

APPENDIX –  
FOR ONLINE PUBLICATION

TABLE A1 – SUMMARY STATISTICS, BRP BOOKS

	N	Mean	St. Dev.	Median
All BRP books				
Original $p$	271	42.79	179.57	11.15
BRP $p$	283	19.41	41.77	7.50
$\Delta p$	271	24.97	21.33	21.87
Chemistry				
Original $p$	216	51.18	200.34	11.70
BRP $p$	228	22.43	46.00	8.50
$\Delta p$	216	24.34	21.39	21.76
Mathematics				
Original $p$	55	9.84	5.77	8.00
BRP $p$	55	6.88	4.32	5.75
$\Delta p$	55	27.44	21.11	23.47

*Notes:* Means, standard deviations, and median prices for 283 books with German-owned US copyrights that were licensed to US publishers under the 1942 BRP. The variable  $\Delta p$  measures the percentage decline in price, calculated as the difference between the original price and the BRP price, divided by the original price. Price data collected Alien Property Custodian (1942).

TABLE A2 – MOST CITED BRP BOOKS

Author	Title	Publication Year	Pre-1942 Citations	Post-1942 Citations	Field
Courant, R. & D. Hilbert	<i>Methoden der Mathematischen Physik</i>	1931	8	235	Mathematics
Becker, R.	<i>Ferromagnetismus</i>	1939	10	232	Chemistry
Alexandroff, P. & H. Topf, H.	<i>Topologie</i>	1935	6	235	Mathematics
Nevanlinna, R.	<i>Eindeutige Analytische Funktionen</i>	1936	6	230	Mathematics
Waerden, B.	<i>Moderne Algebra</i>	1931	11	195	Mathematics
Saccardo, P.	<i>Sylloge Fungorum Omnium Hucusque Cognitorum... curante Alex</i>	1881	59	141	Chemistry
Hansen, M.	<i>Der Aufbau der Zweistofflegierungen</i>	1936	25	172	Chemistry
Doetsch, G.	<i>Theorie und Anwendung der Laplace-Transformation</i>	1937	7	169	Mathematics
Clar, E.	<i>Aromatische Kohlenwasserstoffe: Polycyclische Systeme</i>	1942	0	166	Chemistry
Speiser, A.	<i>Die Theorie der Gruppen von Endlicher Ordnung</i>	1937	2	112	Mathematics

Notes: Citations refer to citations to BRP books by English-language citations.

TABLE A3 – MOST CITED SWISS BOOKS

Author	Title	Publication Year	Pre-1942 Citations	Post-1942 Citations	Field
Leser, Conrad	<i>Invariantentheorie Algebraische Formen</i>	1939	0	41	Mathematics
Huber, Wilhelm	<i>Zur Kenntnis der Sulfuration Aromatischen Amine nach dem sogenannten "Backprozess"</i>	1932	0	34	Chemistry
Motzkin, Theodor	<i>Zur Theorie der Linearen Ungleichungen</i>	1936	0	34	Mathematics
Warschawski, Stefan	<i>Das Randverhalten der Ableitung der Abbildungsfunktion bei Konformer Abbildung</i>	1932	0	34	Chemistry
Stiefel, Edward	<i>Richtungsfelder und Fernparallelism in n-Dimensionalen Mannigfaltigkeiten</i>	1936	2	31	Chemistry
Hofmann, Albert	<i>Über den Enzymatischen Abbau des Chitins und Chitosans</i>	1929	3	17	Mathematics
Jungen, Reinwald	<i>Sur les series de Taylor n'ayant que des singularités algébri-co-logarithmiques sur leur cercle de convergence</i>	1932	6	13	Chemistry
Muller, Hans.	<i>Zur Theorie der elektrischen Ladung und der Koagulation der Kolloide</i>	1928	0	19	Mathematics
Halpern, Ada	<i>Etude de certains potentiels logarithmiques</i>	1937	2	17	Chemistry
Gutzeit, Grégoire	<i>Sur une méthode d'analyse qualitative rapide des cations et anions les plus usuels</i>	1930	3	13	Mathematics

Notes: Citations refer to citations to Swiss books by English-language citations.

TABLE A4 – CHANGES IN PRICE AND IN CITATION FOR THE TOP FIVE RESEARCH FIELDS,  
BRP AND SWISS BOOKS IN CHEMISTRY (TOP) AND MATHEMATICS (BOTTOM)

	BRP Books				N	Swiss Books			
	Price	$\Delta p$	Citations			Citations		N	
	Original		Pre-1941	Post-1941		Pre-1941	Post-1941		
<u>Mathematics</u>									
Mathematics	11.96	38.80	0.520	1.740	14	0.025	0.112	4	
Geometry	7.75	29.27	0.054	0.330	12	0.028	0.112	17	
Algebra	8.74	15.79	0.143	0.990	7	0.017	0.119	13	
Set Theory	9.99	31.59	0.447	2.695	6	0.047	0.072	13	
Analysis	9.52	18.14	0.337	1.952	5	0.009	0.162	16	
<u>Chemistry</u>									
Compounds	29.60	24.68	0.191	0.441	58	0.016	0.059	74	
Organic Chemistry	200.30	34.65	0.367	0.508	28	0.000	0.057	6	
Metals	16.27	18.57	0.427	0.696	27	0.057	0.060	4	
Electrochemistry	15.97	18.93	0.152	0.520	14	0.023	0.045	10	
Analytical Chemistry	14.77	32.79	0.242	0.299	12	0.063	0.138	5	
Physical Chemistry	22.01	26.09	0.249	0.276	10	0.000	0.000	1	

*Notes:* Research fields for 283 BRP and 247 Swiss books in the US National Union Catalog. Research fields are constructed based on topic codes in Alien Property Custodian (1942) and the *Katalog* (vols. 1921-1939 and 1931-1940) of the Swiss National Library.

TABLE A5 – COMPARISON OF MEANS  
NEW PUBLICATIONS THAT CITE BRP BOOKS PER BOOK AND YEAR

	1920-41	1942-1970	Difference
All (N=283)	0.281 (0.784)	0.479 (1.371)	0.197*** (0.025)
English	0.263 (0.775)	0.566 (1.653)	0.303*** (0.041)
Other languages	0.299 (0.793)	0.391 (1.006)	0.092*** (0.026)
Difference	0.036 (0.027)	0.174*** (0.021)	0.211*** (0.049)
Chemistry (N=228)	0.306 (0.838)	0.384 (1.088)	0.078*** (0.023)
English	0.274 (0.814)	0.414 (1.251)	0.140*** (0.037)
Other languages	0.337 (0.860)	0.353 (0.895)	0.016 (0.027)
Difference	0.063 (0.033)	0.060*** (0.019)	0.124*** (0.046)
Mathematics (N=55)	0.204 (0.574)	0.872 (2.138)	0.667*** (0.077)
English	0.230 (0.633)	1.195 (2.661)	0.965*** (0.135)
Other languages	0.179 (0.509)	0.549 (1.363)	0.369*** (0.070)
Difference	0.050 (0.041)	0.647*** (0.075)	0.596*** (0.152)

*Notes:* Means and standard deviations (in parentheses) of the number of new scientific publications (including articles and books) that cite a BRP book  $i$  per year  $t$  between 1920 and 1970. *English* are citations by English-language authors; *other languages* are citations by authors in other languages that cite the same books. To construct data on citations from different languages, we first collected citations from Google Scholar (available at <http://scholar.google.com>, accessed July 1<sup>st</sup> - September 25th, 2014), and then manually assigned all citing publications to their publication language.

