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Laurent Linnemer, Michael Visser

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# The Most Cited Articles from the Top-5 Journals (1991-2015)\*

Laurent Linnemer<sup>†</sup> and Michael Visser<sup>‡</sup>

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## Abstract

This paper documents what are the most cited articles published in the top-5 economics journals during the period 1991-2015. EconLit is used to collect bibliographic information about these articles, and we gathered yearly citations for each article through the Web of Science database. We present different sorts of citation lists. Our most basic one ranks articles on the basis of the cumulated number of citations received between year of publication and 2015. To facilitate the comparison of articles of different ages, we also consider rankings by subperiods, and on the basis of normalized citations per year. Finally we report lists by field of economic research, as defined by the JEL codes of the articles. The paper contains Internet links to all articles, allowing an easy and direct access to arguably the most influential economics literature published in the last 25 years.

**JEL codes:** A14

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<sup>†</sup>CREST (ENSAE). Email: laurent.linnemer@ensae.fr.

<sup>‡</sup>CREST (ENSAE) and CRED-University of Paris 2. Email: michael.visser@ensae.fr.

# 1 Introduction

What are the most influential economics articles in the recent economics literature? And what are the articles that have attracted the most attention by field of economic research (labor, IO, econometrics, trade, etc.)? To answer these questions, we have collected bibliographic information on all articles published between 1991 and 2015 in the top-5 economics journals (AER, ECMA, JPE, QJE, and RESTUD). To measure the academic influence of these articles, we have also retrieved yearly citations for each of them. We use this database to document many different types of rankings. We shall comment the results only briefly, and let instead readers appreciate and go through our different lists by themselves.

This paper contributes to a recent literature wherein academic articles are ranked according to the number of citations they received. Van Noorden, Maher, Nuzzo, et al. (2014), for instance, list the 100 most highly cited papers of all time. This list covers all fields of research and is produced by consulting Thomson Reuter's Web of Science data base. There are also studies that rank academic output by subfields of research. Ryan and Woodall (2005), for example, identify the 25 most-cited statistical papers. Kim, Morse, and Zingales (2006) produce a list of economics articles that have received more than 500 citations. These two papers also retrieved the citation counts from the Web of Science database. A common feature of the studies in this literature is that they only rank articles on the basis of *cumulated citations* gathered between the year of publication and some instant (typically the date at which citations are collected). The disadvantage of such rankings is that old articles (with a long time span to gather citations) are favored relatively to recent ones (short time to collect citations). To account for the effects of age we therefore provide lists by sub-periods (in addition to our basic list based on cumulated citations).<sup>1</sup> To establish these lists by sub-periods we exploit an unusual aspect of our data set, namely that citations are observed for each article on a yearly basis. We also compare articles on the basis of normalized number of citations (defined as the number of cumulated citations of an article divided by the average number of cumulated citations received by all other articles published in the same year). It turns out to be important to account for the effects of age: our lists that control for differences in publication years contain many recent articles that do not appear in the basic list because of unfair competition with articles from older cohorts.

All our rankings contain direct web links to the articles (clicking on them gives access to the pdf files),<sup>2</sup> allowing for easy and direct access to a highly selective set of prominent economics papers. As such, this paper can be useful for researchers wishing to read relatively new articles that have the potential of becoming or already are classics in the literature. Our paper may also be helpful in guiding starting PhD students on what they should read to get a good picture of what is important in their chosen domain of research.

## 2 Methodology and data

Our data set is constructed by combining two sources. First, we used EconLit<sup>3</sup> to collect bibliographic information about articles published in the top-5 economics journals between 1991 and 2015. We kept all articles published in this period except the ones that appeared in AER Papers and Proceedings, the comments on previously published papers (and replies to comments),<sup>4</sup> corrections on articles, editorial statements, and all sorts of other announcements. Second, we gathered citation statistics on all these articles using the Web of Science database (hereafter *WoS*). For each top-5 article we thus observe the yearly number of citations (between the publication year and the end of 2015), in any of the academic journals referenced in the *WoS*.

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<sup>1</sup>For example, we rank the articles published in the sub-period 1996-2000 on the basis of cumulated citations received within a time interval that is the same for all articles (15 years in this example)

<sup>2</sup>Direct consultation of the articles requires, however, a subscription to JSTOR (otherwise the links only give access to the abstracts and titles of the papers).

<sup>3</sup>We used the AEA member access which appeared to be the most convenient way.

<sup>4</sup>Comments (and replies) can be interesting but they are different in nature from standard articles. They are also much shorter and generally less cited so including them would bias the results for the journals that tend to publish them (primarily AER).

Since all academic fields are covered in the *WoS*, our measure of citations refers to citations not just in economics journals but in journals of any field. We then merged the information obtained through EconLit and *WoS* by matching on the author names and titles of the articles.<sup>5</sup> Our final database contains 6,816 articles.<sup>6</sup>

Our goal is to provide lists of articles with the largest number of citations in *WoS*. This is also the objective in the paper by [Kim, Morse, and Zingales \(2006\)](#) who look at the 146 articles (published in 41 journals) that have received more than 500 citations in *WoS* between the publication year and June 2006. One difference with their work is that we have all articles but in a narrower set of journals (in their list of 146 articles about 2/3 are from the top-5). More crucially, we do not only report a list on the basis of the cumulated number of citations received between year of publication and the end of the observation period, but also rank articles by sub-periods and on the basis of normalized citations. These additional lists account for the age effects of articles (the fact that older articles are advantaged relatively to recent ones). To produce them we exploit the fact that we observe yearly citation counts (and not just the cumulated counts as in Kim et al.). Finally we give rankings by fields of economic research as defined by the JEL codes.<sup>7</sup>

Table 1 reports the number of published articles in each of the five journals, separately for the whole observation period and for 5 sub-periods of 5 years each. Publications in the AER and ECMA are decomposed into regular (r) and short (s) publications.<sup>8</sup> About 33% of our total of 6,816 articles have been published in AER, 21% in ECMA, 15% in JPE, 15% in QJE, and 16% in RESTUD. The total production is relatively evenly distributed across the five sub-periods: 1,408 in the period 1991-1995, 1,196 in 1996-2000, 1,413 in 2001-2005, 1,337 in 2006-2010, and 1,462 in 2011-2015. These aggregate figures hide that AER has augmented its number of publications during the observation period (from 29% of all publications in 1991-1995 to 40% in 2011-2015), while JPE and QJE have decreased their publications (from 17 to 10% for JPE, and from 17 to 13% for QJE). The fraction of publication published in ECMA and RESTUD has remained relatively stable.

### 3 Citations cumulated at the end of 2015

In this section we give the list of most cited articles according to the cumulated number of citations between the publication year and the end of 2015. This is a crude but natural way to look at citations (at least as a first benchmark analysis). The obvious drawback with this analysis is that younger articles have had less time to accumulate citations than older ones. The distributions of the cumulated citations are summarized in Table 2 for each journal.

Several quick remarks can be made. First, the articles in our sample have received many citations: about 84 on average and a median equal to 36. At the very top, the 69 articles in the last percentile have each at least 734 citations. Second, the average and all percentiles of QJE articles are higher than those of articles published in the four other journals. Third, RESTUD published the article with the highest number of citations. Fourth, AER (s) and ECMA (s) are comparable to RESTUD. In fact, articles in AER (s) have even more citations (on average) than articles in RESTUD and the difference is significantly different from zero.

<sup>5</sup>For about 95% of the articles the matching was immediate, for the remaining 5% we had to check manually because of small spelling mistakes.

<sup>6</sup>Some articles published in 2015 are missing (basically the last issue of all journals) because the EconLit database was not yet completed by the Spring of 2016. So about 36 articles are missing. For our purpose here it is not an issue as these last articles of 2015 could not possibly have many citations.

<sup>7</sup>A related literature studies the determinants of citations of economics articles in top-5 journals. [Card and DellaVigna \(2013\)](#), [Hamermesh \(2013\)](#) and [Anauati, Galiani, and Gálvez \(2016\)](#) are based on slightly longer observation periods compared to our's. [Card and DellaVigna](#) and [Anauati, Galiani, and Gálvez](#) study all articles that appeared during 1970-2012 and 1970-2000, respectively. The analysis of [Hamermesh](#) covers the period 1963-2011, but his sample only contains six publication years (one year per decade). These articles do not, however, contain lists of the most cited articles.

<sup>8</sup>Short publications refer to the 'Shorter papers' in AER and the 'Notes and comments' in ECMA.

