

**DEAD POETS' PROPERTY**  
**THE COPYRIGHT ACT OF 1814 AND THE PRICE OF BOOKS**  
**IN THE ROMANTIC PERIOD**

Xing Li, Stanford University,  
Megan MacGarvie, Boston University and NBER, and  
Petra Moser, Stanford University and NBER

# Should copyright be more short-lived?

- Temporary monopoly rights to “original works of authorship”
  - U.S. Code Title 17, for literature, music, and software
  - “life of author” + 70 years
- Long-lived copyright terms may encourage creativity by increasing expected profits
  - Liebowitz and Margolis (2004)
  - An “extension will enhance the long-term volume, vitality and accessibility of the public domain” (U.S. Copyright Term Extension Act of 1998)
- But long-lived terms may also increase price and restrict access
  - Akerlof et al. (2002)
  - Prevent entry and allow copyright owners to charge monopoly price

# Difficult to identify causal effects in modern data

- Most modern changes occur in response to lobbying from owners of particularly long-lived and valuable assets
- Example: U.S. Copyright Act of 1998
  - From life of author + 50 to life of author +70 years
  - “Mickey Mouse Protection Act”
- Causal effects difficult to establish
  - No increase in U.S. movie releases per year 1990-98 vs. 1999-2000 (Hui and Png 2002)



<http://www.cartoonbrew.com/disney/la-times-on-disneys-mickey-mouse-copyright-6617.html>

# Empirical evidence from piracy

- Drastic reduction in expected length of copyright
  - Limited effects on sales (Strumpf and Oberholzer-Gee 2007; Waldfogel 2012) or on counts of new songs (Waldfogel 2011)
- Counterintuitive correlations between weaker copyright and higher price - without establishing causality
  - After libraries install copy machines in 1959, journals increase subscription price for libraries (Liebowitz 1985)
  - Pirated books by European authors sold for *higher* prices than copyrighted books by U.S. authors (Khan 2005)

# “Dead Poets’ Property”

## Investigate causal effect of longer copyright on price

- Differential increase under U.K. Copyright Act of 1814
  - Main intent: re-affirm requirement to provide library copies
  - From 28 years to “life of authors” if author is alive at end of 28-year term
  - From 28 years if author had been alive at 14 years to uniform 28-years term
  - Differential increase for books in print for 14 years or less by dead authors
- Compare change in  $p$  after 1814 for books by dead and living authors
  - Difference-in-differences controls for change in technology and in demand
  - Stanhope’s printing press and Fourdrinier’s paper making machines
  - (Potential) increase in demand for reading after end of Napoleonic wars
- New data set of 1,072 book editions between 1790 and 1840
  - Average price of 17.7 shillings
  - Working class wages between 9 and 40 shillings per week

# Difference-in-differences estimates imply substantial increase in price

- 8 percent for each additional year of copyright
  - Controlling for book age, author, and time fixed effects
  - Controlling for literary quality, genre-fixed effects
  - No evidence of differential pre-trends
- Robustness
  - Excluding popular authors who had died after 1814
  - Excluding recently deceased authors
- Placebo
  - No significant increase for books by dead authors that did not benefit from longer copyright
- Decline in  $p$  as titles approach end of copyright
  - Estimate price separately for 3-year intervals as books approach end of copyright

# Outline

- The Copyright Act of 1814
- Data
  - Book prices for new editions, 1790-1840
  - Genre and literary quality
  - Expected length of copyright
  - Page numbers and page size
- Empirical results
  - Significant increase in price of books by dead authors after 1814
  - Time-varying estimates before and after 1814
  - Controlling for the physical characteristics of books
  - Excluding books by popular authors who died after 1814
  - Excluding books by recently deceased authors
- Placebo for books by dead authors without longer copyrights
- Books become cheaper as they approach the end of copyright?
- Conclusions

# U.K. copyright law 1710-1814

- Copyright first formalized through 1710 *Statute of Anne*
  - 14 years + 14 years if author was alive at end of first 14-year term
  - Match length of utility patents under 1624 *Statute of Monopolies*
  - Enough time to train 2 apprentices for 7 years each
- Publishers to provide library copies
  - British Library and 10 university libraries
  - Called into question in 1798 by *Beckford v. Hood*
  - Publishers argue against high costs of 11 copies on “best paper”
- 1814 Copyright Act reaffirms deposit requirement
  - Relaxes requirement of printing library copies on best paper
  - 1 copy on best paper for British Library, 10 on average-quality paper
  - Also change length of copyright, possibly to compensate publishers



# Extension from 28 years to “life of author”

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		Pre-1814	Post-1814	Difference
Author	Alive	14 years after first edition +14 years if author is alive	max (28 years or life)	

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# Given life expectancies, no substantive increase

- Life expectancy of UK writers, born 1700-1850
  - From life and death years in *Dictionary of Literary Biography*
  - 947 U.K. authors
- Average author was 42 years old at first edition
- At age 42 average author could expect to live another 28 years

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		Pre-1814	Post-1814	Difference
Author	Alive	14 years after first edition +14 years if author is alive	max (28 years or life)	
	Mean	28	28	0

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# From 14 to 28 years for dead authors

- No substantive extension for books by living authors
- 14 years for books by dead authors

		Pre-1814	Post-1814	Difference
Author	Alive	14 years after first edition +14 years if author is alive	max (28 years or life)	
	Mean	28	28	0
	Dead	14	28	14
Difference		-14	0	14

# Differential increase of 14 years

- No substantive extension for books by living authors
- 14 years for books by dead authors
- Books by dead authors receive 14 extra years of copyright compared with books by living authors

		Pre-1814	Post-1814	Difference
Author	Alive	14 years after first edition +14 years if author is alive	max (28 years or life)	
	Mean	28	28	0
	Dead			
		14	28	14
Difference		-14	0	14

# Outline

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# Price of 1,072 editions printed 1790-1840

- 609 books titles by 137 authors
  - St. Clair (2004) *The Reading Nation in the Romantic Period*
  - *English Catalogue of Books* (1863)
  - *London Catalogue of Books* (1791, 1799, 1851)
- Mean price of 17.72 shillings
  - Weekly wage for working class men “between 9 and very exceptionally 40 shillings a week” (Bautz 2007)