TABLE A6 – OLS WITH CONTROLS FOR LINEAR PRE-TRENDS, DEPENDENT VARIABLE IS CITATIONS PER BOOK AND YEAR

	(1)	(2)	(3)	(4)
English	-0.036 (0.042)	-0.036 (0.042)	-0.036 (0.042)	-0.036 (0.042)
English x post	0.211*** (0.066)	-0.077 (0.091)	0.079 (0.053)	-0.074 (0.091)
English x $\Delta p$ x post		1.192*** (0.344)		0.646** (0.288)
English x Math x post			0.674** (0.279)	
English x Math x $\Delta p$ x post				2.383*** (0.907)
Citation Year FE	Yes	Yes	Yes	Yes
Book FE	Yes	Yes	Yes	Yes
R-squared	0.357	0.366	0.368	0.382
N	19,680	18,986	19,680	18,986
Pre-1942 Mean	0.263	0.264	0.263	0.264

Standard errors in parentheses clustered at the book level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Notes:* The dependent variable measures citations to book  $i$  per year  $t$  between 1920 and 1970. In column (1-4), the depended variable is de-trended by estimating separate linear pre-trends for English-language citations and for citations by authors publishing in other languages, and then controlling for these different trends in the post-period. The indicator *English* equals 1 for citations by *English-language* authors; the control group are citations to the same books from authors in other languages. The variable *post* equals one for years after 1941. The variable *Math* indicates 55 books in mathematics. The variable  $\Delta p$  measures the difference between the original price and the BRP price for book  $i$ , divided by the original price.

TABLE A7 – COMPARISON OF MEANS:  
NEW PUBLICATIONS THAT CITE BRP VS. SWISS BOOKS

	1920-41	1942-1970	Difference
All Books (N=530)	0.105 (0.487)	0.338 (0.255)	0.232*** (0.018)
BRP (N=283)	0.263 (0.775)	0.566 (1.653)	0.303*** (0.041)
Swiss (N=247)	0.024 (0.171)	0.078 (0.353)	0.054*** (0.007)
Difference	0.239*** (0.014)	0.488*** (0.020)	0.249*** (0.038)
Chemistry (N=389)	0.111 (0.514)	0.271 (0.993)	0.160*** (0.017)
BRP (N=228)	0.274 (0.814)	0.413 (1.251)	0.140*** (0.037)
Swiss (N=161)	0.025 (0.176)	0.069 (0.311)	0.044*** (0.007)
Difference	0.249*** (0.013)	0.345*** (0.019)	0.096*** (0.035)
Mathematics (N=141)	0.089 (0.395)	0.523 (1.776)	0.434*** (0.051)
BRP (N=55)	0.230 (0.633)	1.195 (2.661)	0.965*** (0.135)
Swiss (N=86)	0.021 (0.152)	0.094 (0.420)	0.073*** (0.015)
Difference	0.209*** (0.023)	1.101*** (0.054)	0.892*** (0.104)

*Notes:* Means and standard deviations (in parentheses) for English-language citations to BRP and Swiss books  $i$  per year  $t$  between 1920 and 1970. *BRP* books include 283 books with German-owned copyrights that were licensed to US publishers under the 1942 Book Republication Program (BRP). Swiss books cover 247 books with Swiss-owned copyrights that were not available for copyright licensing due to Switzerland's neutrality during the war. To construct data on citations from different languages, we first collect citations from Google Scholar (available at <http://scholar.google.com>, accessed July 1<sup>st</sup> - September 25th, 2014), and then manually assigned all citing publications to their publication language.



TABLE A8 – CITATIONS PER YEAR – MATCHED SAMPLE

	1920-41	1942-1970	Difference
All Books (N = 255)	0.218 (0.710)	0.581 (1.667)	0.362*** (0.038)
BRP (N = 214)	0.283 (0.804)	0.661 (1.787)	0.378*** (0.047)
Swiss (N = 39)	0.027 (0.196)	0.141 (0.531)	0.113*** (0.024)
Difference	0.256*** (0.036)	0.520*** (0.054)	0.264*** (0.091)
Chemistry (N = 193)	0.229 (0.751)	0.405 (1.207)	0.175*** (0.033)
BRP (N = 165)	0.302 (1.420)	0.462 (1.767)	0.160*** (0.041)
Swiss (N = 29)	0.023 (0.352)	0.068 (0.460)	0.045*** (0.016)
Difference	0.280*** (0.043)	0.394*** (0.045)	0.114* (0.078)
Mathematics (N = 60)	0.186 (0.572)	1.147 (2.572)	0.961*** (0.114)
BRP (N = 49)	0.230 (0.633)	1.331 (2.785)	1.102*** (0.141)
Swiss (N = 11)	0.042 (0.240)	0.326 (0.854)	0.284 (0.079)
Difference	0.188*** (0.059)	1.005 *** (0.158)	0.818*** (0.274)

*Notes:* Means and standard deviations (in parentheses) of the number of new scientific publications that cite book  $i$  per year  $t$  between 1920 and 1970. The indicator *BRP* equals 1 for 214 books in the National Union Catalog (NUC) that were licensed to US publishers under the 1942 Book Republication Program (BRP). The control group covers 39 Swiss books in the NUC (that were not available for copyright licensing due to Switzerland's neutrality). We have matched BRP books with Swiss books through a Mahalanobis matching procedure using research fields and the average of pre-1942 German language citations per year as matching variables. Citations from Google Scholar (<http://scholar.google.com>), July 1<sup>st</sup> to September 25th, 2014.

TABLE A9 – OLS AND QML POISSON REGRESSIONS

	OLS (1-3)			Poisson (4)
	(1)	(2)	(3)	(4)
BRP		-0.635*** (0.145)	0.222** (0.088)	
BRP x post	0.392*** (0.086)	0.433*** (0.146)	0.436*** (0.096)	-0.002 (0.209)
Citation year FE	Yes	Yes	Yes	Yes
Book FE	Yes	Yes	No	Yes
Field * Citation year FE	No	Yes	No	No
Publication year FE	No	No	Yes	No
Field FE	No	No	Yes	No
R-squared	0.550	0.584	0.146	-
N	20,191	19,702	19,702	13,834
Pre-1942 mean	.263	.268	.268	.268

Standard errors in parentheses clustered at the book level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Notes:* The dependent variable measures citations to book  $i$  per year  $t$  between 1920 and 1970. Columns (1-3) estimate OLS. Column (4) estimates quasi-maximum likelihood (QML) Poisson regressions to address the count data characteristics of citations. The indicator  $BRP$  equals 1 for 283 books that were licensed to US publishers under the 1942 Book Replication Program (BRP). The control group covers 247 Swiss books that were not available for licensing due to Switzerland's neutrality during the war. The variable  $post$  equals for years after 1941.

TABLE A10— OLS AND QML POISSON REGRESSIONS

	(1)	OLS (1-3) (2)	(3)	Poisson (4) (4)
BRP			0.159* (0.086)	
BRP x post	0.097 (0.077)	0.170* (0.100)	0.127 (0.087)	0.034 (0.285)
BRP x $\Delta p$ x post	1.006*** (0.344)	0.961** (0.433)	1.066*** (0.313)	-0.087 (0.490)
$\Delta p$			0.282 0.159*	
Citation Year FE	Yes	Yes	Yes	Yes
Book FE	Yes	Yes	No	Yes
Field FE * Citation year FE	No	Yes	No	No
Publication year FE	No	No	Yes	No
Field FE	No	No	Yes	No
R-squared	0.554	0.587	0.167	
N	19,844	19,383	19,383	13,572
Pre-1942 Mean	.264	.269	.269	.264

Standard errors in parentheses clustered at the book level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

*Notes:* The the dependent variable measures citations to book  $i$  per year  $t$  between 1920 and 1970. Columns (1-3) estimate OLS. Column (4) estimates quasi-maximum likelihood (QML) Poisson regressions to address the count data characteristics of citations. The indicator  $BRP$  equals 1 for 283 books that were licensed to US publishers under the 1942 Book Republication Program (BRP). The control group covers 247 Swiss books that were not available for licensing due to Switzerland's neutrality during the war. The variable  $post$  equals for years after 1941. The variable  $\Delta p$  measures the difference between the original price and the BRP price for book  $i$ , divided by the original price.

