

## Minimal Working Example

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This minimal example demonstrates a header formatting bug in `econsocart.cls` where Quantitative Economics (QE) submissions in draft mode display garbled headers on odd pages.

### 1. REPRODUCING THE BUG

Compile this document with:

```
pdflatex mwe-headers-draft.tex
```

Then examine the header on page 2 (an odd page).

#### 1.1 *Expected Behavior*

For QE submissions, odd-page headers (right side) should show:

[Paper Title]	[Page Number]
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#### 1.2 *Actual Behavior (Bug)*

Instead, odd-page headers show:

Submitted to Quantitative EconomicsMinimal Working Example1
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The journal name and title are concatenated without spacing, creating garbled, unreadable text.

### 2. ROOT CAUSE ANALYSIS

#### 2.1 *Location in Source Code*

File: `econsocart.cls`, lines 1953–1956

```
\ifecta@layout
```

```

1      \markboth{{\let\.\econsocart@redef@uc@dot\@runauthor}}{\@runtitle}%
2  \else
3      \markboth{\@runauthor\hfill\@runjournal}{\@runjournal\hfill\@runtitle}
4  \fi

```

## 2.2 *The Problem*

1. QE submissions use `\documentclass[qe]{econsocart}`
2. This sets `\qe@layouttrue` **but not** `\ecta@layouttrue`
3. Conditional falls into `\else` branch (intended for other journals)
4. The `\else` branch sets: `\rightmark = \@runjournal\hfill\@runtitle`
5. Both journal name **and** title appear in odd-page header

## 2.3 *Why This Is Wrong*

QE submissions should behave like ECTA (Econometrica) submissions:

Page Type	Should Show	Actually Shows
Even (left)	Journal name	Journal name
Odd (right)	Paper title only	Journal name + Title

## 3. DEMONSTRATION ON PAGE 2

This section forces content onto page 2 so you can observe the garbled header in the compiled PDF.

Look at the top-right corner of this page. You should see both the journal name and the paper title crammed together.

3.1 *Additional Context*

The bug affects readability and professionalism of draft submissions. While reviewers can still read the document, the garbled headers look unprofessional and may cause confusion.

3.2 *Impact*

- **Severity:** Major visual defect
- **Scope:** All QE submissions in draft mode
- **Workaround:** Required for acceptable output

## 4. SUGGESTED FIX

Modify `econsocart.cls` lines 1953–1956 to handle QE like ECTA:

```
\ifecta@layout
    \markboth{{\let\.\econsocart@redef@uc@dot\@runauthor}}{\@runtitle}%
\else
    \ifqe@layout
        % QE should behave like ECTA for headers
        \markboth{{\let\.\econsocart@redef@uc@dot\@runauthor}}{\@runtitle}%
    \else
        % Other journals show journal name + title
        \markboth{\@runauthor\hfill\@runjournal}%
            {\@runjournal\hfill\@runtitle}%
    \fi
\fi
```

1	This would correctly set:	1
2		2
3	• <code>\leftmark = \@runauthor</code> (authors, for even pages)	3
4	• <code>\rightmark = \@runtitle</code> (title only, for odd pages)	4
5		5
6	5. TEMPORARY WORKAROUND	6
7	Until the class file is fixed, users can directly redefine headers after <code>\end{frontmatter}</code> .	7
8	See <code>workaround.sty</code> for a complete implementation.	8
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