Table 1: Number of articles per journal

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	1,555 (100) (22.8)	281 (18.1) (20.0)	239 (15.4) (20.0)	277 (17.8) (19.6)	320 (20.6) (23.9)	438 (28.2) (30.0)
aer (s)	689 (100) (10.1)	133 (19.3) (9.4)	95 (13.8) (7.9)	166 (24.1) (11.7)	144 (20.9) (10.8)	151 (21.9) (10.3)
aer (all)	2,244 (100) (32.9)	414 (18.4) (29.4)	334 (14.9) (27.9)	443 (19.7) (31.4)	464 (20.7) (34.7)	589 (26.2) (40.3)
ecma (r)	1,078 (100) (15.8)	236 (21.9) (16.8)	191 (17.7) (16.0)	230 (21.3) (16.3)	193 (17.9) (14.4)	228 (21.2) (15.6)
ecma (s)	351 (100) (5.1)	56 (16.0) (4.0)	55 (15.7) (4.6)	101 (28.8) (7.1)	74 (21.1) (5.5)	65 (18.5) (4.4)
ecma (all)	1,429 (100) (21.0)	292 (20.4) (20.7)	246 (17.2) (20.6)	331 (23.2) (23.4)	267 (18.7) (20.0)	293 (20.5) (20.0)
jpe	1,021 (100) (15.0)	245 (24.0) (17.4)	244 (23.9) (20.4)	231 (22.6) (16.3)	158 (15.5) (11.8)	143 (14.0) (9.8)
qje	1,053 (100) (15.4)	242 (23.0) (17.2)	202 (19.2) (16.9)	202 (19.2) (14.3)	211 (20.0) (15.8)	196 (18.6) (13.4)
restud	1,069 (100) (15.7)	215 (20.1) (15.3)	170 (15.9) (14.2)	206 (19.3) (14.6)	237 (22.2) (17.7)	241 (22.5) (16.5)
All	6,816 (100) (100)	1408 (20.7) (100)	1196 (17.5) (100)	1413 (20.7) (100)	1337 (19.6) (100)	1462 (21.4) (100)

Table 2: Cumulated citations at the end of 2015

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	1,555	84.47	141.14	0	1	3	14	40	99	210	297	702	1,940
aer (s)	689	59.94	107.16	0	2	4	12	29	65	137	201	471	1,310
aer (all)	2,244	76.94	132.11	0	1	3	13	36	86	185	283	646	1,940
ecma (r)	1,078	89.07	180.26	0	1	4	14	38	91	200	312	886	2,252
ecma (s)	351	38.60	70.35	0	1	2	8	20	42	83	141	392	841
ecma (all)	1,429	76.67	161.84	0	1	3	12	33	78	167	273	734	2,252
jpe	1,021	94.15	180.45	0	2	6	18	45	108	215	316	728	3,362
qje	1,053	131.78	222.55	0	2	6	22	66	156	296	453	1,167	2,349
restud	1,069	53.80	157.81	0	1	3	8	22	55	112	174	445	4,285
All	6,816	84.30	167.91	0	1	4	13	37	92	197	302	734	4,285

We list the top 1% of the most cited articles in Table 3. For each article, one can access its JSTOR page by clicking on the title (in the pdf version of this report). The first column gives the rank of the article, the second one the total number of citations received between the publication year and the end of 2015, and the third column the title of the paper.<sup>9</sup> The fourth column lists the name(s) of the author(s) (when there is only one or two coauthors, otherwise only the name of the first author is given), and the column indicates the journal and the publication year. The sixth column gives all the JEL codes of the article (aggregated at the one digit level), and the seventh column indicates the type of the article. Using the JEL codes, keywords, and in particular the abstracts we have (non-manually) classified articles into three types: Data, experiment, and theory.<sup>10</sup> Finally, the eighth column gives the percentage of authors with a position in the

<sup>9</sup>For space limitations, only the first 50 characters are shown, or less if the title contains an interrogation mark or a colon.

<sup>10</sup>Hamermesh (2013) implements a finer typology with five types: theory, theory with simulation, empirical using borrowed data, empirical using self generated data, and experiment. He only had to classify 748 articles whereas our database contains

USA (1 if all authors work in the USA, 0.5 if half of the authors are affiliated with a U.S. institution, etc.).

Table 3: Articles in the top 1% for  $T = 1991 - 2015$

Rank	WoS	Title	Authors	Journal	JEL	Type	USA
1	4285	Some Tests of Specification for Panel Data	Arellano ; Bond	restud-91	C2-J2	D	0
2	3362	Law and Finance	La Porta et al.	jpe-98	K2	D	1
3	2349	Economic Growth in a Cross Section of Countries	Barro	qje-91	O4-O5	D	1
4	2274	A Theory of Fairness, Competition, and Cooperation	Fehr ; Schmidt	qje-99	D6-C7	T	0
5	2252	Estimation and Hypothesis Testing of Cointegration	Johansen	ecma-91	C3	D	0
6	2176	Increasing Returns and Economic Geography	Krugman	jpe-91	R1-R3	T	1
7	2075	A Contribution to the Empirics of Economic Growth	Mankiw et al.	qje-92	O4	D	1
8	1940	The Colonial Origins of Comparative Development	Acemoglu et al.	aer-01	O1-I1	D	1
9	1926	Conditional Heteroskedasticity in Asset Returns	Nelson	ecma-91	C5-G1	D	1
10	1917	Geographic Localization of Knowledge Spillovers as	Jaffe et al.	qje-93	O3	D	0.67
11	1850	Instrumental Variables Regression with Weak Instru	Staiger ; Stock	ecma-97	C3	D	1
12	1774	The Impact of Trade on Intra-industry Reallocation	Melitz	ecma-03	F1-F2	T	1
13	1617	Why Do Some Countries Produce So Much More Output	Hall ; Jones	qje-99	O4-E2	D	1
14	1534	A Sensitivity Analysis of Cross-Country Growth Reg	Levine ; Renelt	aer-92	O4	D	1
15	1516	Corruption and Growth	Mauro	qje-95	D7	D	1
16	1512	A Model of Growth through Creative Destruction	Aghion ; Howitt	ecma-92	O4-O3	T	0
17	1489	How Much Should We Trust Differences-in-Difference	Bertrand et al.	qje-04	C2-J3	D	1
18	1430	Efficient Tests for an Autoregressive Unit Root	Elliott et al.	ecma-96	C2-C5	D	1
19	1406	Loss Aversion in Riskless Choice	Tversky ; Kahneman	qje-91	D1	E	1
20	1374	A Theory of Fads, Fashion, Custom, and Cultural Ch	Bikhchandani et al.	jpe-92	D7-D8	T	1
21	1361	Incorporating Fairness into Game Theory and Econom	Rabin	aer-93	C7-D6	T	1
22	1340	The Penn World Table (Mark 5)	Summers ; Heston	qje-91	O5-E1	D	1
23	1333	Convergence	Barro ; Sala-i-Martin	jpe-92	O4-N1	D	1
24	1328	Does Social Capital Have an Economic Payoff	Knack ; Keefer	qje-97	O4-P1	D	1
25	1326	ERC	Bolton ; Ockenfels	aer-00	D6-C7	T	0.50
26	1310	R&D spillovers and the geography of innovation an	Audretsch ; Feldman	aer(s)-96	O3-R1	D	0.50
27	1263	Heteroskedasticity and Autocorrelation Consistent	Andrews	ecma-91	C2	D	1
28	1221	Growth in Cities	Glaeser et al.	jpe-92	R1-O4	D	0.25
29	1214	Financial Dependence and Growth	Rajan ; Zingales	aer-98	E4-G2	D	1
30	1167	Corporate Governance and Equity Prices	Gompers et al.	qje-03	G1-G3	D	1
31	1163	A Simple Model of Herd Behavior	Banerjee	qje-92	D8-D6	T	1
32	1142	Golden Eggs and Hyperbolic Discounting	Laibson	qje-97	D9-G1	D	1
33	1138	Identification of Endogenous Social Effects	Manski	restud-93	C2	D	1
34	1137	Estimating and Testing Linear Models with Multiple	Bai ; Perron	ecma-98	C2	D	0.50
35	1101	Africa's Growth Tragedy	Easterly ; Levine	qje-97	O5-J1	D	1
36	1090	Tests for Parameter Instability and Structural Cha	Andrews	ecma-93	C2	D	1
37	1084	Changes in Relative Wages, 1963-1987	Katz ; Murphy	qje-92	J3	D	1
38	1081	Protection for Sale	Grossman ; Helpman	aer-94	F1-D7	T	0.50
39	1054	Gravity with Gravitas	Anderson ; van Wincoop	aer-03	F1	D	1
40	1047	Nominal Rigidities and the Dynamic Effects of a Sh	Christiano et al.	jpe-05	E1-E3	T	1
41	1032	Cooperation and Punishment in Public Goods Experim	Fehr ; Gächter	aer(s)-00	H4	E	0
42	1029	Finance and Growth	King ; Levine	qje-93	O1	D	1
43	1023	Economic Growth and the Environment	Grossman ; Krueger	qje-95	O4-Q2	D	1
44	1016	Monetary Policy Rules and Macroeconomic Stability	Clarida et al.	jpe-00	E5	D	0.83
45	978	Credit Cycles	Kiyotaki ; Moore	jpe-97	E5-E3-E2	T	0.50
46	968	Matching as an Econometric Evaluation Estimator	Heckman et al.	restud-97	J2-C5	D	1
47	964	Risk Aversion and Incentive Effects	Holt ; Laury	aer(s)-02	D8-D1	E	1
48	948	Does Trade Cause Growth	Frankel ; Romer	aer-99	F4-O4	D	1
49	915	Automobile Prices in Market Equilibrium	Berry et al.	ecma-95	L1-L6	D	1
50	912	Corruption	Shleifer ; Vishny	qje-93	D7-K4	T	1
51	909	Productivity Growth, Technical Progress, and Effic	Fare et al.	aer-94	O4	D	0.25
52	886	A Simple Estimator of Cointegrating Vectors in Hig	Stock ; Watson	ecma-93	C3-E4	D	1
53	875	Lag Length Selection and the Construction of Unit	Ng ; Perron	ecma-01	C2	D	1
54	872	By Force of Habit	Campbell ; Cochrane	jpe-99	G1	T	1

