symbols and units which should be properly defined. When using a full stop (period) in an abbreviation, the full stop indicates letters omitted. A full stop should not be used if the abbreviation ends with the same letter as the original word. "Volume" may be abbreviated "Vol.", "section" may be abbreviated "sec.", etc., but "Doctor" should be abbreviated "Dr" without an ending full stop.

Acknowledgements
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).
Formatting of funding sources
List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Math formulae
Displayed formulae should be numbered consecutively throughout the manuscript as (1), (2), etc. against the right-hand margin of the page. In cases where the derivation of formulae has been abbreviated, it is of great help to the referees if the full derivation can be presented on a separate sheet (not to be published).

Please be sure to carefully check your equations after the PDF has been built. If you are having difficulties with equations, please refer to this author support article.

Footnotes
Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

The footnotes should be double spaced.

Editing
Paper must be carefully edited. Professional editing is HIGHLY RECOMMENDED.

Artwork
Electronic artwork
General points
• Make sure you use uniform lettering and sizing of your original artwork.
• Embed the used fonts if the application provides that option.
• Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Size the illustrations close to the desired dimensions of the published version.
• Submit each illustration as a separate file.
• Ensure that color images are accessible to all, including those with impaired color vision.

A detailed guide on electronic artwork is available.

You are urged to visit this site; some excerpts from the detailed information are given here.

Formats
If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

EPS (or PDF): Vector drawings, embed all used fonts.
TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.
Please do not:
- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

Color artwork
Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color artwork then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. **Further information on the preparation of electronic artwork.**

Figure captions
Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

Tables
Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

References
Double check that references are in correct format. Only those papers that are being referenced are to be included in the references section. Papers not being referenced in text must be omitted. Marginal references should be omitted. In general, try to limit the number of references to about 25. **MAKE SURE** that references, section headings, etc., are in journal style. Reference and heading styles are shown below. However, check for references and heading styles by looking at a recent paper. Please write to our editorial office if you need a sample jbf@elsevier.com.

Citation in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Reference links
Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is highly encouraged.

A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.

Web references
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.
Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

Data Reference Example

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference management software
Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

Reference formatting
There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the article number or pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct. If you do wish to format the references yourself they should be arranged according to the following examples:

Reference style
References to publications should be as follows:
'Smith (1992) reports that...' of 'This problem has been studied previously (e.g., Smith et al., 1969)'. The author should make sure that there is a strict one-to-one correspondence between the names and years in the text and those on the list. The list of references should appear at the end of the main text (after any appendices, but before tables and legends for figures). It should be double spaced and listed in alphabetical order by author's name.

References should appear as follows:
For books

For Contributions to Collective Works

For Periodicals

For forthcoming papers, papers in press

**Journal abbreviations**
Journal titles should not be abbreviated.

**Video**
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

**Data visualization**
Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions [here](#) to find out about available data visualization options and how to include them with your article.

**Supplementary material**
Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

**Code and data deposit to RunMyCode.org**
You can enrich your online article by uploading relevant computer code and data to the RunMyCode repository. Once published, your article on ScienceDirect will be linked to a dedicated RunMyCode companion website via the "Data for this article" application displayed next to the article, in the right hand side panel. This linkage will allow readers to access your code and data via the RunMyCode companion website. To create a companion website, please go to: [http://www.runmycode.org/home](http://www.runmycode.org/home).

**Research data**
This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the [research data](#) page.

**Data linking**
If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.
There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

Mendeley Data
This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the Mendeley Data for journals page.

Data in Brief
You have the option of converting any or all parts of your supplementary or additional raw data into one or multiple data articles, a new kind of article that houses and describes your data. Data articles ensure that your data is actively reviewed, curated, formatted, indexed, given a DOI and publicly available to all upon publication. You are encouraged to submit your article for Data in Brief as an additional item directly alongside the revised version of your manuscript. If your research article is accepted, your data article will automatically be transferred over to Data in Brief where it will be editorially reviewed and published in the open access data journal, Data in Brief. Please note an open access fee of 600 USD is payable for publication in Data in Brief. Full details can be found on the Data in Brief website. Please use this template to write your Data in Brief.

Data statement
To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

AFTER ACCEPTANCE

Online proof correction
Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

Offprints
The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via
Elsevier's Author Services. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

AUTHOR INQUIRIES
Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.

© Copyright 2018 Elsevier | https://www.elsevier.com