TABLE A11 –BOOKS IN THE US LIBRARY OF CONGRESS. OLS, DEPENDENT VARIABLE IS CITATIONS PER YEAR

	(1)	(2)	(3)	(4)	(5)	(6)
BRP			0.742*** (0.259)			0.613** (0.264)
BRP x post	0.361*** (0.089)	0.361*** (0.089)	0.439*** (0.151)	0.070 (0.083)	0.070 (0.083)	0.148 (0.155)
BRP x $\Delta p$ x post				0.992*** (0.342)	0.992*** (0.342)	1.000*** (0.316)
$\Delta p$						0.378 (0.287)
Citation Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Book FE	Yes	Yes	No	Yes	Yes	No
Publication Year FE	No	No	Yes	No	No	Yes
Field FE	No	No	Yes	No	No	Yes
Linear pre-trend	No	Yes	No	No	Yes	No
R-squared	0.551	0.545	0.156	0.554	0.548	0.178
N	10,567	10,567	10,308	10,220	10,220	9,989
Pre-1942 Mean	0.263	0.263	0.268	0.264	0.264	0.269

Standard errors in parentheses are clustered at the book level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Notes:* OLS regressions for BRP and Swiss books that are listed among the entries of the US Library of Congress. The dependent variable measures citations to book  $i$  per year  $t$  between 1920 and 1970. The indicator  $BRP$  equals 1 for 283 BRP books that are listed in the Library of Congress and that were licensed to US publishers under the 1942 Book Republication Program (BRP). The control group covers 19 Swiss books in the Library of Congress that were not available for licensing due to Switzerland's neutrality during the war. The variable  $post$  equals for years after 1941. The variable  $\Delta p$  measures the difference between the original price and the BRP price for book  $i$ , divided by the original price. In columns 2 and 5 the dependent variable is de-trended by estimating separate linear pre-trends for BRP and Swiss books for pre-BRP years and controlling for trends in the post-period.

TABLE A12 – BOOKS BY ÉMIGRÉS TO THE UNITED STATES

Title	Author	Publication year	English- language Citations		Price	
			1920-41	1942-70	Original	$\Delta p$
<i>Methoden der mathematischen Physik</i>	R. Courant and D. Hilbert	1931	8	235	28.24	0.504
Strahlenoptik	M. Herzberger	1931	0	2	7.75	0.161
<i>Mathematische Grundlagen der Quantenmechanik</i>	J. v. Neumann	1932	6	28	7.85	0.554
<i>Aufgaben und Lehrsätze aus der Analysis</i>	G. Pólya and G. Szegő	1925	4	34	14.40	0.583

Notes: Emigrés are identified using entries in the *International Biographical Dictionary of Central European Émigrés 1933-1945* (Strauss et al. 1983), as well as based on affiliations with US universities, which we collect from the *Mathematics Genealogy Project* (available at <http://genealogy.math.ndsu.nodak.edu>, accessed February 1-18, 2015).

TABLE A13 – DIFFERENTIAL EFFECTS OF ÉMIGRÉ BOOKS. OLS, DEPENDENT VARIABLE IS CITATIONS PER BOOK AND YEAR

	(1)	(2)	(3)	(4)
English x post	0.479* (0.244)	0.085 (0.244)	0.479* (0.243)	0.086 (0.243)
English	0.051 (0.066)	-0.204*** (0.062)	0.051 (0.065)	-0.204*** (0.062)
US émigré * English * post	1.614 (1.589)	1.614 (1.589)	1.609 (1.580)	1.609 (1.580)
US émigré			-1.050* (0.561)	-1.050* (0.561)
Citation year FE	Yes	Yes	Yes	Yes
Book FE	Yes	Yes	No	No
Linear pre-trend	No	Yes	No	Yes
Publication year and field FE	No	No	Yes	Yes
R-squared	0.400	0.401	0.266	0.266
N	3,978	3,978	3,978	3,978
Pre-1942 Mean	0.230	0.230	0.230	0.230

Standard errors in parentheses clustered at the book level.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Notes:* The dependent variable measures citations to book  $i$  per year  $t$  between 1920 and 1970. The indicator *English* equals 1 for citations by *English-language* authors; the control group are citations to the same books from authors in other languages. The variable *post* equals one for years after 1941. The variable *US émigré* indicates books by mathematicians who emigrated to the United States after the Nazi government took power in 1933. In columns 2 and 4 the depended variable is de-trended by estimating separate linear pre-trends for English-language citations and for citations by authors publishing in other languages, and then controlling for these different trends in the post-period.

TABLE A14 – OLS,  
DEPENDENT VARIABLE IS NUMBER OF CITATIONS BY ENGLISH-LANGUAGE PUBLICATIONS

	(1)	(2)	(3)	(4)
25 miles * post	0.184*** (0.047)			0.145*** (0.046)
50 miles * post		0.138*** (0.050)		
75 miles * post			0.170*** (0.040)	
25-50 miles * post				0.205*** (0.073)
50-75 miles * post				-0.126** (0.060)
75-100 miles * post				-0.039 (0.057)
Year FE	Yes	Yes	Yes	Yes
Location FE	Yes	Yes	Yes	Yes
R-squared	0.272	0.269	0.269	0.279
N	4,752	4,752	4,752	4,752
Pre-1942 Mean	0.031	0.031	0.031	0.031

Standard errors in parentheses clustered at the location level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Notes:* The dependent variable counts new citations by English-language publications to BRP books in mathematics from location  $k$  in year  $t$ . The indicator  $x$  miles equals 1 for locations that are within  $x$  miles from a library that acquired at least one BRP book by 1956. The indicator  $x$ - $y$  miles equals 1 for locations that are between  $x$  and  $y$  miles away from a library with BRP books. The variable  $post$  equals 1 for years after 1941.