to be continued next page

6,816 articles. Another manual classification has been done by Anauati, Galiani, and Gálvez (2016). They classified the articles into 4 research fields (applied, applied theory, econometric methods, and theory). As our classification is non manual, it is not perfect.

Rank	WoS	Title	Authors	Journal	JEL	Type	USA
55	841	Identification and Estimation of Local Average Tre	Imbens ; Angrist	ecma(s)-94	C5	D	0.50
56	820	Income Distribution and Macroeconomics	Galor ; Zeira	restud-93	E2-E1	T	0.50
57	817	The Effects of Human Resource Management Practices	Ichniowski et al.	aer-97	J2-L6	D	1
57	817	Distributive Politics and Economic Growth	Alesina ; Rodrik	qje-94	O4-D7	D	1
59	807	The Twin Crises	Kaminsky ; Reinhart	aer-99	F3-F3	D	1
60	779	Learning, Mutation, and Long Run Equilibria in Gam	Kandori et al.	ecma-93	C7-D8	T	0.67
61	774	Long-Run Policy Analysis and Long-Run Growth	Rebelo	jpe-91	O4-E6	T	0.67
62	755	Understanding Social Preferences with Simple Tests	Charness ; Rabin	qje-02	D7	E	1
63	752	Economics and Identity	Akerlof ; Kranton	qje-00	D1-J1	T	1
64	746	Stock Markets, Banks, and Economic Growth	Levine ; Zervos	aer-98	E4-G1	D	0.50
65	743	Reversal of Fortune	Acemoglu et al.	qje-02	D3-O1	D	1
65	743	Is Inequality Harmful for Growth	Persson ; Tabellini	aer-94	O4-D3	D	0
67	738	Do Domestic Firms Benefit from Direct Foreign Inve	Aitken ; Harrison	aer-99	O1-F2	D	1
68	734	Transform Analysis and Asset Pricing for Affine Ju	Duffie et al.	ecma-00	G1	T	1
68	734	Wage Inequality and the Rise in Returns to Skill	Juhn et al.	jpe-93	J3	D	1
70	733	Export versus FDI with Heterogeneous Firms	Helpman et al.	aer(s)-04	F1-F2	D	0.83

The top-1% list is made up of 70 articles. At the very top the distribution of citations is very skewed as these articles count for 15.6% of all citations in our sample. On average, an article in the list has 1,280 citations. The most cited article is (by far) “Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations” by Manuel Arellano and Stephen Bond with 4,285 citations (923 more citations than the second one, or 27% more). It was published in RESTUD in 1991 and at that time both authors were working in the U.K.: Arellano at the LSE and Bond at Oxford university. In a sense, this article is atypical first because it is published in RESTUD (only 4 articles in the list are published by this journal), and second because both its authors were affiliated with institutions outside the U.S. (as the last column of the table shows most articles are written at least in part by U.S. based economists).

Among the 70 articles, 18 are published in the AER (including 4 short articles), 15 in ECMA (including 1 short article), 10 in JPE, 23 in QJE, and 4 in RESTUD. This clearly illustrates the dominant position of QJE discussed earlier. Given the citation measure chosen here, it does not come as a surprise that many articles in the list are rather old. Half of them have been published in the period 91-95, 24 in 90-00, and 11 in 01-05. The most recent paper is “Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy” by Lawrence J. Christiano, Martin Eichenbaum and Charles L. Evans, published in JPE in 2005. It is ranked 40th with already 1,047 citations cumulated over 10 years.

Clearly the field growth/trade is over-represented in this list as the word “growth” appears in 16 of the 70 titles (23%). There are also relatively many articles that have at least one “C” among their JEL codes (13, or 18.6%). Relatively many articles are thus based on mathematical or quantitative methods. The other articles are split evenly among the other fields (as defined by the JEL codes). Looking at the column describing the type of article, it is also apparent that a majority of the articles in the list are data-oriented: either because their contribution is in the field of econometrics (with or without empirical application), or because their goal is primarily empirical (analysis of a dataset). Theoretical papers are relatively rare, only 18 fall into this category (26%). This contrasts with the full sample where 47% of the articles are classified theoretical. Admittedly, not all the articles that fall in this category are theoretical in the usual sense. For example, the paper “Corruption” by Shleifer and Vishny, published in QJE in 1993, contains not more than a single equation. Finally, 81.7% of the authors of the top-1% articles work in the USA, compared to 69.5% in the full sample.



## 4 Lists for five-year time periods

A drawback of the analysis in the previous section is that by measuring influence via the cumulated number of citations, recent articles are disadvantaged compared to old ones. Comparing two articles, one published in say 1992 and the other in 2002 is unfair in the sense that the former has had 10 more years than the latter to accumulate citations. In this section we propose a more equitable and balanced analysis by comparing articles published in subperiods. We start by considering all articles published in the period 1991-1995, and take as our measure of influence of an article its cumulated number of citations obtained in the interval [year of publication, year of publication + 20]. We then move on to the period 1996-2000, and rank articles on the basis of their total number of citations cumulated in the interval [year of publication, year of publication + 15]. We proceed like this until we reach the most recent period, 2011-2015, for which we establish a ranking based on cumulated citations in the interval [year of publication, year of publication + 2]. As we analyze more recent periods, the time interval over which citations are counted gets shorter, but the important thing here is that all articles are treated equally.

### 4.1 1991-1995

Between 1991 and 1995 a total of 1,424 articles have been published. Table 4 lists the 50 most cited articles for this period of time. The table is organized as Table 3 except that the second column now gives the cumulated number of citations gathered by each article between its publication year and 20 years thereafter (denoted  $C_i(20)$ ). There is overlap between this listing and the one reported in the previous section. For instance, the article by Arellano and Bond remains at the top. Furthermore, all the first 25 articles of Table 4 appear in Table 3 as well. However, the second half of Table 4 contains many articles that are not included in Table 3. Many of these articles are published in either 1994 or 1995 (for example, the paper “Globalization and the Inequality of Nations” by Krugman and Venables, published in QJE in 1995), illustrating the point made at the beginning of this section, namely that rankings based on cumulated citations as reported in the previous section may disadvantage relatively recent papers.