Lord Byron Childe Harold's Pilgrimage,  
London, Douglass, 1825

## Price data by source

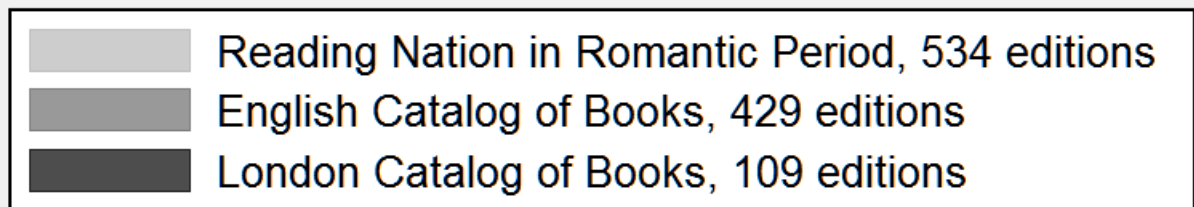
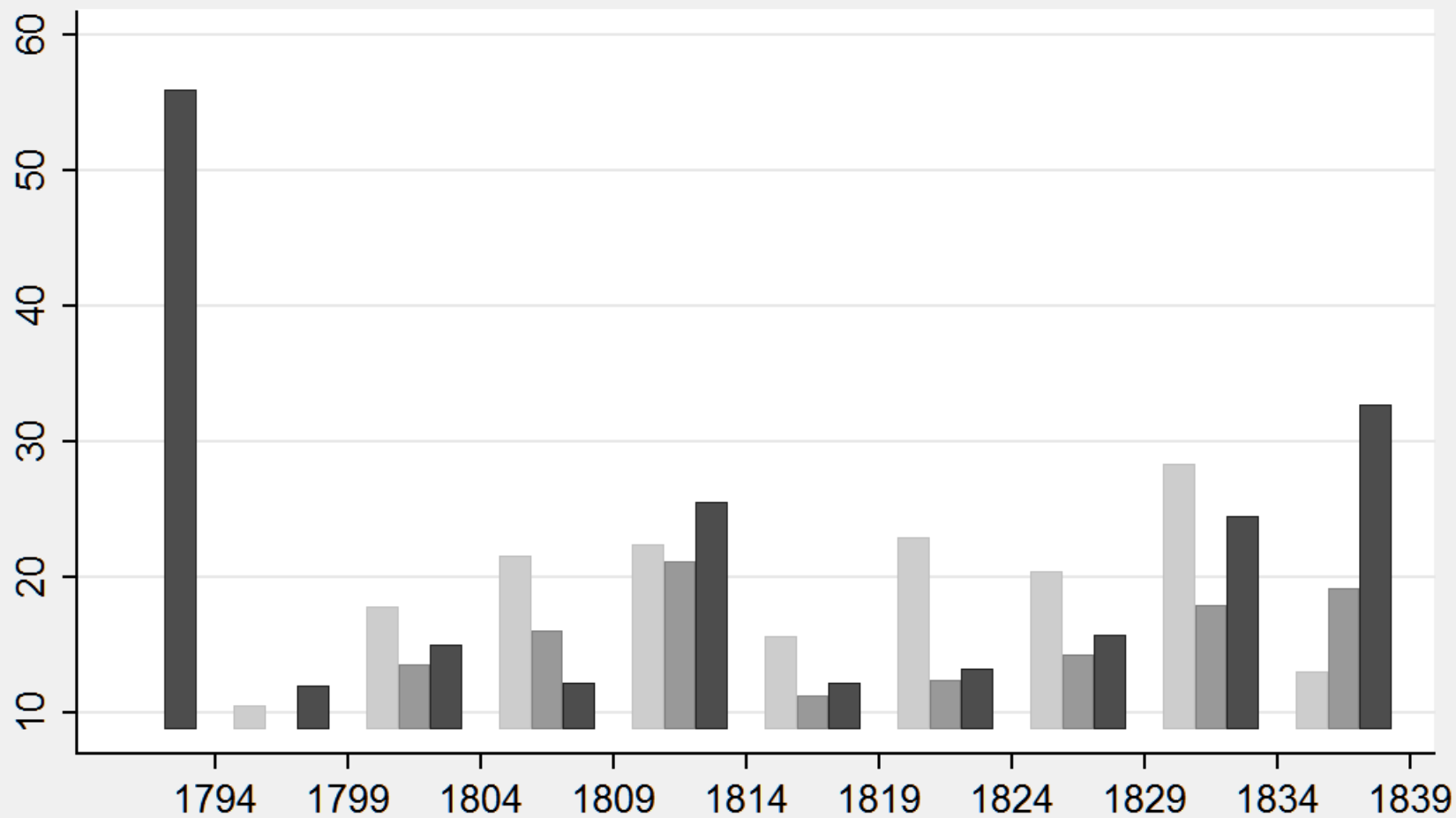
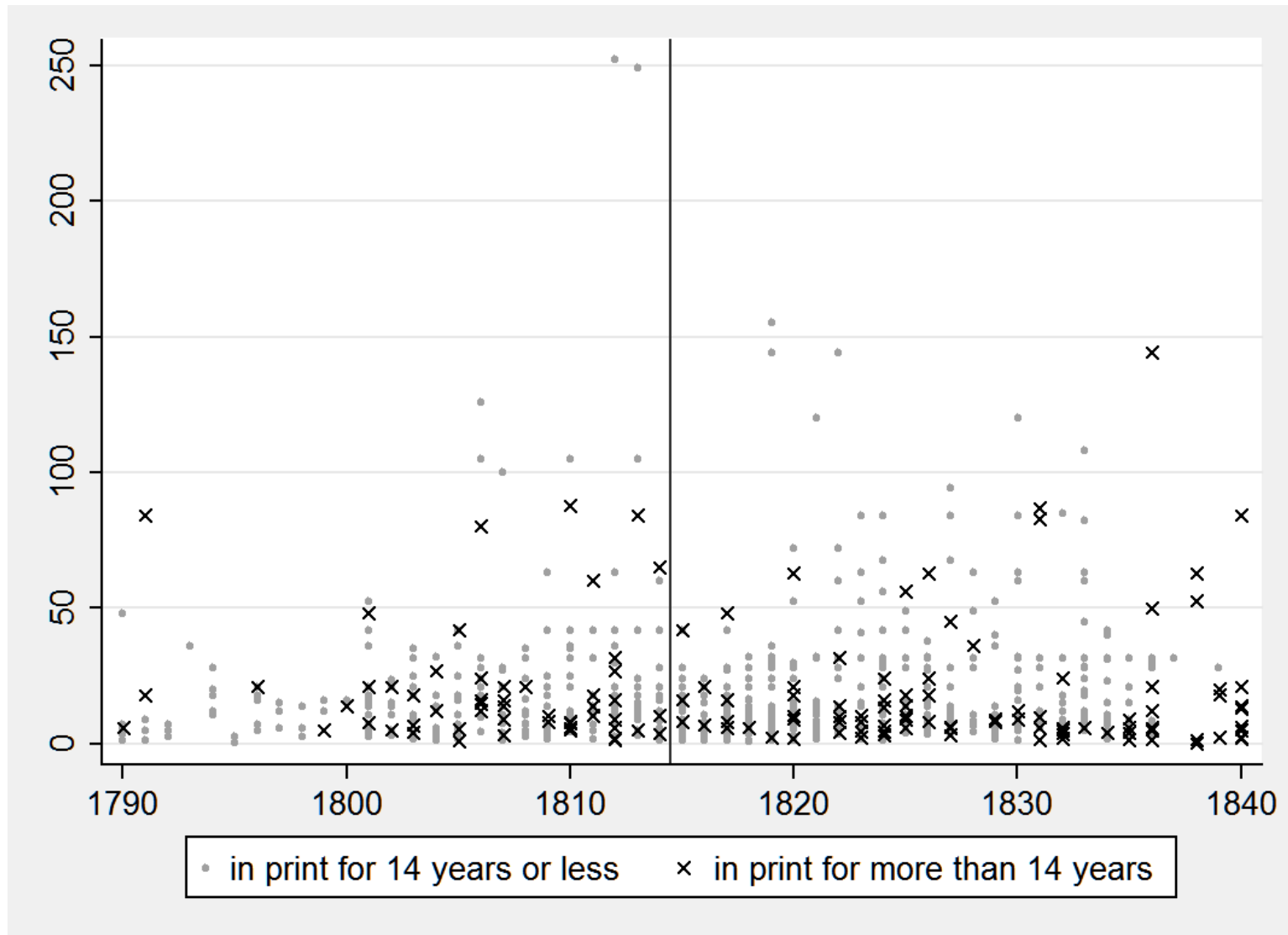


FIGURE 1 – BOOK PRICES FOR EDITIONS PRINTED 1790-1840, ALL 1,072 EDITIONS



Note: Average price is 17.72 shillings for editions in print for 14 years or less, 17.68 for editions in print for more than 14 years



# Control variables in the baseline

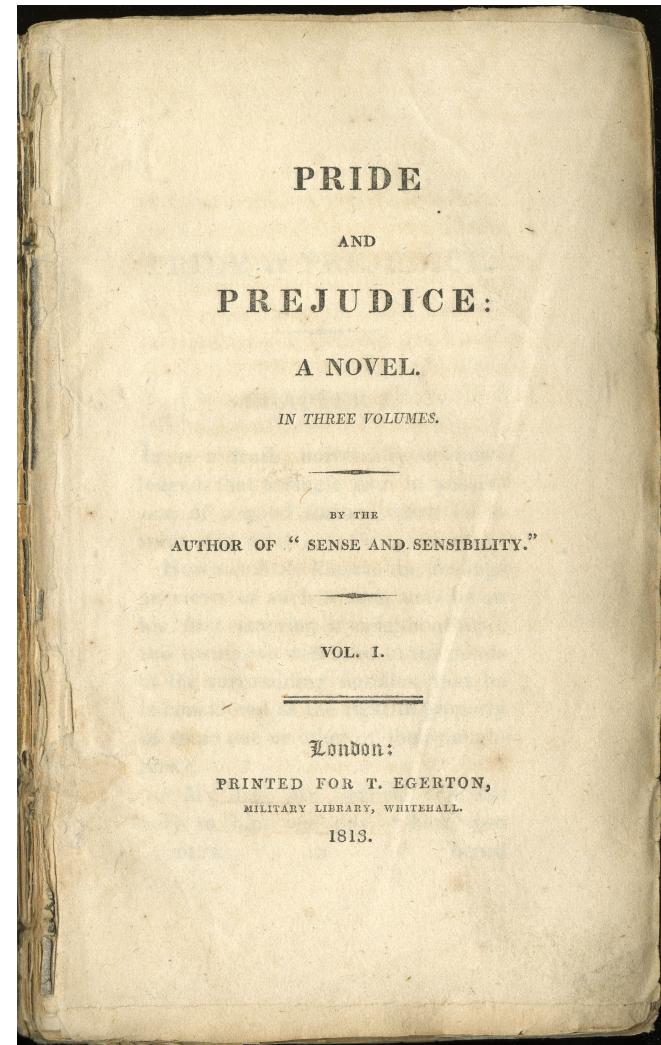
- Book age
  - Control for variation across life cycle of books, survivor bias
  - Measured as years since first edition
  - Data on year of first edition collected from online catalogues of *British Library*
- Author fixed effects
  - Control for variation in  $p$  as a result of variation in quality, popularity, other unobservables
  - Also estimate without author fixed effects
- Time-fixed effects
  - Change in technology and in demand



Photo by Universal Studios (1935) of Boris Karloff in *The Bride of Frankenstein*. This image is in the public domain because it was published without a copyright notice in the United States between 1923 and 1977.

# Additional controls in alternative specifications

- Literary quality
  - 23 titles in Bloom's (1994) *Western Canon*
- Genre fixed effects
  - Poetry (37% of editions, e.g., Lord Byron's *Childe Harold's Pilgrimage*)
  - Novels (24%, e.g., Mary Shelley's *Frankenstein*, Jane Austen's *Pride and Prejudice*)
  - Other fiction (5%, children's books, hymns)
  - Non-fiction (34%, *Wealth of Nations*)
- Page counts and page size
  - Variation in size and production costs
  - From online catalogs of British Library and Google Books
  - Page number for 795 editions
  - Page size for 579 editions
  - No measurable differential change after 1814



Notes: Title page from the first edition of the first volume of *Pride and Prejudice*, London: T. Egerton, 1813. Since the book's author, Jane Austen, died in 1817, this book has passed into the public domain.