TABLE A15 –OLS, INCLUDING BOOKS THAT ARE NOT IN THE NUC, DEPENDENT VARIABLE IS CITATIONS PER BOOK AND YEAR

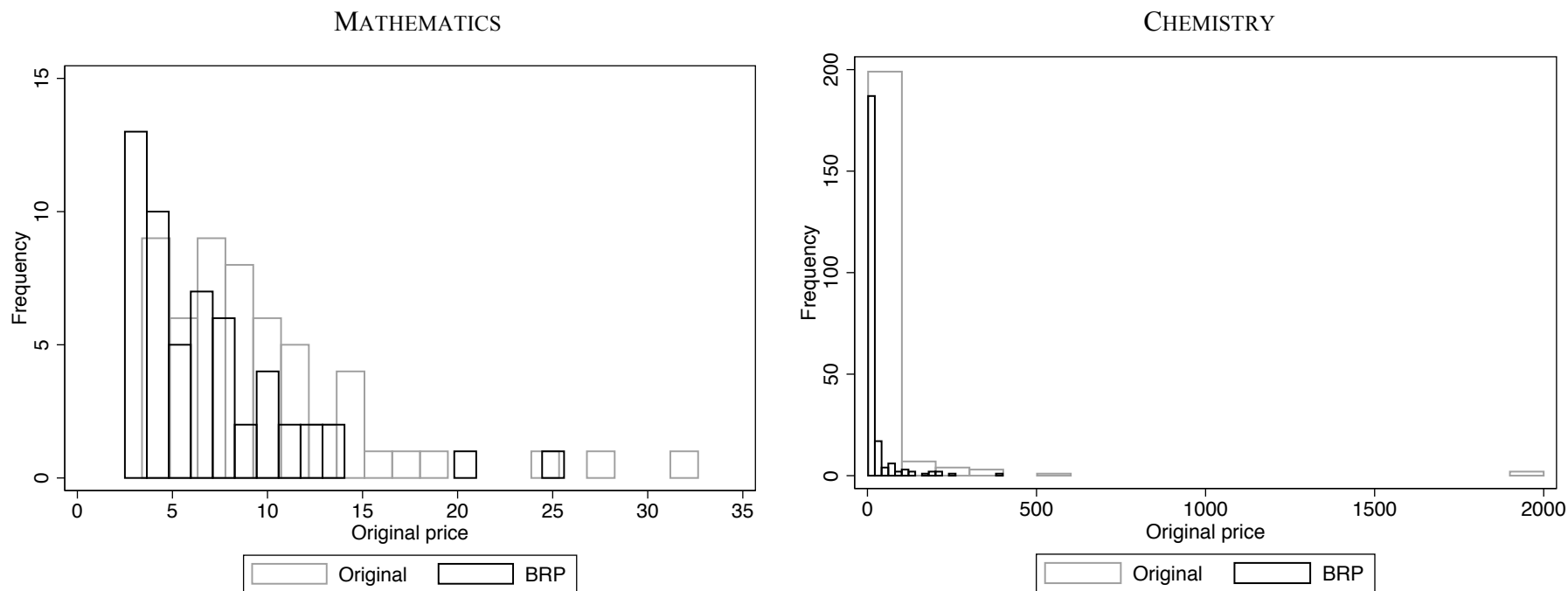
	(1)	(2)	(3)	(4)	(5)	(6)
BRP			0.220*** (0.057)			0.141** (0.059)
BRP x post	0.393*** (0.083)	0.393*** (0.083)	0.420*** (0.085)	0.107 (0.076)	0.107 (0.076)	0.116 (0.078)
BRP x $\Delta p$ x post				0.971*** (0.338)	0.971*** (0.338)	1.068*** (0.305)
R-squared	0.549	0.544	0.142	0.552	0.547	0.164
Citation Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Book FE	Yes	Yes	No	Yes	Yes	No
Linear pre-trend	No	Yes	No	No	Yes	No
Publication Year FE	No	No	Yes	No	No	Yes
Subject FE	No	No	Yes	No	No	Yes
R-squared	0.549	0.544	0.142	0.552	0.547	0.164
N	29,879	29,879	29,241	29,504	29,504	28,894
Pre-1942 Mean	0.263	0.263	0.268	0.264	0.264	0.269

Standard errors in parentheses are clustered at the book level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Notes:* OLS regressions for the full sample of BRP and Swiss books, including books that are not listed in the National Union Catalog (which captures the holdings of US libraries.) The dependent variable measures citations to book  $i$  per year  $t$  between 1920 and 1970. The indicator  $BRP$  equals 1 for 291 books that were licensed to US publishers under the 1942 Book Republication Program (BRP). The control group covers 486 Swiss books that were not available for licensing due to Switzerland's neutrality during the war. The variable  $post$  equals for years after 1941. The variable  $\Delta p$  measures the difference between the original price and the BRP price for book  $i$ , divided by the original price. In columns 2 and 6 the dependent variable is de-trended by estimating separate linear pre-trends for BRP and Swiss books for pre-BRP years and controlling for trends in the post-period.