Table 4: Top 50 articles for  $T = 1991 - 1995$

Rank	$C_i(20)$	Title	Authors	Journal	JEL	Type	USA
1	2225	Some Tests of Specification for Panel Data	Arellano ; Bond	restud-91	C2-J2	D	0
2	1770	Economic Growth in a Cross Section of Countries	Barro	qje-91	O4-O5	D	1
3	1711	Estimation and Hypothesis Testing of Cointegration	Johansen	ecma-91	C3	D	0
4	1620	A Contribution to the Empirics of Economic Growth	Mankiw et al.	qje-92	O4	D	1
5	1608	Geographic Localization of Knowledge Spillovers as	Jaffe et al.	qje-93	O3	D	0.67
6	1516	Corruption and Growth	Mauro	qje-95	D7	D	1
7	1506	Increasing Returns and Economic Geography	Krugman	jpe-91	R1-R3	T	1
8	1319	A Sensitivity Analysis of Cross-Country Growth Reg	Levine ; Renelt	aer-92	O4	D	1
9	1309	Conditional Heteroskedasticity in Asset Returns	Nelson	ecma-91	C5-G1	D	1
10	1263	The Penn World Table (Mark 5)	Summers ; Heston	qje-91	O5-E1	D	1
11	1157	Incorporating Fairness into Game Theory and Econom	Rabin	aer-93	C7-D6	T	1
12	1145	A Model of Growth through Creative Destruction	Aghion ; Howitt	ecma-92	O4-O3	T	0
13	1082	Convergence	Barro ; Sala-i-Martin	jpe-92	O4-N1	D	1
14	1023	Economic Growth and the Environment	Grossman ; Krueger	qje-95	O4-Q2	D	1
15	1005	A Theory of Fads, Fashion, Custom, and Cultural Ch	Bikhchandani et al.	jpe-92	D7-D8	T	1
16	1004	Protection for Sale	Grossman ; Helpman	aer-94	F1-D7	T	0.50
17	955	Heteroskedasticity and Autocorrelation Consistent	Andrews	ecma-91	C2	D	1
18	936	Growth in Cities	Glaeser et al.	jpe-92	R1-O4	D	0.25
19	931	Tests for Parameter Instability and Structural Cha	Andrews	ecma-93	C2	D	1
20	915	Automobile Prices in Market Equilibrium	Berry et al.	ecma-95	L1-L6	D	1
20	915	Changes in Relative Wages, 1963-1987	Katz ; Murphy	qje-92	J3	D	1
22	906	Loss Aversion in Riskless Choice	Tversky ; Kahneman	qje-91	D1	E	1
23	862	Finance and Growth	King ; Levine	qje-93	O1	D	1
24	841	Identification of Endogenous Social Effects	Manski	restud-93	C2	D	1

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Rank	$C_i(20)$	Title	Authors	Journal	JEL	Type	USA
25	840	A Simple Model of Herd Behavior	Banerjee	qje-92	D8-D6	T	1
26	822	Productivity Growth, Technical Progress, and Effic	Fare et al.	aer-94	O4	D	0.25
27	766	Distributive Politics and Economic Growth	Alesina ; Rodrik	qje-94	O4-D7	D	1
28	748	Identification and Estimation of Local Average Tre	Imbens ; Angrist	ecma(s)-94	C5	D	0.50
29	744	A Simple Estimator of Cointegrating Vectors in Hig	Stock ; Watson	ecma-93	C3-E4	D	1
30	740	Corruption	Shleifer ; Vishny	qje-93	D7-K4	T	1
31	728	R&D-based models of economic growth	Jones	jpe-95	O4-O3	T	1
32	720	Income Distribution and Macroeconomics	Galor ; Zeira	restud-93	E2-E1	T	0.50
33	706	Is Inequality Harmful for Growth	Persson ; Tabellini	aer-94	O4-D3	D	0
34	699	Learning, Mutation, and Long Run Equilibria in Gam	Kandori et al.	ecma-93	C7-D8	T	0.67
35	671	Wage Inequality and the Rise in Returns to Skill	Juhn et al.	jpe-93	J3	D	1
36	657	Growth Empirics	Islam	qje-95	O4	D	1
37	647	Long-Run Policy Analysis and Long-Run Growth	Rebelo	jpe-91	O4-E6	T	0.67
38	629	Job Creation and Job Destruction in the Theory of	Mortensen ; Pissarides	restud-94	J4-E2	T	0.50
39	608	Bond Pricing and the Term Structure of Interest Ra	Heath et al.	ecma-92	G1-E4	T	1
40	598	Automatic Lag Selection in Covariance Matrix Estim	Newey ; West	restud-94	C3	D	1
41	592	Optimal Tests When a Nuisance Parameter Is Present	Andrews ; Ploberger	ecma-94	C1	D	0.50
42	588	Changes in the Demand for Skilled Labor within U.S	Berman et al.	qje-94	J2-L6	D	1
43	575	Globalization and the Inequality of Nations	Krugman ; Venables	qje-95	F1	T	0.50
44	571	The Tyranny of Numbers	Young	qje-95	O1	D	1
45	568	Tobin's q, Corporate Diversification, and Firm Per	Lang ; Stulz	jpe-94	L2-G3	T	0.50
46	556	The Federal Funds Rate and the Channels of Monetar	Bernanke ; Blinder	aer-92	E5	T	1
47	554	Economic Performance through Time	North	aer-94	N0	T	1
48	526	Markov-Perfect Industry Dynamics	Ericson ; Pakes	restud-95	L1	D	1
49	518	Politicians and Firms	Shleifer ; Vishny	qje-94	L3-L3	T	1
50	514	Myopic Loss Aversion and the Equity Premium Puzzle	Benartzi ; Thaler	qje-95	G1	D	1

## 4.2 1996-2000

Between 1996 and 2000 a total of 1,213 articles have been published in the top-5 journals. Table 5 gives the ranking of the 50 most cited articles for this time period. Note that the second column is now labelled  $C_i(15)$ , to indicate that the lifespan over which citations are counted for each article is 15 years here. This list is headed by “Law and Finance,” an article published in JPE in 1998 and written by La porta et al. Again, many articles here appear also in the top-1% list reported in Table 3. There are, however, a lot of newcomers as well. For instance, the article “Measuring Trust” by Glaeser et al., published in QJE in 2000, is ranked 25th but is not among the papers listed in Table 3.

Table 5: Top 50 articles for  $T = 1996 - 2000$

Rank	$C_i(15)$	Title	Authors	Journal	JEL	Type	USA
1	2768	Law and Finance	La Porta et al.	jpe-98	K2	D	1
2	1994	A Theory of Fairness, Competition, and Cooperation	Fehr ; Schmidt	qje-99	D6-C7	T	0
3	1495	Why Do Some Countries Produce So Much More Output	Hall ; Jones	qje-99	O4-E2	D	1
4	1326	ERC	Bolton ; Ockenfels	aer-00	D6-C7	T	0.50
5	1247	Instrumental Variables Regression with Weak Instru	Staiger ; Stock	ecma-97	C3	D	1
6	1032	Cooperation and Punishment in Public Goods Experim	Fehr ; Gächter	aer(s)-00	H4	E	0
7	1016	Monetary Policy Rules and Macroeconomic Stability	Clarida et al.	qje-00	E5	D	0.83
8	965	Financial Dependence and Growth	Rajan ; Zingales	aer-98	E4-G2	D	1
9	931	Does Social Capital Have an Economic Payoff	Knack ; Keefer	qje-97	O4-P1	D	1
10	882	R&D spillovers and the geography of innovation an	Audretsch ; Feldman	aer(s)-96	O3-R1	D	0.50
11	881	Estimating and Testing Linear Models with Multiple	Bai ; Perron	ecma-98	C2	D	0.50
12	877	Does Trade Cause Growth	Frankel ; Romer	aer-99	F4-O4	D	1
13	846	Efficient Tests for an Autoregressive Unit Root	Elliott et al.	ecma-96	C2-C5	D	1
14	825	Africa's Growth Tragedy	Easterly ; Levine	qje-97	O5-J1	D	1