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  - Time-varying estimates before and after 1814
  - Controlling for the physical characteristics of books
  - Excluding books by popular authors who died after 1814
  - Excluding books by recently deceased authors
- Placebo for books by dead authors without longer copyrights
- Do books become cheaper as they approach the end of copyright?
- Conclusions

# Books by living authors become slightly cheaper after 1814

TABLE 2 – DIFFERENCES IN THE MEAN PRICE OF BOOKS BY DEAD AND LIVING AUTHORS, BOOKS IN PRINT 14 YEARS OR LESS

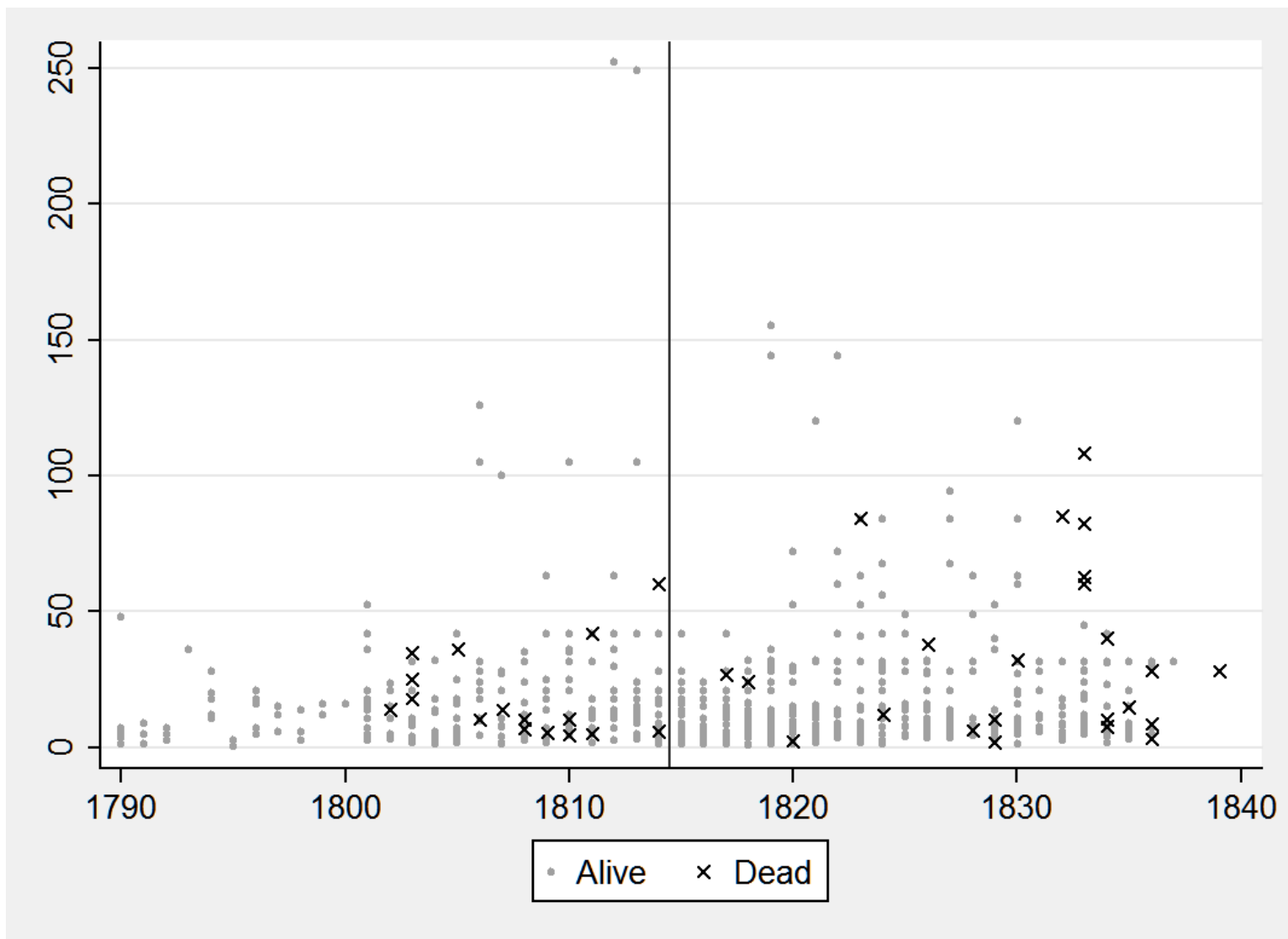
Price		Pre-1814	Post-1814	Difference
Author	Alive	17.64	17.13	-0.50
	N=860	(26.16)	(19.16)	(1.59)
	Dead	17.69	33.39	15.69
	N=42	(15.74)	(30.83)	(6.84)
Difference		0.06	16.25	16.19
		(5.33)	(4.57)	(7.02)

## Books by dead authors increase in price from 17.7 to 33.4 shillings

TABLE 2 – DIFFERENCES IN THE MEAN PRICE OF BOOKS BY DEAD AND LIVING  
AUTHORS, BOOKS IN PRINT 14 YEARS OR LESS

Price		Pre-1814	Post-1814	Difference
Author	Alive	17.64	17.13	-0.50
	N=860	(26.16)	(19.16)	(1.59)
	Dead	17.69	33.39	15.69
	N=42	(15.74)	(30.83)	(6.84)
Difference		0.06	16.25	16.19
		(5.33)	(4.57)	(7.02)

FIGURE 2 - PRICES OF BOOKS BY DEAD AND LIVING AUTHORS,  
BOOKS IN PRINT FOR 14 YEARS OR LESS



Note: 902 editions of books in print for 14 years or less.

Books by dead authors become 20.02s more expensive after 1814 compared with books by living authors (implying 112% increase compared with mean of 17.79s for all books after 1814)

TABLE 3 - OLS – DEPENDENT VARIABLE IS PRICE OF EDITIONS PRINTED BETWEEN 1790 AND 1840 FOR BOOKS IN PRINT 14 YEARS OR LESS

	(1)	(2)	(3)	(4)
Dead	-6.03 (7.69)	-6.16 (7.64)	-4.09 (9.30)	-5.49 (7.92)
Post-1814 * dead	20.02** (7.75)	20.22** (7.73)	17.76* (9.81)	21.79** (8.36)
Western Canon		-2.48 (3.30)		
Constant	9.37*** (2.71)	11.27*** (3.65)	10.03*** (2.87)	11.11*** (2.66)
Book age fixed effects	Y	Y	Y	Y
Author fixed effects	Y	Y	Y	Y
Genre fixed effects	N	N	Y	N
Five year fixed effects	Y	Y	Y	Y
Observations	902	902	902	902
R-squared	0.36	0.36	0.37	0.34

Standard errors in brackets clustered at the level of authors

\*\*\* denotes significance at the 1 percent level, \*\* 5 percent, and \* 10 percent.

Controlling for canonical books, books by dead authors become 20.22s more expensive (136% increase compared with mean of 17.79s)

TABLE 3 - OLS – DEPENDENT VARIABLE IS PRICE OF EDITIONS PRINTED BETWEEN 1790 AND 1840 FOR BOOKS IN PRINT 14 YEARS OR LESS

	(1)	(2)	(3)	(4)
Dead	-6.03 (7.69)	-6.16 (7.64)	-4.09 (9.30)	-5.49 (7.92)
Post-1814 * dead	20.02** (7.75)	20.22** (7.73)	17.76* (9.81)	21.79** (8.36)
Western Canon		-2.48 (3.30)		
Constant	9.37*** (2.71)	11.27*** (3.65)	10.03*** (2.87)	11.11*** (2.66)
Book age fixed effects	Y	Y	Y	Y
Author fixed effects	Y	Y	Y	Y
Genre fixed effects	N	N	Y	N
Five year fixed effects	Y	Y	Y	Y
Observations	902	902	902	902
R-squared	0.36	0.36	0.37	0.34

Standard errors in brackets clustered at the level of authors

\*\*\* denotes significance at the 1 percent level, \*\* 5 percent, and \* 10 percent.



## Controlling for genre, in addition to author f.e., books by dead authors become 17.76s more expensive (compared with mean of 17.79s)

TABLE 3 - OLS – DEPENDENT VARIABLE IS PRICE OF EDITIONS PRINTED BETWEEN 1790 AND 1840  
FOR BOOKS IN PRINT 14 YEARS OR LESS

	(1)	(2)	(3)	(4)
Dead	-6.03 (7.69)	-6.16 (7.64)	-4.09 (9.30)	-5.49 (7.92)
Post-1814 * dead	20.02** (7.75)	20.22** (7.73)	17.76* (9.81)	21.79** (8.36)
Western Canon		-2.48 (3.30)		
Constant	9.37*** (2.71)	11.27*** (3.65)	10.03*** (2.87)	11.11*** (2.66)
Book age fixed effects	Y	Y	Y	Y
Author fixed effects	Y	Y	Y	Y
Genre fixed effects	N	N	Y	N
Five year fixed effects	Y	Y	Y	Y
Observations	902	902	902	902
R-squared	0.36	0.36	0.37	0.34

Standard errors in brackets clustered at the level of authors

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Excluding author fixed effects to increase statistical power increases estimate to 21.8s (122% increase compared with mean of 17.8s)