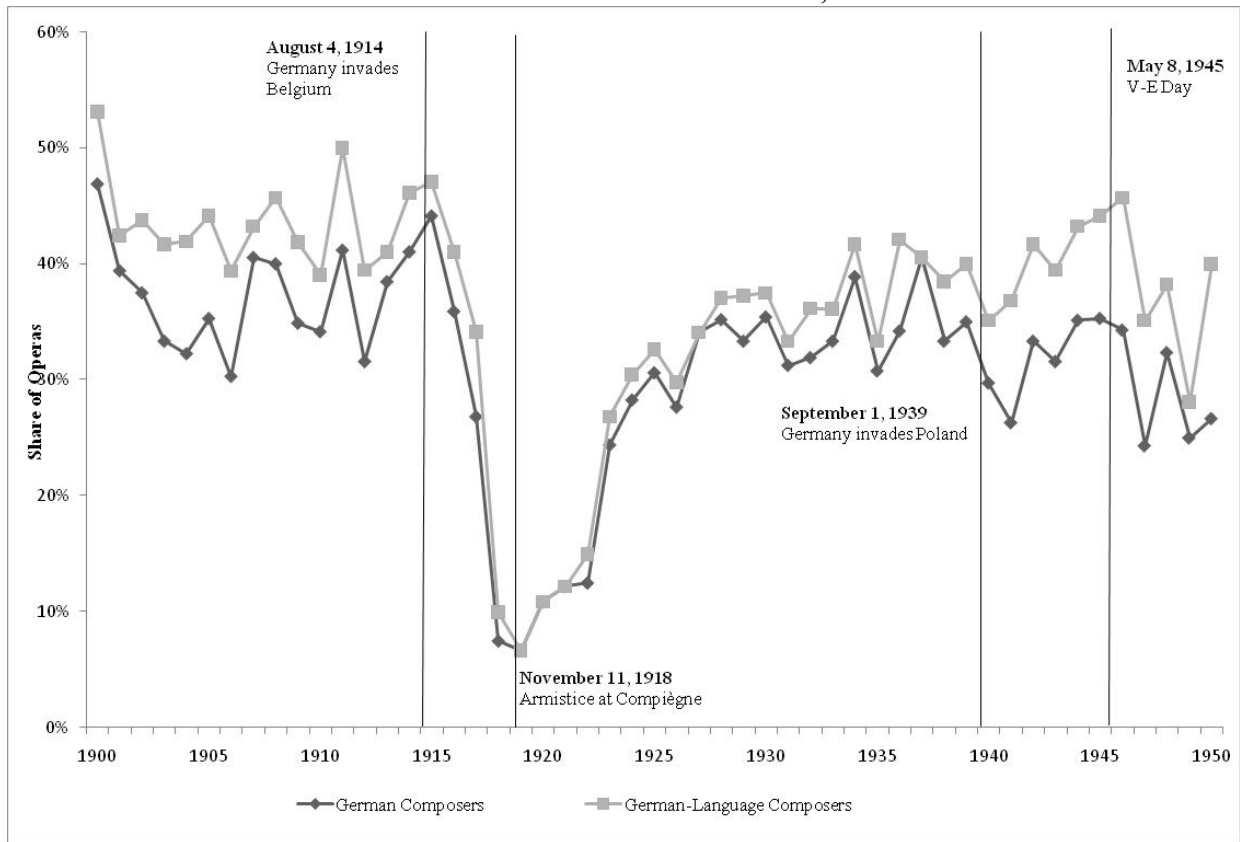


FIGURE A1 – ORIGINAL AND BRP PRICES FOR BRP BOOKS



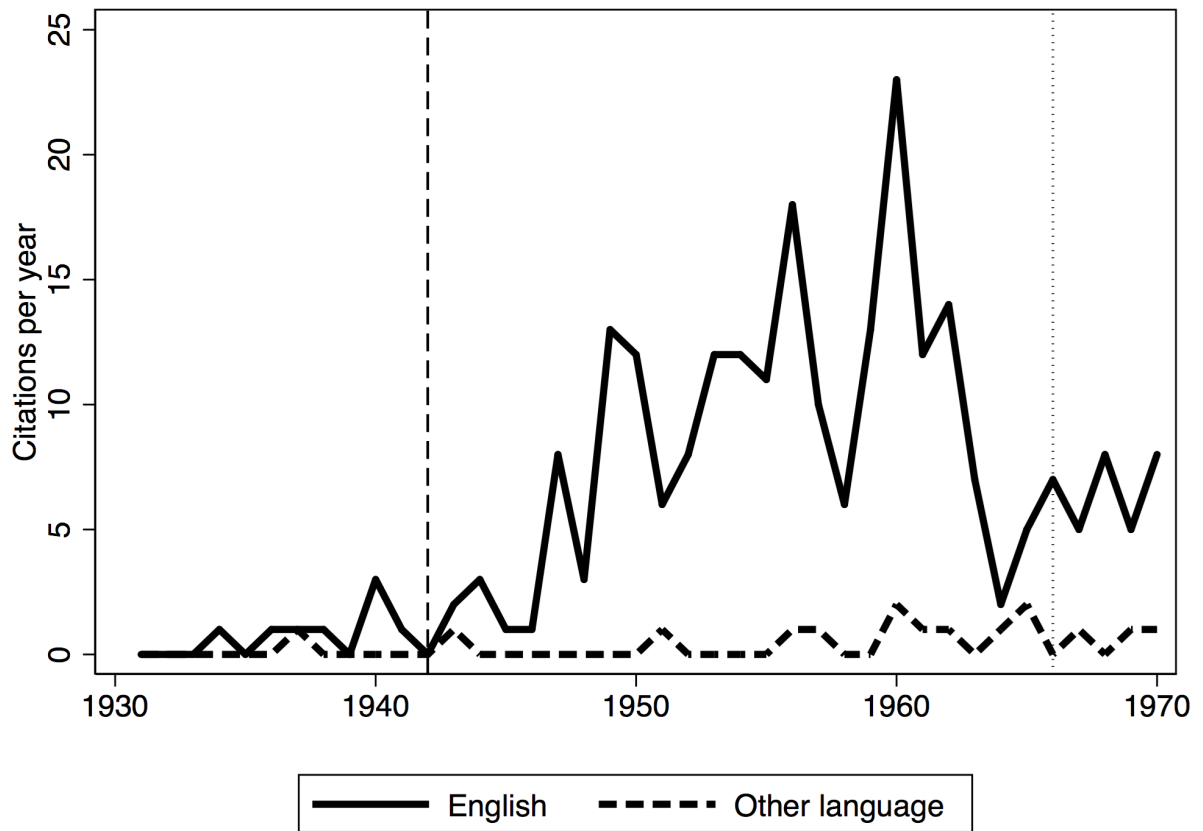
Notes: Original (pre-BRP) and BRP prices for 55 books in mathematics (left) and 228 books in chemistry (right). Two chemistry books sold for an original price of \$2,000 each: Beilstein’s *Handbuch der Organischen Chemie* (with a BRP price of \$400) and Saccardo’s *Silloge Fungorum* (with a BRP price of \$200). The most expensive math books are Courant’s *Grundlagen der Mathematik* (with an original price of \$32.6 and a BRP price of \$25.6) and Courant and Hilbert’s *Methoden der Mathematischen Physik* (with an original price of \$28.2 and a BRP price of \$14).

FIGURE A2 – SHARE OF GERMAN-LANGUAGE OPERAS  
AT THE METROPOLITAN OPERA IN NEW YORK, 1900-1950



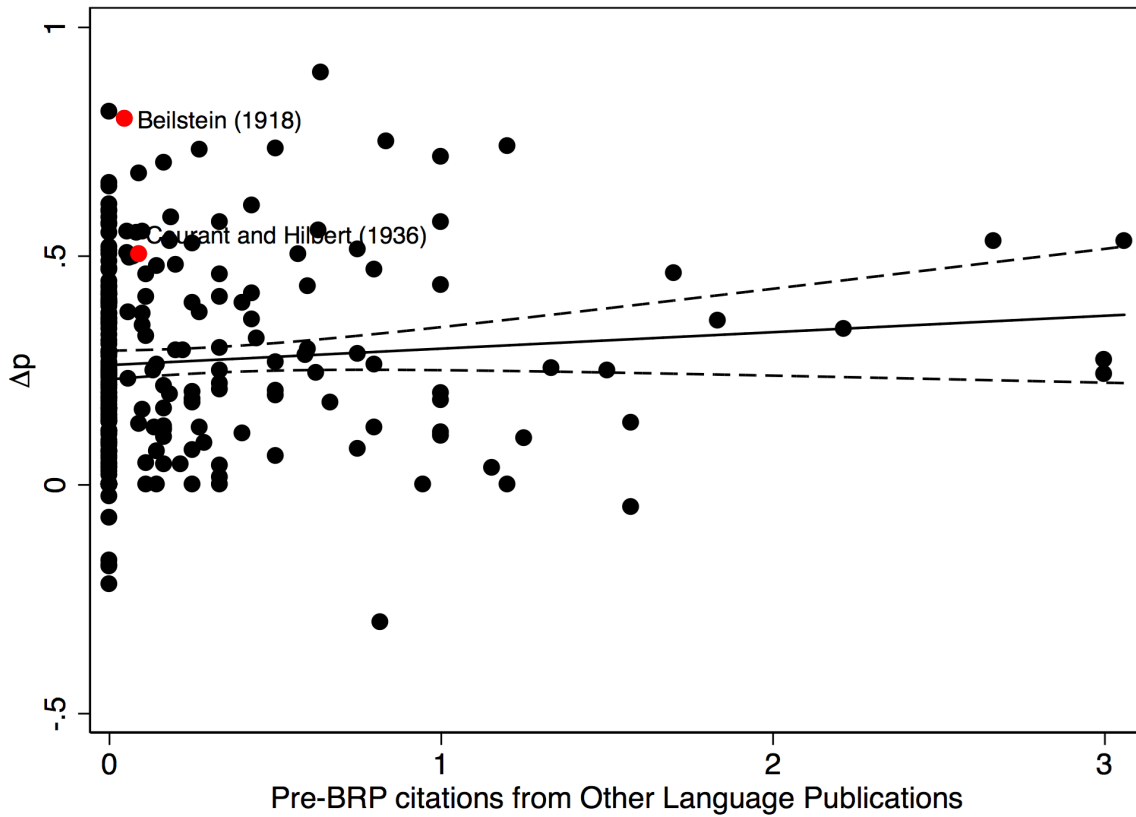
*Notes:* Data on the share of German-language operas collected from historical schedules of performances in the online archives of the Metropolitan Opera in New York (Moser 2012). *German composers* include Carl Maria von Weber, Engelbert Humperdinck, Friedrich Handel, Friedrich von Flotow, Giacomo Meyerbeer, Hermann Goetz, Jacques Offenbach, Ludwig van Beethoven, Max von Schillings, Peter Cornelius, Richard Strauss, and Richard Wagner. *German-language composers* further include Austrian composers Wolfgang Amadeus Mozart, Ernst Krenek, Franz von Suppé, Johann Strauss Jr. and Franz Schubert and the Bohemian Christoph von Gluck. Composers are assigned to ethnicities based on their country of birth, which means that Beethoven and Handel are counted as German, even though Beethoven was also active in Vienna and Handel in London.

FIGURE A3 – CITATIONS BY NEW PUBLICATIONS PER YEAR –  
*METHODEN DER MATHEMATISCHEN PHYSIK* (1931) BY R. COURANT AND D. HILBERT