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Rank	$C_i(15)$	Title	Authors	Journal	JEL	Type	USA
15	792	By Force of Habit	Campbell ; Cochrane	jpe-99	G1	T	1
16	790	Golden Eggs and Hyperbolic Discounting	Laibson	qje-97	D9-G1	D	1
17	752	Economics and Identity	Akerlof ; Kranton	qje-00	D1-J1	T	1
18	742	The Twin Crises	Kaminsky ; Reinhart	aer-99	F3-F3	D	1
19	734	Transform Analysis and Asset Pricing for Affine Ju	Duffie et al.	ecma-00	G1	T	1
20	719	Aid, Policies, and Growth	Burnside ; Dollar	aer-00	O1-O2	D	1
21	682	Do Domestic Firms Benefit from Direct Foreign Inve	Aitken ; Harrison	aer-99	O1-F2	D	1
22	648	Matching as an Econometric Evaluation Estimator	Heckman et al.	restud-97	J2-C5	D	1
23	646	The Effects of Human Resource Management Practices	Ichniowski et al.	aer-97	J2-L6	D	1
24	644	Intellectual Human Capital and the Birth of U.S. B	Zucker et al.	aer(s)-98	L6-O3	D	1
25	621	Stock Markets, Banks, and Economic Growth	Levine ; Zervos	aer-98	E4-G1	D	0.50
25	621	Measuring Trust	Glaeser et al.	qje-00	Z1	E	0.25
27	616	Credit Cycles	Kiyotaki ; Moore	jpe-97	E5-E3-E2	T	0.50
28	550	Why Do More Open Economies Have Bigger Governments	Rodrik	jpe-98	H1-F4	D	1
29	522	Doing It Now or Later	O'Donoghue ; Rabin	aer-99	D9-D1	T	1
30	515	Predicting How People Play Games	Erev ; Roth	aer-98	C7-C9	E	0.75
31	513	Public Goods and Ethnic Divisions	Alesina et al.	qje-99	R5-J1	D	1
32	509	Output Fluctuations in the United States	McConnell ; Perez-Quiros	aer(s)-00	E3	T	0.50
33	507	Matching as an Econometric Evaluation Estimator	Heckman et al.	restud-98	C5-C2	D	1
34	506	Formal and Real Authority in Organizations	Aghion ; Tirole	jpe-97	D2	T	0
35	494	Financial Contagion	Allen ; Gale	jpe-00	G2-E4	T	1
36	493	Population, Technology, and Growth	Galar ; Weil	aer-00	O4-O1	T	0.75
37	480	Are Recessions Good for Your Health	Ruhm	qje-00	I1-E3	D	1
38	477	Characterizing Selection Bias Using Experimental D	Heckman et al.	ecma-98	C5-C2-J2	E	0.25
39	448	Do Investment-Cash Flow Sensitivities Provide Usef	Kaplan ; Zingales	qje-97	G3	D	1
40	446	Productivity and the Density of Economic Activity	Ciccone ; Hall	aer-96	R2-R1	D	0.75
40	446	Entry, Exit, Growth, and Innovation over the Produ	Klepper	aer-96	L1	T	1
42	440	Computing Inequality	Autor et al.	qje-98	O3-J3	D	1
43	433	Experience-Weighted Attraction Learning in Normal	Camerer ; Ho	ecma-99	C7-D8	E	1
44	432	Is Learning by Exporting Important	Clerides et al.	qje-98	O1-F2-O1	D	0.67
45	426	Geographic Concentration in U.S. Manufacturing Ind	Ellison ; Glaeser	jpe-97	L1-R1	D	1
46	421	Zipf's Law for Cities	Gabaix	qje-99	R1	D	1
47	420	Stochastic Volatility	Kim et al.	restud-98	C2-C5	D	0.33
48	419	Labor Market Institutions and the Distribution of	DiNardo et al.	ecma-96	J3	D	0.33
49	417	Participation in Heterogeneous Communities	Alesina ; La Ferrara	qje-00	D7	D	0.50
50	415	Performance Pay and Productivity	Lazear	aer-00	J3-J2	D	1

### 4.3 2001-2005

Between 2001 and 2005 a total of 1,420 articles have been published, and Table 6 gives the ranking of the 50 most cited ones for this time period. At the top of this list is “How Much Should We Trust Differences-in-Differences Estimates?”, written by Bertrand et al. and published in QJE in 2004. This article has accumulated an impressive number of citations over a relatively short time span (10 years).

Table 6: Top 50 articles for  $T = 2001 - 2005$

Rank	$C_i(10)$	Title	Authors	Journal	JEL	Type	USA
1	1253	How Much Should We Trust Differences-in-Difference	Bertrand et al.	qje-04	C2-J3	D	1
2	1170	The Impact of Trade on Intra-industry Reallocation	Melitz	ecma-03	F1-F2	T	1
3	1150	The Colonial Origins of Comparative Development	Acemoglu et al.	aer-01	O1-I1	D	1
4	1047	Nominal Rigidities and the Dynamic Effects of a Sh	Christiano et al.	jpe-05	E1-E3	T	1
5	853	Corporate Governance and Equity Prices	Gompers et al.	qje-03	G1-G3	D	1
6	753	Gravity with Gravitas	Anderson ; van Wincoop	aer-03	F1	D	1
7	651	Export versus FDI with Heterogeneous Firms	Helpman et al.	aer(s)-04	F1-F2	D	0.83
8	617	Teachers, Schools, and Academic Achievement	Rivkin et al.	ecma-05	I2	D	0.67

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Rank	$C_i(10)$	Title	Authors	Journal	JEL	Type	USA
9	524	Are Emily and Greg More Employable than Lakisha an	Bertrand ; Mullainathan	aer-04	J1-J7	D	1
10	508	Unbundling Institutions	Acemoglu ; Johnson	jpe-05	B5-P1	T	1
11	506	Reversal of Fortune	Acemoglu et al.	qje-02	D3-O1	D	1
12	496	Risk Aversion and Incentive Effects	Holt ; Laury	aer(s)-02	D8-D1	E	1
13	490	Competition and Innovation	Aghion et al.	qje-05	L1-O3	D	0.40
14	480	Lag Length Selection and the Construction of Unit	Ng ; Perron	ecma-01	C2	D	1
15	473	The Regulation of Entry	Djankov et al.	qje-02	L1-M1	D	0.25
16	465	Understanding Social Preferences with Simple Tests	Charness ; Rabin	qje-02	D7	E	1
17	448	Modeling and Forecasting Realized Volatility	Andersen et al.	ecma-03	C5	D	0.25
18	446	Estimating Production Functions Using Inputs to Co	Levinsohn ; Petrin	restud-03	C5-L6-O1	D	1
19	437	Information Technology, Workplace Organization, an	Bresnahan et al.	qje-02	J2-O3	D	1
20	436	Does Foreign Direct Investment Increase the Produc	Javorcik	aer-04	F2-O3	D	1
21	427	Liquidity Risk and Expected Stock Returns	Pastor ; Stambaugh	jpe-03	G1	D	1
22	421	The Cyclical Behavior of Equilibrium Unemployment	Shimer	aer-05	E2-J4	T	1
23	418	Plants and Productivity in International Trade	Bernard et al.	aer-03	D2-F2	D	0.25
24	417	Neighbors as Negatives	Luttmer	qje-05	D3-I3	D	1
25	396	The Regulation of Labor	Botero et al.	qje-04	D7-J5-K3	D	1
26	384	The Modern History of Exchange Rate Arrangements	Reinhart ; Rogoff	qje-04	F3-N2	D	1
27	378	Selection on Observed and Unobserved Variables	Altonji et al.	jpe-05	I2-Z1	D	1
27	378	Some Evidence on the Importance of Sticky Prices	Bils ; Klenow	jpe-04	E3-L1	D	1
29	372	Fear of Floating	Calvo ; Reinhart	qje-02	F3-F3-O1	T	0.75
30	364	The Skill Content of Recent Technological Change	Autor et al.	qje-03	J2-G3-J2	D	1
31	359	Economic Shocks and Civil Conflict	Miguel et al.	jpe-04	D7-O1	D	1
32	358	Income Inequality in the United States, 1913-1998	Piketty ; Saez	qje-03	D3-N3	D	0.50
33	355	Determining the Number of Factors in Approximate F	Bai ; Ng	ecma-02	C3-G1	D	1
34	342	Determinants of Long-Term Growth	Sala-i-Martin et al.	aer-04	C5-O4	D	0.17
35	341	Worms	Miguel ; Kremer	ecma-04	I1-O1	D	1
36	319	The Relationship between Education and Adult Morta	Lleras-Muney	restud-05	I1-N3-N4	D	1
37	318	Technology, Geography, and Trade	Eaton ; Kortum	ecma-02	F1-R1	D	1
38	303	The Labor Demand Curve Is Downward Sloping	Borjas	qje-03	J2-J2	D	1
38	303	A Panic Attack on Unit Roots and Cointegration	Bai ; Ng	ecma-04	C2-C3	D	1
40	300	Do We Really Know That the WTO Increases Trade	Rose	aer-04	F1	D	1
41	299	The Variety and Quality of a Nation's Exports	Hummels ; Klenow	aer-05	F1	D	1
42	293	Economic Status and Health in Childhood	Case et al.	aer-02	I1-D3	T	0
43	290	Deception	Gneezy	aer(s)-05	D6-Z1	T	1
44	289	Financial Contracting Theory Meets the Real World	Kaplan ; Stromberg	restud-03	G2-M1	D	1
45	284	Monetary Policy and Exchange Rate Volatility in a	Gali ; Monacelli	restud-05	E5-F4	T	0
46	282	Intrinsic and Extrinsic Motivation	Benabou ; Tirole	restud-03	D8-D1	T	0.75
47	280	Global Sourcing	Antras ; Helpman	jpe-04	F1-L2	T	0.75
48	279	A Smooth Model of Decision Making under Ambiguity	Klibanoff et al.	ecma-05	D8	T	0.33
49	278	Efficient Estimation of Average Treatment Effects	Hirano et al.	ecma-03	C2-C1	D	1
50	273	The Role of Social Capital in Financial Developmen	Guiso et al.	aer-04	D1-Z1	D	0.67

#### 4.4 2006-2010

For the period 2006-2010, a total of 1,347 articles are in our data base, and Table 7 gives the ranking of the 50 most cited articles for this time period. The article “Shocks and Frictions in US Business Cycles: A Bayesian DSGE Approach” by Smets and Wouters, and published in AER in 2007, is ranked first and has gathered 297 citations over a period of 5 years. None of the articles in this list appears in Table 3. Although these articles have accumulated an impressive number of citations in a short timespan, they are published very recently and cannot compete on an equal level with articles published in the early 1990s.