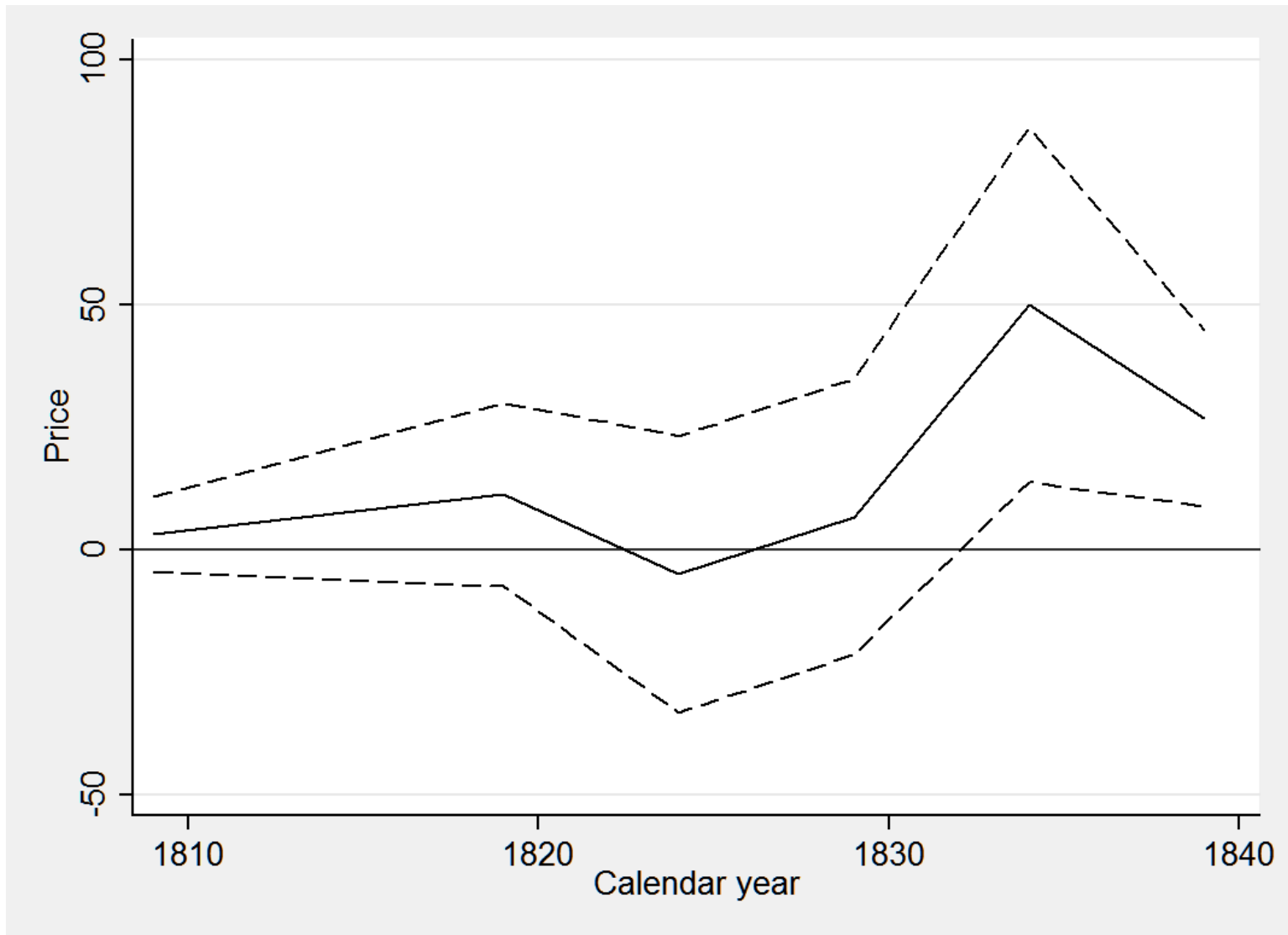
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Constant	9.37*** (2.71)	11.27*** (3.65)	10.03*** (2.87)	11.11*** (2.66)
Book age fixed effects	Y	Y	Y	Y
Author fixed effects	Y	Y	Y	Y
Genre fixed effects	N	N	Y	N
Five year fixed effects	Y	Y	Y	Y
Observations	902	902	902	902
R-squared	0.36	0.36	0.37	0.34

Standard errors in brackets clustered at the level of authors

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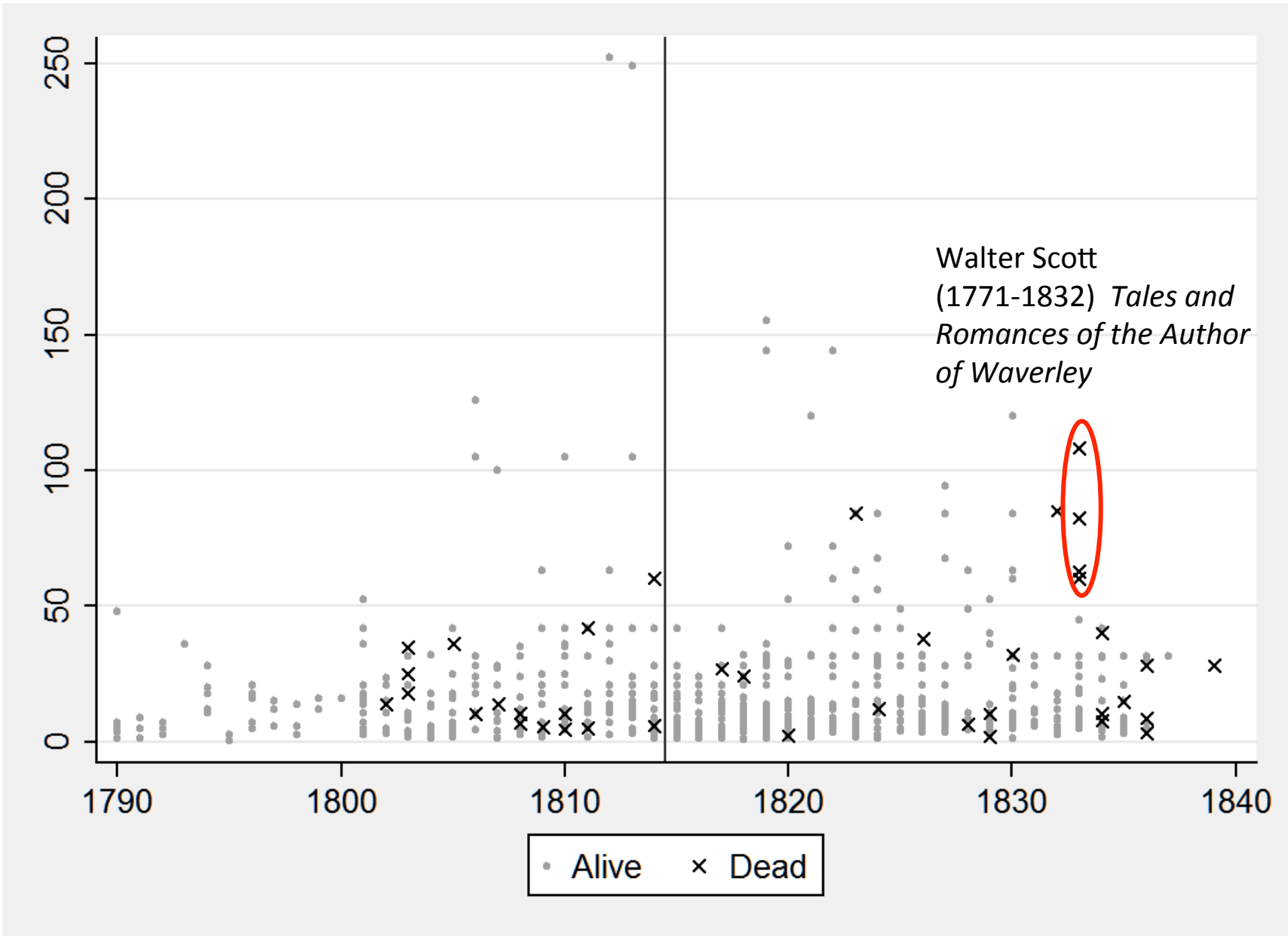
FIGURE 3 - TIME-VARYING ESTIMATES OF EFFECT OF COPYRIGHT ON PRICE



Note: 95% confidence intervals for 5-year specific coefficients  $\beta_s$  in  $Price_{it} = \beta_0 + \beta_s Dead_{it} * Year_{st} + X_{it}\gamma + \varepsilon_{it}$ . Price data for 902 editions printed 1790-1840 for books in print for 14 years or less.