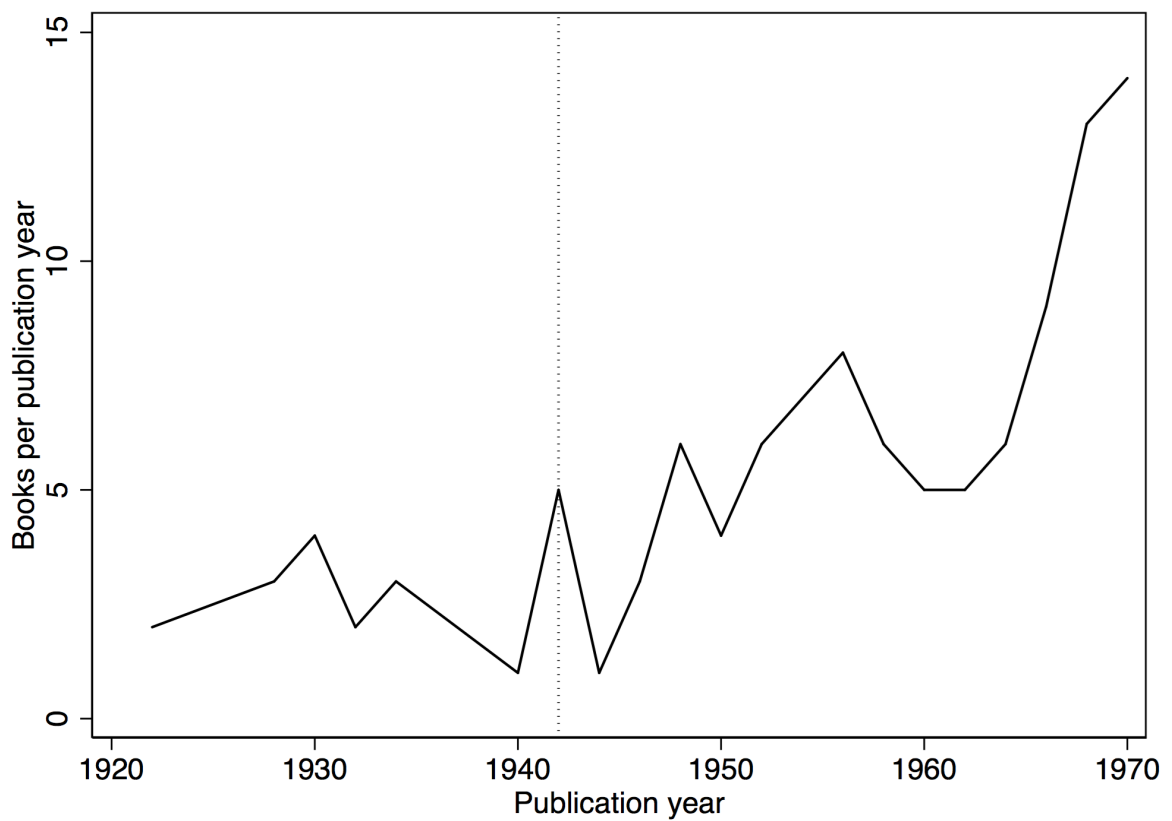
Notes: Citations *Methoden der Mathematischen Physik* (1931) by new scientific publications (book and articles) per year. Citations data from Google Scholar (<http://scholar.google.com>) between July 1<sup>st</sup> and September 25<sup>th</sup>, 2014. We restrict the data to new publications that cite the original German language versions of BRP books, and exclude citations to English translations (here, *Methods of Mathematical Physics*, 1966).

FIGURE A4 – DECLINE IN PRICE FOR BRP BOOKS  
WITH FEW AND MANY PRE-BRP CITATIONS BY AUTHORS PUBLISHING IN OTHER LANGUAGES



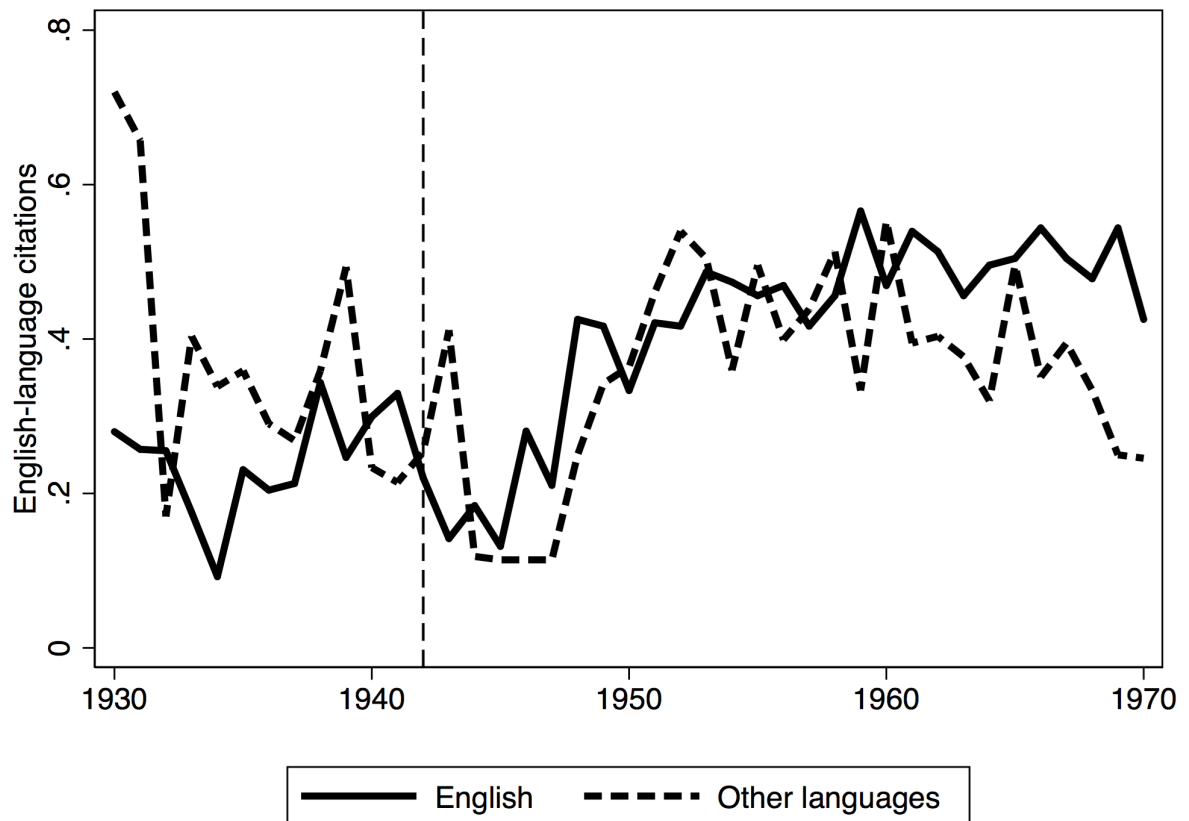
*Notes:* We plot the percentage decline in price  $\Delta p$  (calculated as the difference between the original price and the BRP price divided by the original pre-BRP price) against the pre-BRP counts of citations per year to the same BRP book by publications in other languages. The solid lines plots the linear correlation between  $\Delta p$  and pre-BRP citations with a 5 percent confidence interval. One additional citation by a non-English publication before the BPR is associated with an additional 3.6 percentage point decline in price (with a p-value of 0.18).