Table 7: Top 50 articles for  $T = 2006 - 2010$ 

Rank	$C_i(5)$	Title	Authors	Journal	JEL	Type	USA
1	297	Shocks and Frictions in US Business Cycles	Smetz ; Wouters	aer-07	D5-E3	D	0
2	257	Estimating Trade Flows	Helpman et al.	qje-08	F1	D	1
3	238	Not All Oil Price Shocks Are Alike	Kilian	aer(s)-09	E3-Q4	D	1
4	231	Beyond Markets and States	Ostrom	aer-10	D0-O1-Q2	T	1
5	229	Market Size, Trade, and Productivity	Melitz ; Ottaviano	restud-08	F1	T	0.50
6	226	Experimental Analysis of Neighborhood Effects	Kling et al.	ecma-07	I3-R2-R3	D	1
7	222	Misallocation and Manufacturing TFP in China and I	Hsieh ; Klenow	qje-09	L6-O4	D	1
8	191	Social Preferences, Beliefs, and the Dynamics of F	Fischbacher ; Gächter	aer(s)-10	D1-H4-Z1	E	0
9	183	Why Has CEO Pay Increased So Much	Gabaix ; Landier	qje-08	G3-M5	D	1
10	181	The Impact of Uncertainty Shocks	Bloom	ecma-09	C5-D9	D	0.50
11	175	Did Securitization Lead to Lax Screening	Keys et al.	qje-10	G2	D	0.50
12	171	Learning about a New Technology	Conley ; Udry	aer-10	D8-O3-Q1	D	1
13	170	Do Women Shy Away from Competition	Niederle ; Vesterlund	qje-07	D1-J1	E	0.50
14	165	The Macroeconomic Effects of Tax Changes	Romer ; Romer	aer-10	E3-H2-N1	D	1
15	162	The Consequences of Mortgage Credit Expansion	Mian ; Sufi	qje-09	D1-R3	D	1
16	158	Trading Tasks	Grossman ; Rossi-Hansberg	aer-08	F1-M1	T	1
16	158	Large Sample Properties of Matching Estimators for	Abadie ; Imbens	ecma(s)-06	C2	D	1
18	157	Estimating the Technology of Cognitive and Noncogn	Cunha et al.	ecma-10	C5-J1	D	0.83
19	154	Internet Advertising and the Generalized Second-Pr	Edelman et al.	aer-07	D4-M3	T	0.67
20	150	Income and Democracy	Acemoglu et al.	aer-08	D7-O4	D	0.88
21	149	Measuring and Explaining Management Practices acro	Bloom ; Van Reenen	qje-07	L2-M1	D	0.25
22	148	Distorted Gravity	Chaney	aer(s)-08	F1	T	1
23	145	Five Facts about Prices	Nakamura ; Steinsson	qje-08	E2-E3	D	1
24	144	Incentives and Prosocial Behavior	Benabou ; Tirole	aer-06	D1-D8-Z1	T	0.25
24	144	Teacher Quality in Educational Production	Rothstein	qje-10	H7-J4	D	1
26	139	Reallocation, Firm Turnover, and Efficiency	Foster et al.	aer-08	D2-L2	T	1
26	139	Trade, Quality Upgrading, and Wage Inequality in t	Verhoogen	qje-08	F1	D	1
26	139	Designing Realized Kernels to Measure the Ex Post	Barndorff-Nielsen et al.	ecma-08	C5-G1	D	0.25
26	139	Were There Regime Switches in U.S. Monetary Policy	Sims ; Zha	aer-06	E3-E5	D	1
30	138	Cultural Biases in Economic Exchange	Guiso et al.	qje-09	F1-Z1	D	0.67
30	138	Salience and Taxation	Chetty et al.	aer-09	C9-H2-H7	D	1
32	133	What Drives Media Slant	Gentzkow ; Shapiro	ecma-10	C5-L8	D	1
33	131	Doing Good or Doing Well	Ariely et al.	aer(s)-09	D6-Z1	T	0.67
33	131	Stature and Status	Case ; Paxson	jpe-08	J1-J7	D	1
35	128	Are Risk Aversion and Impatience Related to Cognit	Dohmen et al.	aer(s)-10	D1-D8	E	0.25
36	127	What Causes Industry Agglomeration	Ellison et al.	aer-10	L1-O3	D	1
37	126	Globalization and the Gains from Variety	Broda ; Weinstein	qje-06	F1	D	1
38	123	Politically Connected Firms	Faccio	aer(s)-06	D7-O1	T	1
39	120	Group Identity and Social Preferences	Chen ; Li	aer-09	C9-Z1	E	1
39	120	The Geographic Determinants of Housing Supply	Saiz	qje-10	Q2-R3	D	1
39	120	Peers at Work	Mas ; Moretti	aer-09	J2-M5	D	1
39	120	Eliciting Risk and Time Preferences	Andersen et al.	ecma-08	D1-D9	E	0.75
43	116	Inequality and Unemployment in a Global Economy	Helpman et al.	ecma-10	D2-J2	T	0.67
43	116	An Equilibrium Model of 'Global Imbalances' and Lo	Caballero et al.	aer-08	E4-F3	T	1
43	116	A Model of Reference-Dependent Preferences	Koszegi ; Rabin	qje-06	D1	T	1
46	114	The Cyclical Behavior of Equilibrium Unemployment	Hagedorn ; Manovskii	aer(s)-08	E2-J3	D	0.50
46	114	Inequality in Landownership, the Emergence of Huma	Galor et al.	restud-09	D0-I2	D	0.67
46	114	Social Image and the Fifty-Fifty Norm	Andreoni ; Bernheim	ecma-09	C7-D6	E	1
49	108	Can News about the Future Drive the Business Cycle	Jaimovich ; Rebelo	aer-09	E1-E3	T	1
50	103	Shrouded Attributes, Consumer Myopia, and Informat	Gabaix ; Laibson	qje-06	D1-L1	T	1

## 4.5 2011-2015

In the most recent period that we consider, 2011-2015, 1,465 articles have been published. Table 8 lists the papers on the basis of citations obtained up to two years after publications. Note that for articles published in 2014 or 2015 the lifetime span is thus a bit shorter than two years. The article “The Oregon Health Insurance Experiment” by Finkelstein et al., published in QJE in 2012 ranks first with 75 citations. All articles on this list have gathered a large number of citations in their early career, and many of them will surely be among the high flyers in the near future.