# Excluding books by popular authors who died after 1814

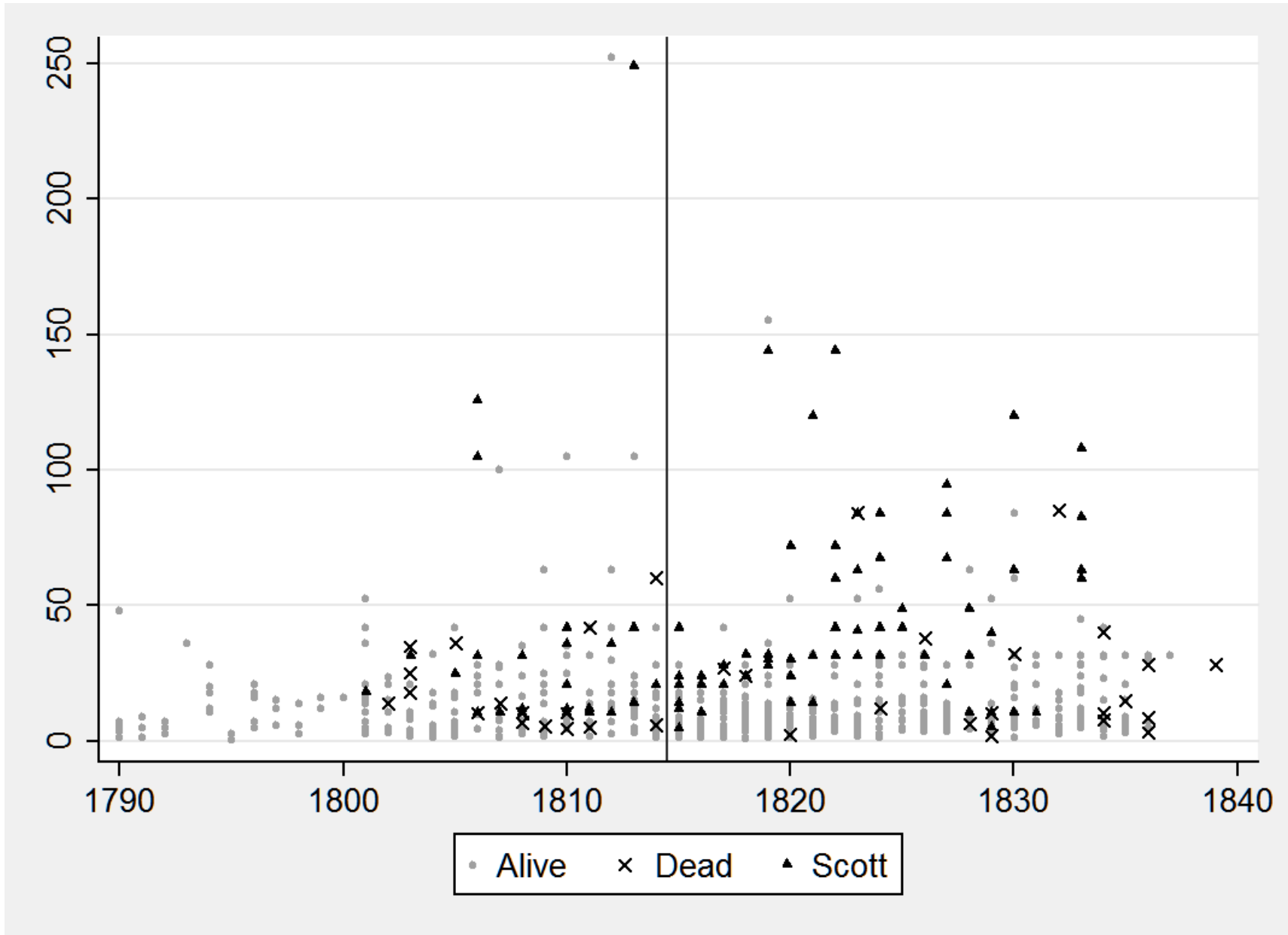
FIGURE 2 – PRICE FOR EDITIONS PUBLISHED 1790-1840, BOOKS IN PRINT FOR 14 YEARS OR LESS





# Books by Sir Walter Scott

FIGURE 2 – PRICE FOR EDITIONS PUBLISHED 1790-1840, BOOKS IN PRINT FOR 14 YEARS OR LESS



# Excluding works by Sir Walter Scott: Books by dead authors become 19.94s more expensive (145% increase compared with a mean of 13.73s)

TABLE 4 - OLS EXCLUDING BOOKS BY SIR WALTER SCOTT AND LORD BYRON  
DEPENDENT VARIABLE IS THE PRICE OF NEW EDITIONS, PRINTED BETWEEN 1790 AND 1840  
FOR BOOKS IN PRINT FOR 14 YEARS OR LESS

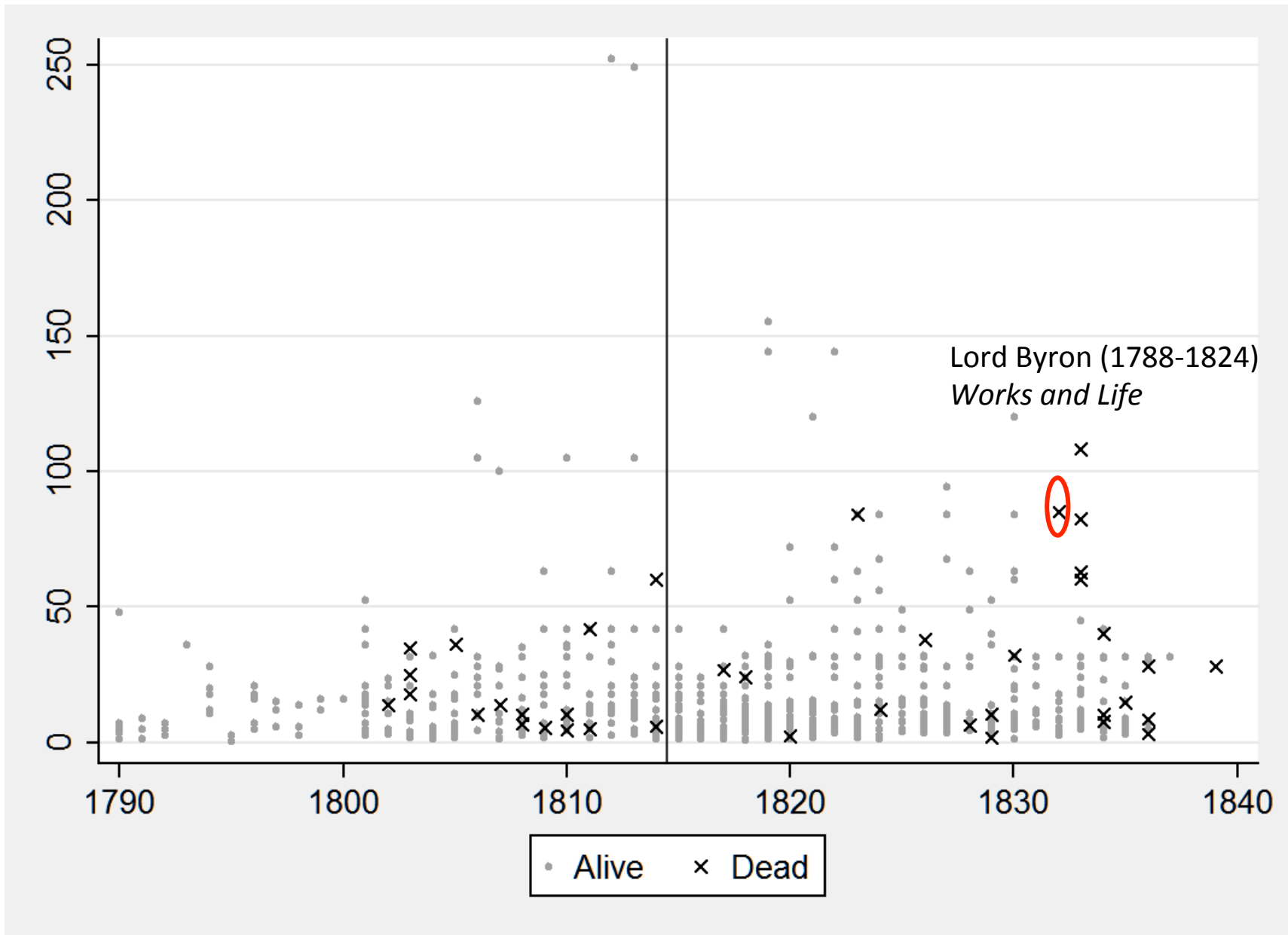
	(1)	(2)	(3)	(4)	(5)	(6)
	Excluding Sir Walter Scott			Excluding Scott and Lord Byron		
Dead	-11.18*** (4.11)	-11.11*** (4.15)	-7.85** (3.42)	-13.40*** (3.51)	-13.41*** (3.51)	-10.02*** (3.08)
Post-1814 * dead	19.94*** (6.05)	19.81*** (6.09)	16.05*** (5.45)	20.42*** (5.40)	20.44*** (5.40)	16.14*** (4.87)
Western Canon		1.12 (3.02)			-0.27 (5.22)	
Constant	8.79*** (2.61)	7.91** (3.34)	9.62*** (2.68)	8.06*** (2.67)	8.29 (5.25)	8.91*** (2.68)
Book age fixed effects	Y	Y	Y	Y	Y	Y
Genre fixed effects	N	N	Y	N	N	Y
Author fixed effects	Y	Y	Y	Y	Y	Y
Five year fixed effects	Y	Y	Y	Y	Y	Y
Observations	775	775	775	732	732	732
R-squared	0.39	0.39	0.41	0.39	0.39	0.41

Standard errors clustered at the level of authors.

\*\*\* denotes significance at the 1 percent, \*\* 5 percent, and \* 10 percent, level.

## Excluding books by popular authors who died after 1814

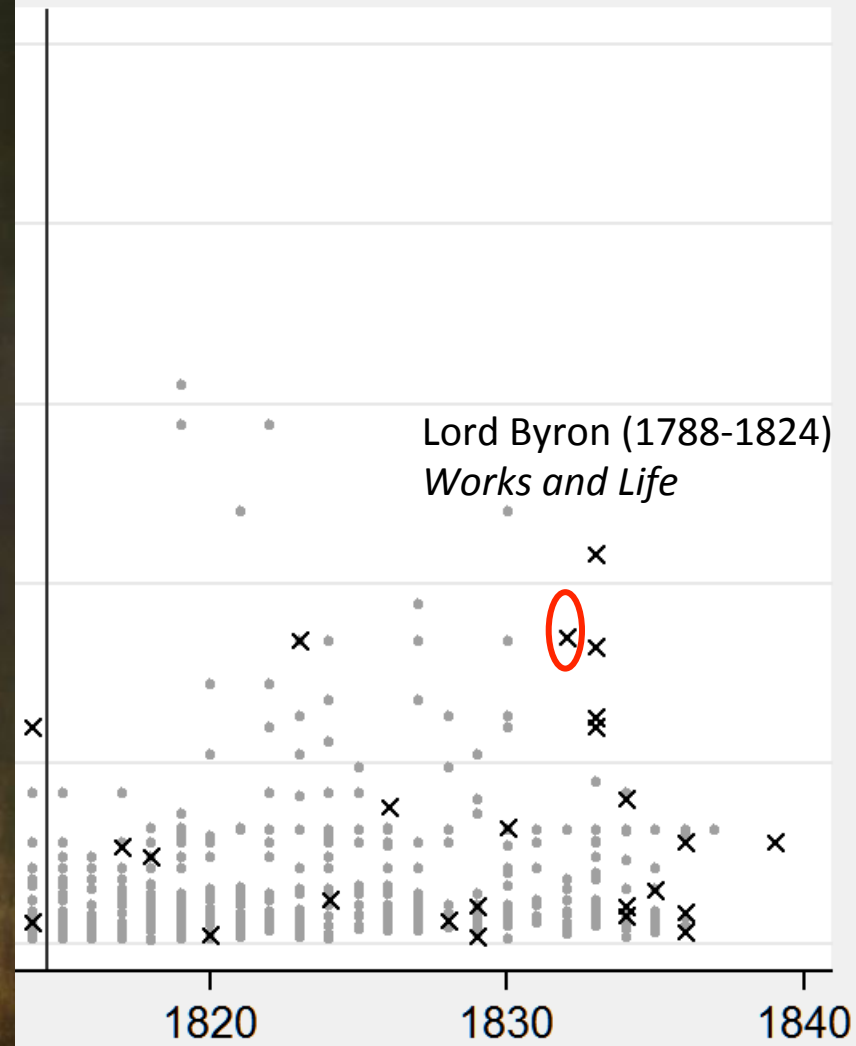
FIGURE 2 – PRICE FOR EDITIONS PUBLISHED 1790-1840, BOOKS IN PRINT FOR 14 YEARS OR LESS