FIGURE A5– PUBLICATION YEARS FOR POTENTIAL SUBSTITUTES FOR BRP BOOKS



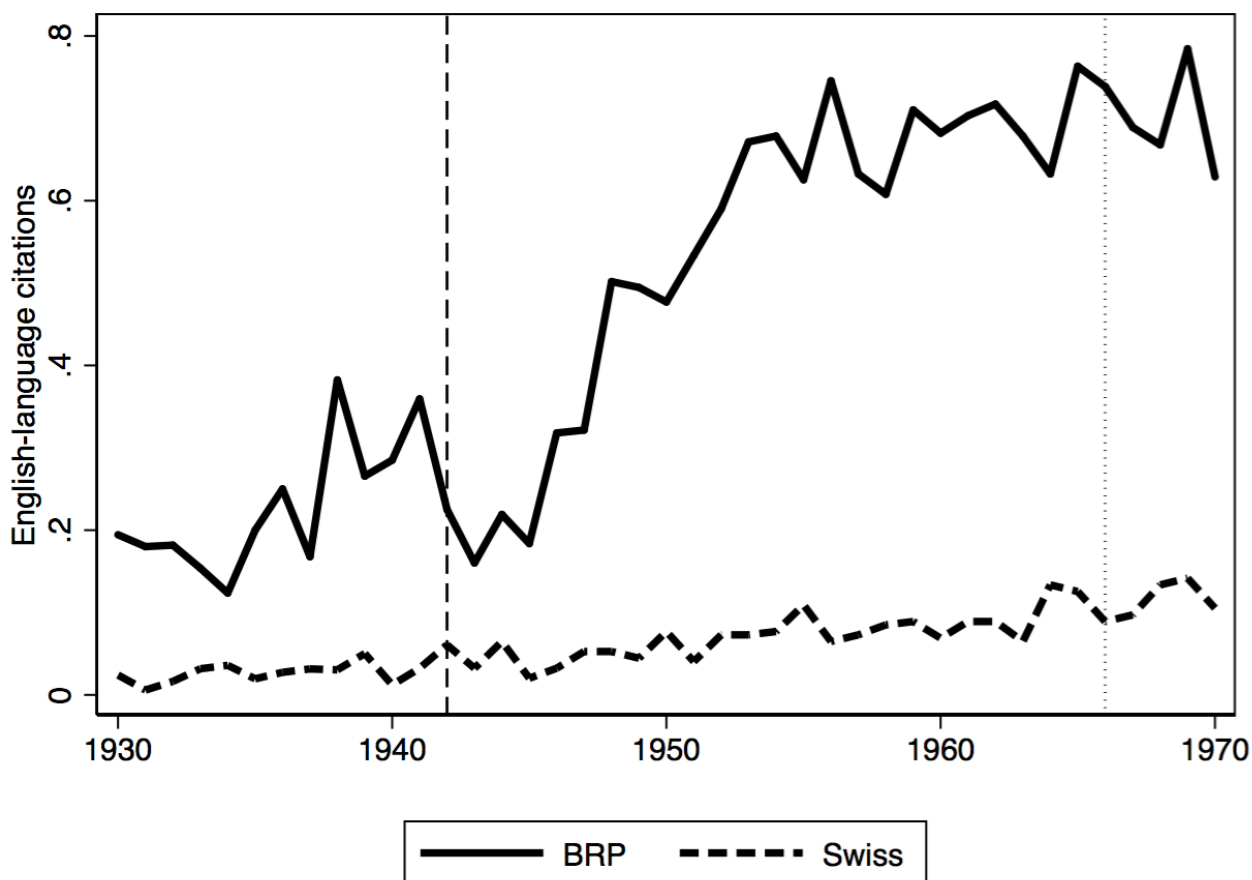
Notes: Books that customers on Amazon who bought BRP books “also bought” or “frequently bought together” with BRP books by the publication year of their first edition. For the four most highly cited BRP books in mathematics: Courant and Hilbert (1931) *Methoden der Mathematischen Physik*, Alexandroff and Hopf (1935), van der Waerden (1931), *Moderne Algebra*, Nevanlinna (1936), *Eindeutige analytische Funktionen* (R. Nevanlinna, 1936). Data collected from [www.amazon.com](http://www.amazon.com), accessed September 21-30, 2016).

FIGURE A6 – CITATIONS TO BRP BOOKS IN CHEMISTRY  
BY ENGLISH-LANGUAGE AUTHORS PER BOOK AND YEAR



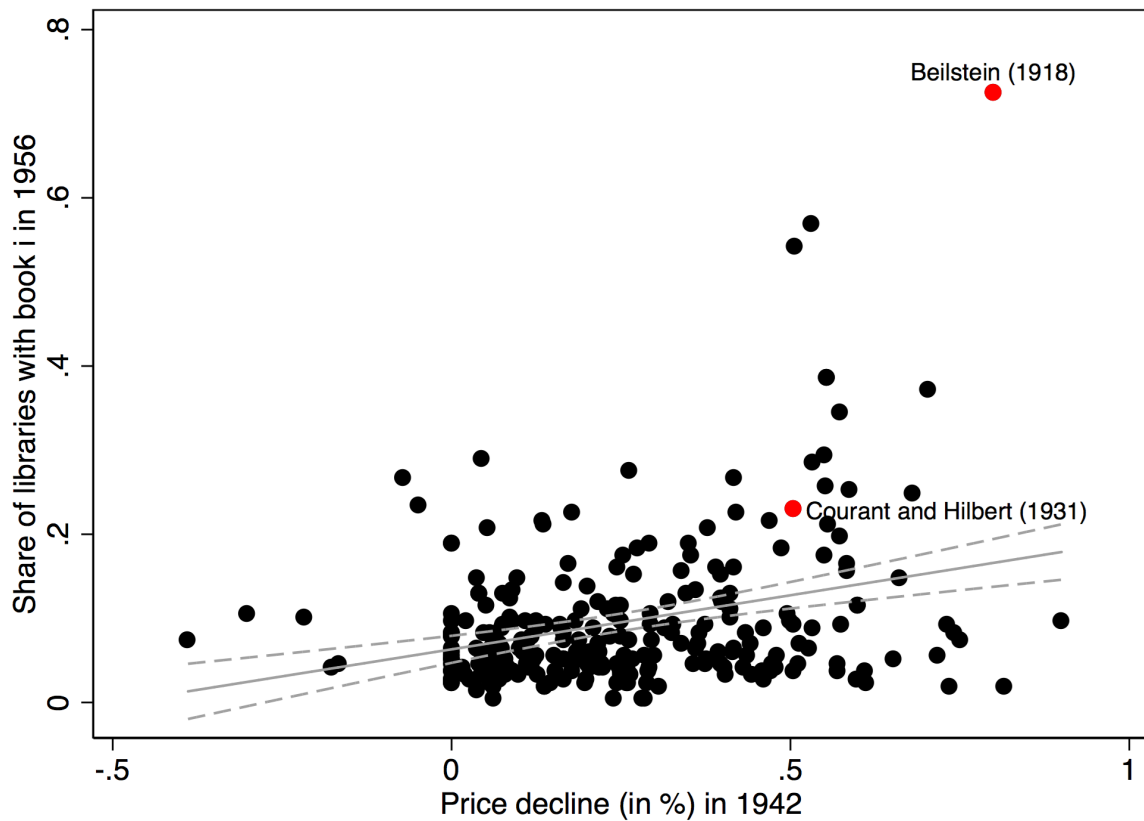
*Notes:* Citations per book and year for 228 BRP chemistry books by new scientific publications in English compared with citations to BRP books by new publications in other languages (which did not benefit directly from the BRP). Citations collected from Google Scholar (<http://scholar.google.com>, accessed July 1<sup>st</sup>-September 25<sup>th</sup>, 2014).

FIGURE A7 – RAW COMPARISONS OF CITATIONS  
FROM ENGLISH-LANGUAGE AUTHORS TO BRP AND SWISS BOOKS



*Notes:* In the main specifications, we compare citations to a matched sample of BRP and Swiss books. This figure plots the raw counts of *all* citations by new English-language publications to BRP and Swiss books in the National Union Catalog (NUC). Data include 5,141 English-language citations to 283 BRP books and 247 Swiss by new publications between 1930 and 1970 collected from Google Scholar (<http://scholar.google.com>, accessed July 1<sup>st</sup> to September 25<sup>th</sup>, 2014).