Table 8: Top 50 articles for  $T = 2011 - 2015$

Rank	$C_i(2)$	Title	Authors	Journal	JEL	Type	USA
1	75	The Oregon Health Insurance Experiment	Finkelstein et al.	qje-12	H7-I3	D	0.13
2	67	The "Out of Africa" Hypothesis, Human Genetic Dive	Ashraf ; Galor	aer-13	N1-N5	D	1
3	65	The Environment and Directed Technical Change	Acemoglu et al.	aer-12	O3-Q3	T	0.88
4	64	Identifying Government Spending Shocks	Ramey	qje-11	D8-H5	D	1
5	63	The Growth of Low-Skill Service Jobs and the Polar	Autor ; Dorn	aer-13	J2-R2	T	0.50
6	62	New Trade Models, Same Old Gains	Arkolakis et al.	aer-12	F1	D	1
7	61	Trade Liberalization, Exports, and Technology Upgr	Bustos	aer-11	F1-O1	D	0
8	59	Credit Booms Gone Bust	Schularick ; Taylor	aer(s)-12	E3-E5	D	0.50
9	57	Testing for Altruism and Social Pressure in Charit	DellaVigna et al.	qje-12	D6-L3	D	1
10	55	Does Management Matter	Bloom et al.	qje-13	D2-L1	D	0.90
11	53	When Is the Government Spending Multiplier Large	Christiano et al.	jpe-11	E2-G0-H5	T	1
12	52	Credit Constraints, Heterogeneous Firms, and Inter	Manova	restud-13	F1-G3	D	1
13	48	An Anatomy of International Trade	Eaton et al.	ecma-11	C5	D	0.67
14	47	On the Origins of Gender Roles	Alesina et al.	qje-13	D8-N3	T	0.83
14	47	Credit Spreads and Business Cycle Fluctuations	Gilchrist ; Zakrajsek	aer(s)-12	E3-G1-G3	D	1
16	46	The China Syndrome	Autor et al.	aer-13	E2	D	0.67
17	44	The Intergenerational Transmission of Risk and Tru	Dohmen et al.	restud-12	D8-Z1	D	0.25
18	42	From Financial Crash to Debt Crisis	Reinhart ; Rogoff	aer-11	E4-F4	D	1
18	42	A Macroeconomic Model with a Financial Sector	Brunnermeier ; Sannikov	aer-14	E1-E4	T	1
18	42	Collective Moral Hazard, Maturity Mismatch, and Sy	Farhi ; Tirole	aer-12	D8	T	0.50
21	41	Macroeconomic Effects of Financial Shocks	Jermann ; Quadrini	aer-12	E2-E4	T	1
21	41	Commodity Price Shocks and Civil Conflict	Dube ; Vargas	restud-13	D7	D	0.50
23	40	Debt, Deleveraging, and the Liquidity Trap	Eggertsson ; Krugman	qje-12	E1-E3	D	1
23	40	Cross-Country Differences in Productivity	Bartelsman et al.	aer-13	D2-O4	D	0.33
23	40	The Changing of the Boards	Ahern ; Dittmar	qje-12	G1-G3	D	1
23	40	Risk Shocks	Christiano et al.	aer-14	D8-E3	D	0.33
27	39	Understanding the Mechanisms through Which an Infl	Heckman et al.	aer-13	I2	E	0.83
27	39	Multiproduct Firms and Trade Liberalization	Bernard et al.	qje-11	F1-L1	D	1
29	38	Americans Do IT Better	Bloom et al.	aer-12	D2-F2	D	0.33
30	37	Pre-colonial Ethnic Institutions and Contemporary	Michalopoulos ; Papaioannou	ecma-13	D0-N4	D	0.50
31	36	Growing Like China	Song et al.	aer-11	E2	D	0.33
31	36	Depression Babies	Malmendier ; Nagel	qje-11	D1-G1	D	1
31	36	Optimal Bandwidth Choice for the Regression Discon	Imbens ; Kalyanaraman	restud-12	C1-C2	D	0.50
34	35	Human Capital and Regional Development	Gennaioli et al.	qje-13	J2-L2	D	0.50
34	35	Innovation and Institutional Ownership	Aghion et al.	aer-13	G2-L2	T	0.67
34	35	Bounds on Elasticities with Optimization Frictions	Chetty	ecma-12	C5-H3-J2	D	1
37	33	Choice Inconsistencies among the Elderly	Abaluck ; Gruber	aer-11	D1-J1	D	1
37	33	What's News in Business Cycles	Schmitt-Grohe ; Uribe	ecma-12	C5	D	1
39	32	Export Prices across Firms and Destinations	Manova ; Zhang	qje-12	F1-P3	D	0.75
39	32	Violent Conflict and Behavior	Voors et al.	aer-12	C9-D7	D	0
39	32	How Does Your Kindergarten Classroom Affect Your E	Chetty et al.	qje-11	I2-J2	E	1
39	32	The Impact of Family Income on Child Achievement	Dahl ; Lochner	aer-12	H2-I2	D	0.50
39	32	Prices, Plant Size, and Product Quality	Kugler ; Verhoogen	restud-12	D2-L2	D	1
44	31	Intersection Bounds	Chernozhukov et al.	ecma-13	C1	D	0.33
45	30	Intermediary Asset Pricing	He ; Krishnamurthy	aer-13	E4-G2	T	1
45	30	Environmental Accounting for Pollution in the Unit	Muller et al.	aer-11	E0-Q5	D	1
45	30	Do Consumers Respond to Marginal or Average Price	Ito	aer-14	D1-L9	D	1
45	30	The Effect of Education on Adult Mortality and Hea	Clark ; Royer	aer-13	H5-I2	D	1
45	30	Identifying Technology Spillovers and Product Mark	Bloom et al.	ecma-13	D2-O3	D	0.33

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Rank	$C_i(2)$	Title	Authors	Journal	JEL	Type	USA
50	29	Nudging Farmers to Use Fertilizer	Duflo et al.	aer-11	Q1	E	0.83
50	29	Forced Sales and House Prices	Campbell et al.	aer(s)-11	D1-R3	D	1

## 5 Normalized citations by publication year

In the previous section we have listed the most cited articles by five-year periods wherein the papers were published. These listings are difficult to compare across the different subperiods because the time span over which the cumulated citations are calculated vary (e.g., the time span corresponding to Table 4 is 20 years, while the one corresponding to Table 7 is only 5 years). Even within a subperiod, articles are not completely comparable because in our data there is a clear upward trend in the number of citations. This increasing number of citations over time is due to an increase in the number of journals (that can cite our top-5 articles), and also because reference lists in academic articles tend to get longer and longer.<sup>11</sup> To account for these two factors, we present in this section listings based on normalized citations.

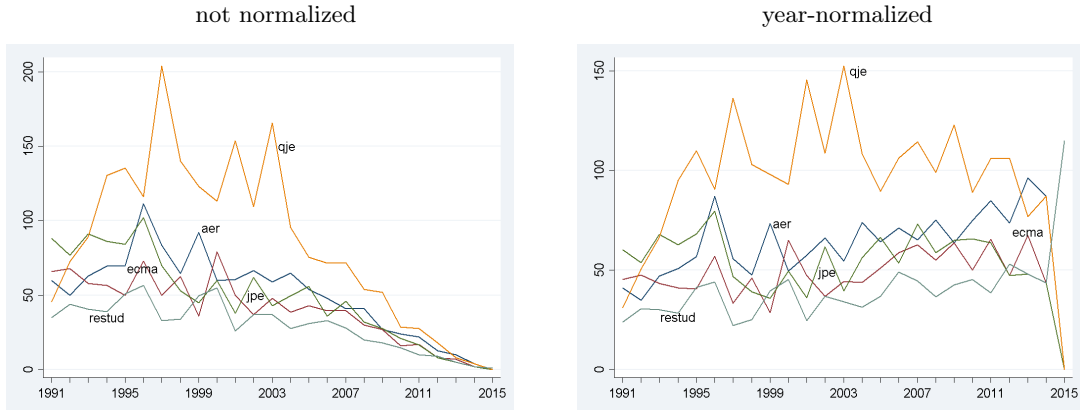
Let  $C_i$  be the cumulated number of citations gathered by article  $i$  at the end of 2015. Furthermore, let  $I(t)$  denote the set of all articles published in year  $t$  in the five journals, and  $N_t$  the total number of articles published in that year (i.e., the number of elements in  $I(t)$ ),  $t = 1991, \dots, 2015$ . Finally, let  $t_i$  be the publication year of article  $i$ . Our normalized number of citations, denoted  $\widetilde{C}_i$ , is now defined as

$$\widetilde{C}_i = 100 \frac{C_i}{\overline{C}_{t_i}}$$

where  $\overline{C}_{t_i}$  is the average number of cumulated citations received per article published in year  $t_i$ , i.e.,  $\overline{C}_{t_i} = \frac{1}{N_{t_i}} \sum_{j \in I(t_i)} C_j$ . The interesting property of  $\widetilde{C}_i$  is that it has the same mean for all publication years.

The figures in Figure 1 help to visualize the impact of our normalization. The left hand-side figure plots for each year (from 1991 to 2015) and for each journal the median of  $C_i$  whereas the right hand-side figure plots the same information but for  $\widetilde{C}_i$ . After normalization there are still variations (for a given journal) across time but much less so than before the normalization. The medians for 2015 are quite erratic as the articles had less than one year to be cited.

Figure 1: Median citations per year



<sup>11</sup>This upward trend in the length of reference lists is also mentioned in Ellison (2002). In our data, among the articles published during 1991-1995, the average number of references per article is 25.8, while among articles published during 2011-2015 it is 44.8.



Table 9 summarizes the distributions of the year-normalized citations. Compared to Table 2, QJE is still dominant at each percentile. The JPE concedes its second place to the AER and is now closely followed by ECMA.

Table 9: Year-normalized citations

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	1,555	115.42	144.20	0	1	14	35	75	138	245	348	695	1,840
aer (s)	689	79.14	109.82	0	4	8	21	46	93	177	260	597	1,024
aer (all)	2,244	104.28	135.59	0	3	11	29	65	125	230	330	653	1,840
ecma (r)	1,078	99.03	145.38	0	6	12	28	57	115	212	344	743	1,637
ecma (s)	351	53.50	75.54	0	1	5	14	30	60	115	193	393	613
ecma (all)	1,429	87.85	133.13	0	4	9	22	49	102	194	308	613	1,637
jpe	1,021	93.11	139.50	0	6	12	26	53	115	201	269	575	2,475
qje	1,053	144.57	181.98	0	6	16	41	96	175	305	453	888	1,815
restud	1,069	69.94	128.30	0	4	7	18	38	78	154	230	486	2,935
All	6,816	100.00	144.44	0	4	10	26	58	119	223	321	680	2,935

Table 10 lists the top 1% of the most cited articles once citations are normalized.<sup>12</sup> To highlight the changes with respect to Table 3 we put two ranks:  $\tilde{R}$  is the rank in terms of normalized citations whereas  $R$  is the rank before the normalization. The column  $\tilde{C}_i$  gives the value of the normalized citations and in parenthesis the number of citations  $C_i$ . We also colored in red the titles of the articles which are not in the top 1% before the normalization. Otherwise the structure of the table is the same.