# Excluding books by popular authors who died after 1814

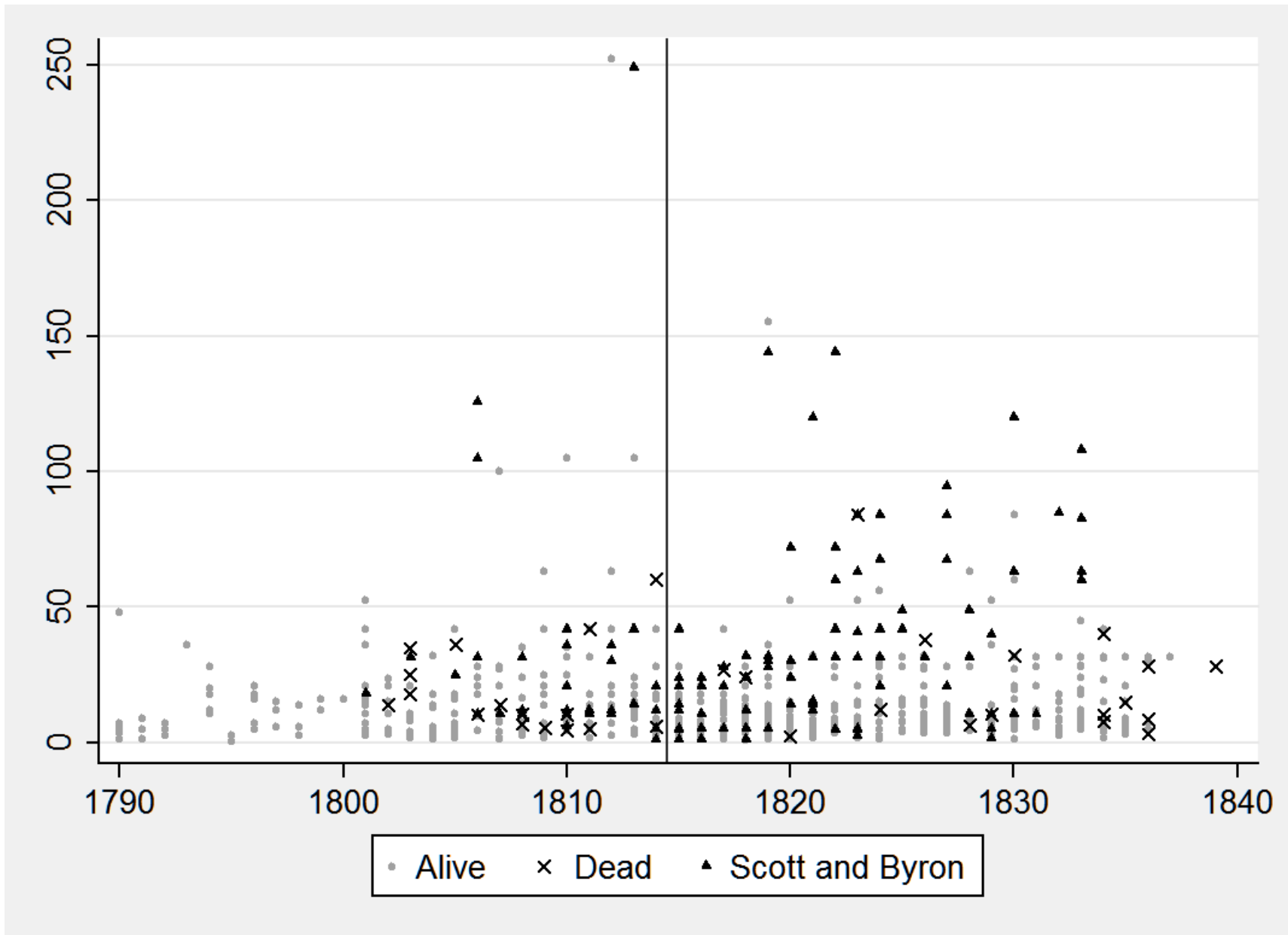
FIGURE 2 – PRICE FOR EDITIONS PUBLISHED 1790-1840, BOOKS IN PRINT FOR 14 YEARS OR LESS



• Alive    × Dead

## Excluding books by popular authors who died after 1814

FIGURE 2 – PRICE FOR EDITIONS PUBLISHED 1790-1840, BOOKS IN PRINT FOR 14 YEARS OR LESS



# Excluding books by popular authors who died after 1814

FIGURE 2 – PRICE FOR EDITIONS PUBLISHED 1790-1840, BOOKS IN PRINT FOR 14 YEARS OR LESS



# Excluding Scott and Byron, books by dead authors become 20.42s more expensive after 1814 (146% compared with mean of 14.0s)

TABLE 4 - OLS EXCLUDING BOOKS BY SIR WALTER SCOTT AND LORD BYRON  
 DEPENDENT VARIABLE IS THE PRICE OF NEW EDITIONS, PRINTED BETWEEN 1790 AND 1840  
 FOR BOOKS IN PRINT FOR 14 YEARS OR LESS

	(1)	(2)	(3)	(4)	(5)	(6)
	Excluding Sir Walter Scott			Excluding Scott and Lord Byron		
Dead	-11.18*** (4.11)	-11.11*** (4.15)	-7.85** (3.42)	-13.40*** (3.51)	-13.41*** (3.51)	-10.02*** (3.08)
Post-1814 * dead	19.94*** (6.05)	19.81*** (6.09)	16.05*** (5.45)	20.42*** (5.40)	20.44*** (5.40)	16.14*** (4.87)
Western Canon		1.12 (3.02)			-0.27 (5.22)	
Constant	8.79*** (2.61)	7.91** (3.34)	9.62*** (2.68)	8.06*** (2.67)	8.29 (5.25)	8.91*** (2.68)
Book age fixed effects	Y	Y	Y	Y	Y	Y
Genre fixed effects	N	N	Y	N	N	Y
Author fixed effects	Y	Y	Y	Y	Y	Y
Five year fixed effects	Y	Y	Y	Y	Y	Y
Observations	775	775	775	732	732	732
R-squared	0.39	0.39	0.41	0.39	0.39	0.41

Standard errors clustered at the level of authors.

\*\*\* denotes significance at the 1 percent, \*\* 5 percent, and \* 10 percent, level.

## Excluding books by recently deceased authors

- News of an author's death may increase demand
  - Art prices increase around the time of the artist's death (Ekelund, Ressler, and Watson 2000)
- May drive observed increase in  $p$  for books by dead authors if
  - Books by recently deceased authors are more expensive AND
  - Books by recently deceased authors account for a larger share of variation after 1814
- Books by recently deceased authors are more expensive
  - 17.13 shillings for books by living authors in print for 14 years or less
  - 36.18 shillings for books by recently deceased authors
  - 28.36 shillings by other dead authors

# Excluding books by recently deceased books by dead authors become 24.47s more expensive (141% compared with a mean of 17.38s)