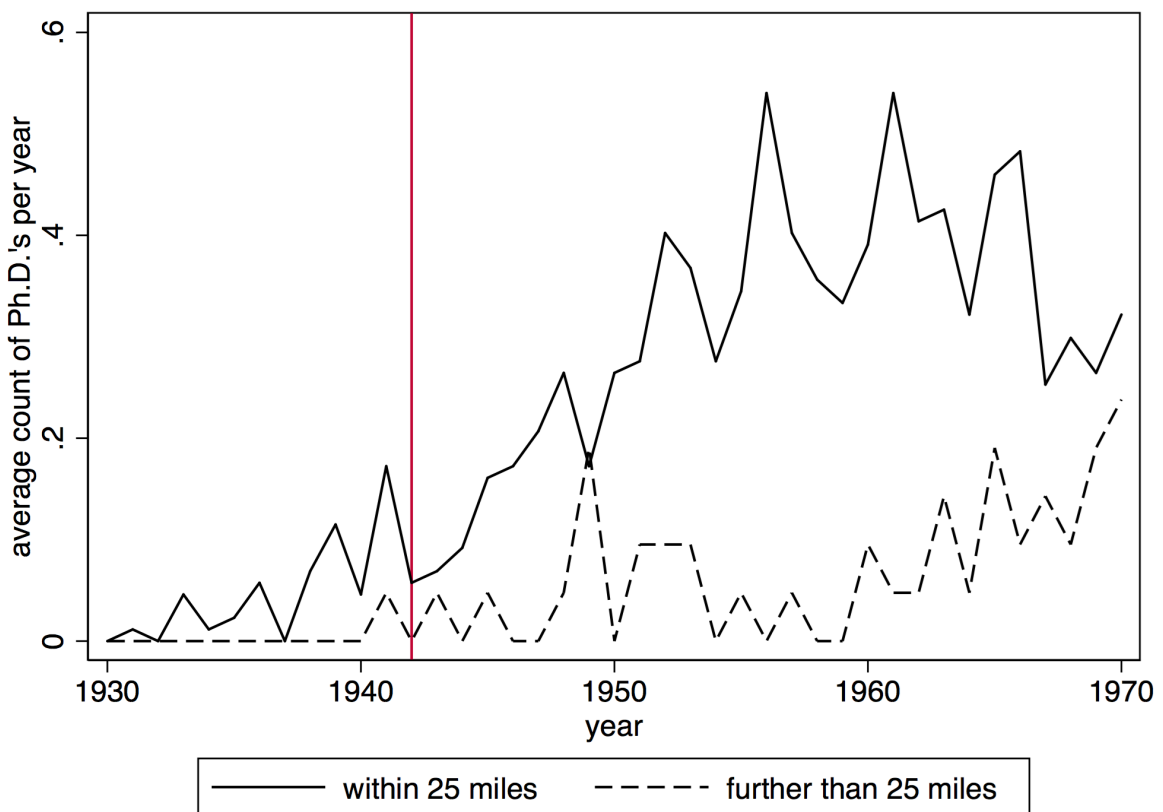
FIGURE A8 – SHARE OF LIBRARIES THAT HAD ACQUIRED A BRP BOOK BY 1956  
VS ITS PRICE DECLINE IN 1942



*Notes:* The share of libraries that had acquired a BRP book  $i$  by 1956 against the decline in price for the same book in 1942. Each additional 10 percent decline in price was associated with a 1.3 percent increase in the share of libraries that held a BRP book (with a p-value of 0.00). Excluding outliers (such as Beilstein), which can be found in more than 40 percent of US libraries, leaves the estimate at 0.8 (with a p-value of 0.00). We constructed data on libraries holdings of BRP books a physical copy of the National Union Catalog (Mansell 1968-1981), which is available in the Hoover Institution Library and Archives.



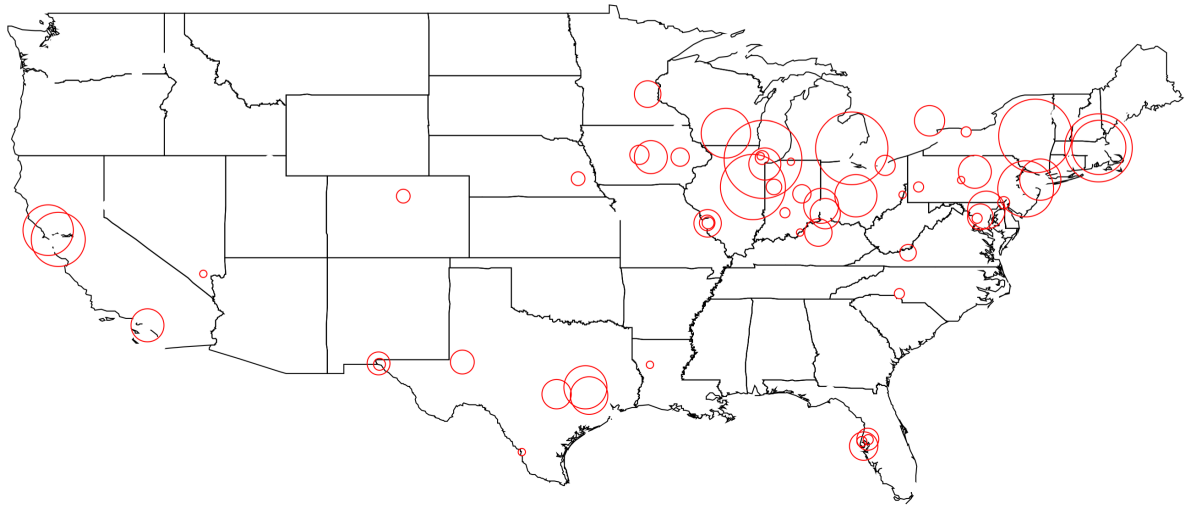
FIGURE A9 – NEW CITATIONS PER YEAR, BY DISTANCE OF LOCATION FROM BRP LIBRARY



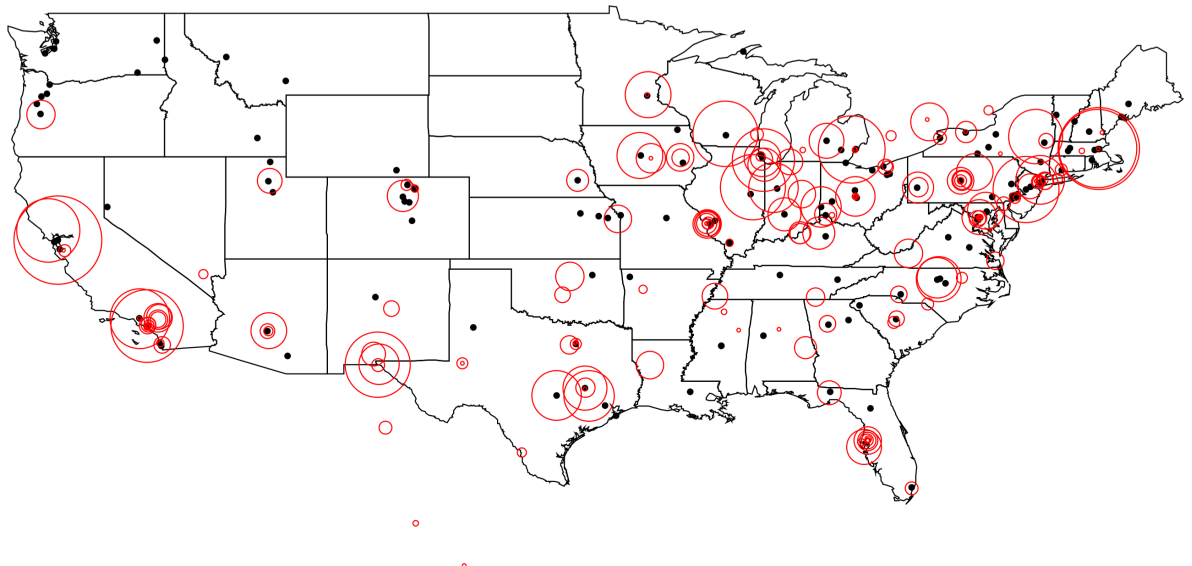
*Notes:* Citations by scientific publications per book and citation year for 55 BRP math books., by distance of the author from a library holding at least one BRP book. We have collected data on the geographic locations of authors from records of PhD granting institution of advisors and advisees in the Mathematics Genealogy Project (available at <http://www.genealogy.ams.org>, accessed January 28th-March 10, 2016). Data on libraries holdings were constructed from the records of the National Union Catalog (Mansell 1968-1981) at the Hoover Institution Library and Archives.

FIGURE A10 – LOCATIONS OF NEW PHDs AND BRP BOOKS IN MATH

1920-1941



1942-1970



*Notes:* Black circles map the locations of US libraries where BRP math books had become available by 1956. Red circles show the locations of PhD-granting institutions; the size of the red circle represents the number of citations from a location. We have collected data on the geographic locations of authors from records of PhD granting institution of advisors and advisees in the Mathematics Genealogy Project (<http://www.genealogy.ams.org>, accessed January 28th-March 10, 2016).