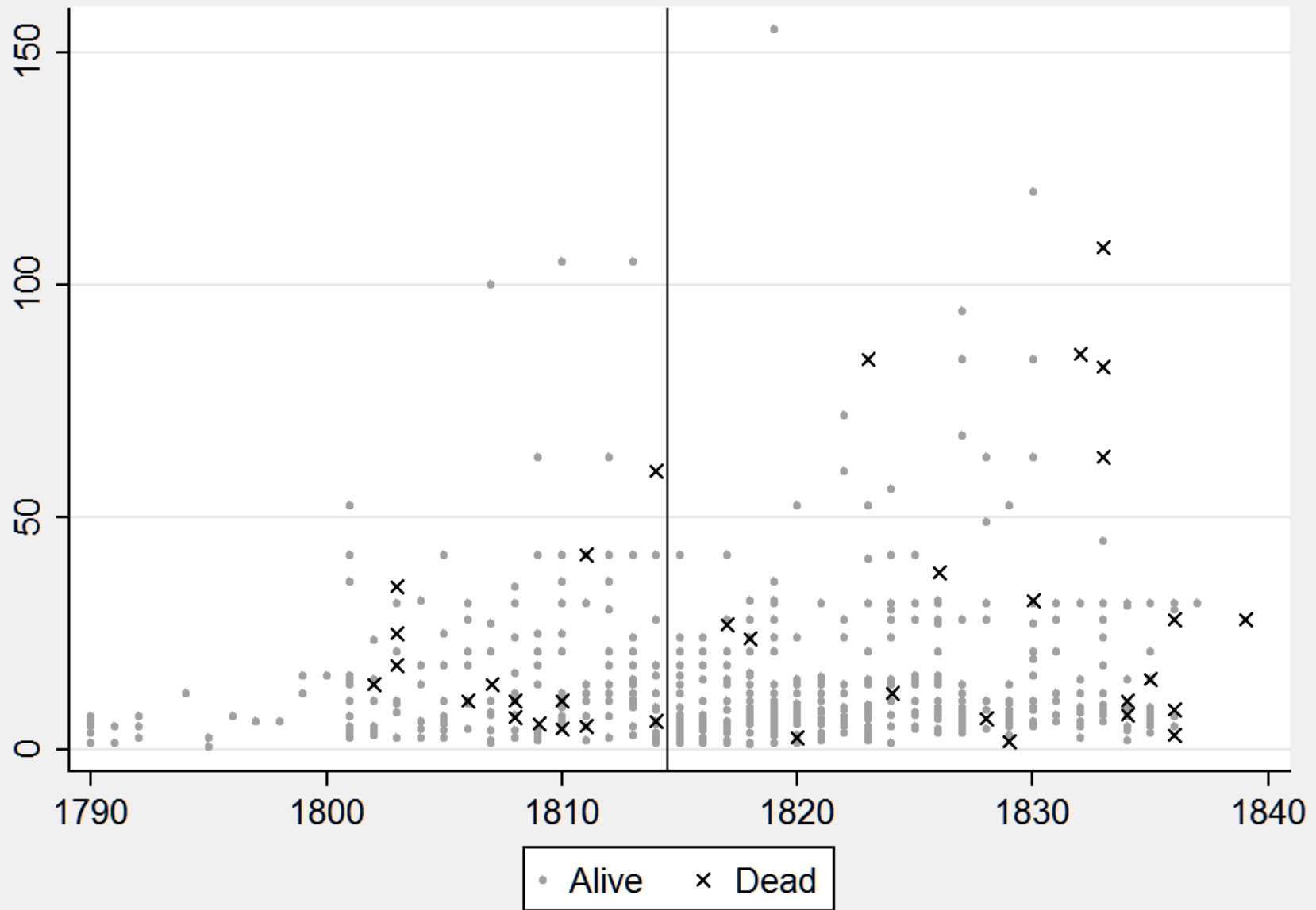
TABLE - OLS EXCLUDING EDITIONS PRINTED WITHIN ONE YEAR OF THE AUTHOR'S DEATH  
DEPENDENT VARIABLE IS THE PRICE OF NEW EDITIONS, PRINTED BETWEEN 1790 AND 1840 FOR BOOKS THAT ARE WITHIN 14 YEARS OF THE  
FIRST PUBLICATION

	(1)	(2)	(3)	(4)
Dead	-14.78** (5.94)	-14.87** (5.96)	-15.99** (6.37)	-14.03** (6.00)
Post-1814 * dead	24.47*** (8.14)	24.65*** (8.19)	25.29*** (8.63)	25.40*** (8.75)
Western Canon		-1.90 (2.95)		
Constant	7.81*** (2.74)	9.23*** (3.16)	7.81*** (2.68)	10.37*** (2.72)
Age fixed effects	Y	Y	Y	Y
Genre fixed effects	Y	Y	N	Y
Decade fixed effects	Y	Y	Y	N
Five year fixed effects	N	N	N	Y
Observations	888	888	888	888
R-squared	0.34	0.34	0.35	0.33

Standard errors in brackets clustered at the level of authors

\*\*\* denotes significance at the 1 percent level, \*\* 5 percent, and \* 10 percent.

PRICE FOR 692 NEW EDITIONS WITH DATA ON PAGE NUMBERS,  
BOOKS IN PRINT FOR 14 YEARS OR LESS



# Controlling for page numbers books by dead authors become 127% more expensive (20.27s compared with a mean of 15.96s)

TABLE - OLS INCLUDING NUMBER OF PAGES  
DEPENDENT VARIABLE IS THE PRICE OF NEW EDITIONS, PRINTED BETWEEN 1790 AND 1840 FOR BOOKS THAT ARE WITHIN 14 YEARS OF THE  
FIRST PUBLICATION

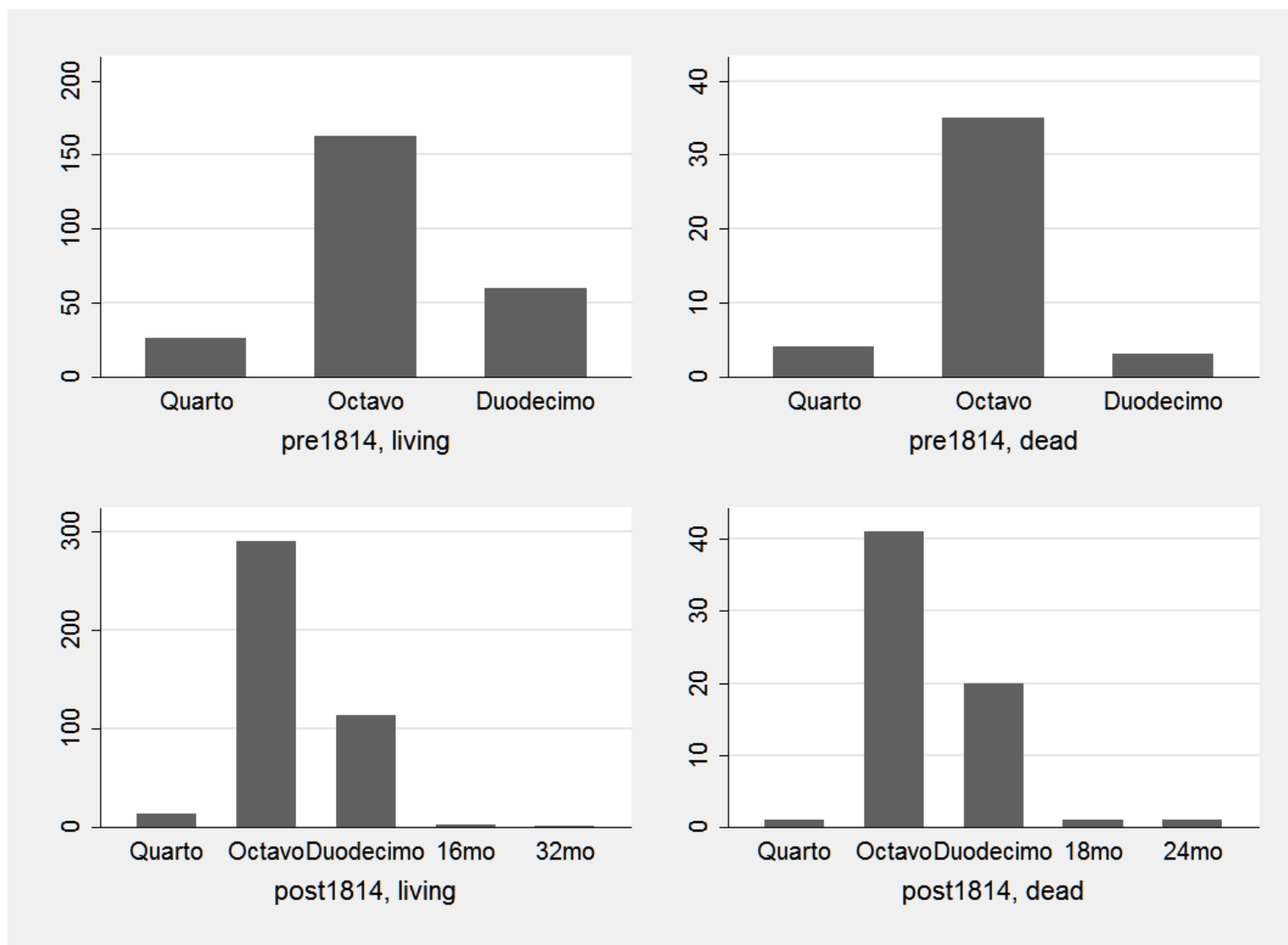
	(1)	(2)	(3)	(4)
Dead	-6.61*** (2.51)	-6.58** (2.53)	-1.58 (3.95)	-5.54** (2.75)
Post-1814 * dead	20.27** (9.08)	20.34** (9.25)	13.19 (8.89)	20.67** (9.11)
Number of pages	0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)
Western Canon		2.12 (3.62)		
Constant	-13.56** (5.69)	-15.79* (8.33)	-5.66 (5.10)	-10.72* (5.95)
Age fixed effects	Y	Y	Y	Y
Genre fixed effects	Y	Y	N	Y
Decade fixed effects	Y	Y	Y	N
Five year fixed effects	N	N	N	Y
Observations	692	692	692	692
R-squared	0.55	0.55	0.56	0.54

Standard errors in brackets clustered at the level of authors

\*\*\* denotes significance at the 1 percent level, \*\* 5 percent, and \* 10 percent.



## No significant change in the distribution of page size



Available for 777 of 1,072 editions, or 665 of 902 editions in print for 14 years or less

# Controlling for page size books by dead authors become 178% more expensive (32.47s compared with a mean of 18.22s)

TABLE - OLS INCLUDING SIZE OF PAGES

DEPENDENT VARIABLE IS THE PRICE OF NEW EDITIONS, PRINTED BETWEEN 1790 AND 1840 FOR BOOKS THAT ARE WITHIN 14 YEARS OF THE FIRST PUBLICATION

	(1)	(2)	(3)	(4)	(5)
Dead	-15.65 (9.93)	-15.24 (10.06)	-10.80 (7.03)	-16.57* (9.06)	-18.50** (8.87)
Post-1814 * dead	32.47** (12.40)	31.91** (12.64)	27.20** (11.66)	35.75*** (12.68)	33.07** (13.87)
Western Canon		2.95 (3.47)			
Constant	21.56*** (4.91)	19.88*** (4.84)	27.32*** (3.98)	21.92*** (7.02)	15.80 (15.37)
Page size fixed effects	Y	Y	Y	Y	Y
Age fixed effects	Y	Y	Y	Y	Y
Genre fixed effects	N	N	Y	N	N
Author fixed effects	Y	Y	Y	N	Y
Five year fixed effects	Y	Y	Y	Y	N
Linear and quadratic time trend	N	N	N	N	Y
Observations	665	665	665	665	665
R-squared	0.54	0.54	0.57	0.52	0.53

Standard errors in brackets clustered at the level of authors

\*\*\* denotes significance at the 1 percent level, \*\* 5 percent, and \* 10 percent.

# Outline

- The Copyright Act of 1814
- Data
  - Book prices for new editions, 1790-1840
  - Genre and literary quality
  - Expected length of copyright
  - Page numbers and page size
- Empirical results
  - Significant increase in price of books by dead authors after 1814
  - Time-varying estimates before and after 1814
  - Controlling for the physical characteristics of books
  - Excluding books by popular authors who died after 1814
  - Excluding books by recently deceased authors
- [Placebo for books by dead authors without longer copyrights](#)
- Books become cheaper as they approach the end of copyright?
- Conclusions

# Placebo

- Did price increase for books by dead authors without change in copyright?
- Books whose author had survived first 14 years term
- Under copyright for another 14-year term under 1710 Statute of Anne = no extension in 1814
- Subject to same changes in tastes and other unobservables

DIFFERENCES IN THE LENGTH OF COPYRIGHT FOR DEAD AND LIVING AUTHORS –BOOKS 15-28 YEARS

		Pre-1814	Post-1814	Difference
Author	Alive	28	Maximum of 28 years or life of author	>0
	Mean	28	28	0
	Dead	28	28	0
	Mean	28	28	0

# Without longer copyright, no significant effect on books by dead authors

TABLE 8– OLS – DEPENDENT VARIABLE IS PRICE OF EDITIONS BETWEEN 1790 AND 1849  
FOR BOOKS IN PRINT FOR *MORE* THAN 14 YEARS (PLACEBO)

	(1)	(2)	(3)
Dead	-20.47 (28.47)	-5.55 (39.26)	-20.47 (28.47)
Post-1814 * dead	3.30 (16.28)	9.05 (17.39)	3.30 (16.28)
Constant	22.26 (41.33)	0.28 (50.16)	22.26 (41.33)
Age fixed effects	Y	Y	Y
Genre fixed effects	N	Y	N
Author fixed effects	Y	Y	N
Five year fixed effects	Y	Y	Y
Linear and quadratic time trend	N	N	N
Observations	63	63	63
R-squared	0.97	0.97	0.97

Standard errors clustered at the level of authors.

\*\*\* denotes significance at the 1 percent, \*\* 5 percent, and \* 10 percent, level.

# Outline

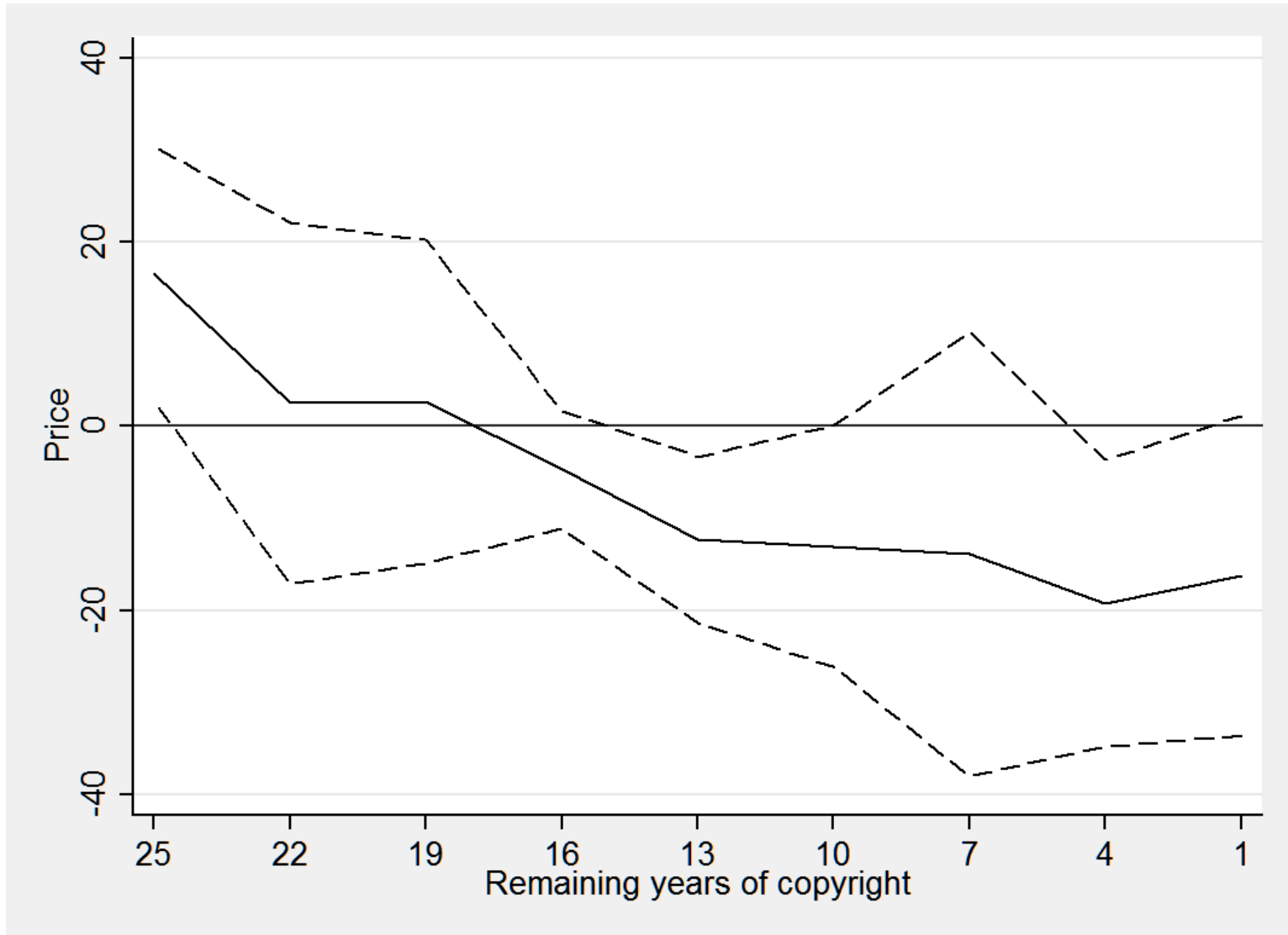
- The Copyright Act of 1814
- Data
  - Book prices for new editions, 1790-1840
  - Genre and literary quality
  - Expected length of copyright
  - Page numbers and page size
- Empirical results
  - Significant increase in price of books by dead authors after 1814
  - Time-varying estimates before and after 1814
  - Controlling for the physical characteristics of books
  - Excluding books by popular authors who died after 1814
  - Excluding books by recently deceased authors
- Placebo for books by dead authors without longer copyrights
- Do books become cheaper as they approach the end of copyright?
- Conclusions

# Does $p$ decline as copyright ends?

- If expectations about copyright length influence  $p$ , new editions of book titles should become cheaper towards  $T$
- Median price on copyright is 10.5 shillings, compared with 9.0 shillings off copyright (-15%)
  - Reverend William Paley (1743-1805)'s *A View of Evidences of Christianity* (first edition in 1794, under copyright until 1808)
  - 12 shillings in 1794 to 9 shillings in 1820 and 4.5 shillings in 1824.
- Books by living authors become subject to different extensions as a result of extension to “life of author”

# Editions of book titles become cheaper towards end of copyright

FIGURE 4- ESTIMATED EFFECTS OF REMAINING YEARS OF COPYRIGHT ON PRICE



Note: 95% confidence intervals  $Price_{it} = \beta_0 + \sum_s \beta_s Expected Length_{ist} + X_{it}\gamma + \varepsilon_{it}$



# Conclusions

- Substantial increase in price in response to longer copyright
  - 8 percent each additional year of copyright
  - Elasticity of price w.r.t. to length of copyright of 27.4 percent
  - Controlling for book age, author, and time fixed effect
  - Robust to controlling for canonical works, genre fixed effects, dropping author fixed effects, no significant pre-trends
  - Robust to excluding popular authors who died after 1814
  - Robust to excluding recently deceased authors
- Mechanism
  - Placebo regressions for books by dead authors without stronger copyright suggest no significant effects
  - Books become cheaper as they approach the end of copyright
- Differential impact of IP regimes across industries
  - In pharmaceuticals,  $p$  for patented drugs increases after generic entry
  - In books, customers can delay purchase to wait for lower priced editions
- Future research
  - If longer copyrights do increase price, do they encourage entry and creativity?
  - Do payments to authors increase?
  - Did copyrights allow writing to become a profession?

# Publishers print more editions by dead authors