Table 10: Articles in the top 1% for  $T = 1991 - 2014$ , citations normalized per year

$\tilde{R}$ ( $R$ )	$\tilde{C}_i$ ( $C_i$ )	Title	Authors	Journal	JEL	Type	USA
1 (1)	2935 (4285)	Some Tests of Specification for Panel Data	Arellano ; Bond	restud-91	C2-J2	D	0
2 (2)	2475 (3362)	Law and Finance	La Porta et al.	jpe-98	K2	D	1
3 (8)	1840 (1940)	The Colonial Origins of Comparative Development	Acemoglu et al.	aer-01	O1-I1	D	1
4 (4)	1815 (2274)	A Theory of Fairness, Competition, and Cooperation	Fehr ; Schmidt	qje-99	D6-C7	T	0
5 (17)	1692 (1489)	How Much Should We Trust Differences-in-Difference	Bertrand et al.	qje-04	C2-J3	D	1
6 (12)	1637 (1774)	The Impact of Trade on Intra-industry Reallocation	Melitz	ecma-03	F1-F2	T	1
7 (3)	1609 (2349)	Economic Growth in a Cross Section of Countries	Barro	qje-91	O4-O5	D	1
8 (5)	1543 (2252)	Estimation and Hypothesis Testing of Cointegration	Johansen	ecma-91	C3	D	0
9 (6)	1491 (2176)	Increasing Returns and Economic Geography	Krugman	jpe-91	R1-R3	T	1
10 (7)	1447 (2075)	A Contribution to the Empirics of Economic Growth	Mankiw et al.	qje-92	O4	D	1
11 (10)	1429 (1917)	Geographic Localization of Knowledge Spillovers as	Jaffe et al.	qje-93	O3	D	0.67
12 (9)	1319 (1926)	Conditional Heteroskedasticity in Asset Returns	Nelson	ecma-91	C5-G1	D	1
13 (13)	1291 (1617)	Why Do Some Countries Produce So Much More Output	Hall ; Jones	qje-99	O4-E2	D	1
14 (40)	1243 (1047)	Nominal Rigidities and the Dynamic Effects of a Sh	Christiano et al.	jpe-05	E1-E3	T	1
15 (11)	1237 (1850)	Instrumental Variables Regression with Weak Instru	Staiger ; Stock	ecma-97	C3	D	1
16 (15)	1231 (1516)	Corruption and Growth	Mauro	qje-95	D7	D	1
17 (18)	1118 (1430)	Efficient Tests for an Autoregressive Unit Root	Elliott et al.	ecma-96	C2-C5	D	1
18 (25)	1092 (1326)	ERC	Bolton ; Ockenfels	aer-00	D6-C7	T	0.50
19 (30)	1077 (1167)	Corporate Governance and Equity Prices	Gompers et al.	qje-03	G1-G3	D	1
20 (14)	1070 (1534)	A Sensitivity Analysis of Cross-Country Growth Reg	Levine ; Renelt	aer-92	O4	D	1
21 (16)	1055 (1512)	A Model of Growth through Creative Destruction	Aghion ; Howitt	ecma-92	O4-O3	T	0
22 (26)	1024 (1310)	R&D spillovers and the geography of innovation an	Audretsch ; Feldman	aer(s)-96	O3-R1	D	0.50
23 (21)	1015 (1361)	Incorporating Fairness into Game Theory and Econom	Rabin	aer-93	C7-D6	T	1
24 (91)	976 (614)	Shocks and Frictions in US Business Cycles	Smets ; Wouters	aer-07	D5-E3	D	0

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<sup>12</sup>Articles published in 2015 are excluded because especially the ones published towards the end of that year had little time to obtain citations, and also because, as mentioned earlier, for all journals except AER the last issues are not (yet) included in EconLit.

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	JEL	Type	USA
25 (39)	972 (1054)	Gravity with Gravititas	Anderson ; van Wincoop	aer-03	F1	D	1
26 (19)	963 (1406)	Loss Aversion in Riskless Choice	Tversky ; Kahneman	qje-91	D1	E	1
27 (47)	959 (964)	Risk Aversion and Incentive Effects	Holt ; Laury	aer(s)-02	D8-D1	E	1
28 (20)	958 (1374)	A Theory of Fads, Fashion, Custom, and Cultural Ch	Bikhchandani et al.	jpe-92	D7-D8	T	1
29 (23)	930 (1333)	Convergence	Barro ; Sala-i-Martin	jpe-92	O4-N1	D	1
30 (22)	918 (1340)	The Penn World Table (Mark 5)	Summers ; Heston	qje-91	O5-E1	D	1
31 (3098)	915 (42)	A Macroeconomic Model with a Financial Sector	Brunnermeier ; Sannikov	aer-14	E1-E4	T	1
32 (29)	894 (1214)	Financial Dependence and Growth	Rajan ; Zingales	aer-98	E4-G2	D	1
33 (24)	888 (1328)	Does Social Capital Have an Economic Payoff	Knack ; Keefer	qje-97	O4-P1	D	1
34 (3204)	871 (40)	Risk Shocks	Christiano et al.	aer-14	D8-E3	D	0.33
35 (27)	865 (1263)	Heteroskedasticity and Autocorrelation Consistent	Andrews	ecma-91	C2	D	1
36 (28)	852 (1221)	Growth in Cities	Glaeser et al.	jpe-92	R1-O4	D	0.25
37 (41)	850 (1032)	Cooperation and Punishment in Public Goods Experim	Fehr ; Gächter	aer(s)-00	H4	E	0
38 (33)	849 (1138)	Identification of Endogenous Social Effects	Manski	restud-93	C2	D	1
39 (34)	837 (1137)	Estimating and Testing Linear Models with Multiple	Bai ; Perron	ecma-98	C2	D	0.50
40 (44)	837 (1016)	Monetary Policy Rules and Macroeconomic Stability	Clarida et al.	qje-00	E5	D	0.83
41 (70)	833 (733)	Export versus FDI with Heterogeneous Firms	Helpman et al.	aer(s)-04	F1-F2	D	0.83
42 (43)	831 (1023)	Economic Growth and the Environment	Grossman ; Krueger	qje-95	O4-Q2	D	1
43 (53)	830 (875)	Lag Length Selection and the Construction of Unit	Ng ; Perron	ecma-01	C2	D	1
44 (36)	813 (1090)	Tests for Parameter Instability and Structural Cha	Andrews	ecma-93	C2	D	1
45 (31)	811 (1163)	A Simple Model of Herd Behavior	Banerjee	qje-92	D8-D6	T	1
46 (173)	810 (442)	Estimating Trade Flows	Helpman et al.	qje-08	F1	D	1
47 (38)	788 (1081)	Protection for Sale	Grossman ; Helpman	aer-94	F1-D7	T	0.50
48 (42)	767 (1029)	Finance and Growth	King ; Levine	qje-93	O1	D	1
49 (32)	764 (1142)	Golden Eggs and Hyperbolic Discounting	Laibson	qje-97	D9-G1	D	1
50 (48)	757 (948)	Does Trade Cause Growth	Frankel ; Romer	aer-99	F4-O4	D	1
51 (37)	756 (1084)	Changes in Relative Wages, 1963-1987	Katz ; Murphy	qje-92	J3	D	1
52 (62)	751 (755)	Understanding Social Preferences with Simple Tests	Charness ; Rabin	qje-02	D7	E	1
53 (1211)	743 (126)	The Oregon Health Insurance Experiment	Finkelstein et al.	qje-12	H7-I3	D	0.13
54 (49)	743 (915)	Automobile Prices in Market Equilibrium	Berry et al.	ecma-95	L1-L6	D	1
55 (65)	739 (743)	Reversal of Fortune	Acemoglu et al.	qje-02	D3-O1	D	1
56 (35)	736 (1101)	Africa's Growth Tragedy	Easterly ; Levine	qje-97	O5-J1	D	1
57 (326)	735 (311)	Not All Oil Price Shocks Are Alike	Kilian	aer(s)-09	E3-Q4	D	1
58 (90)	733 (617)	Teachers, Schools, and Academic Achievement	Rivkin et al.	ecma-05	I2	D	0.67
59 (518)	722 (231)	Beyond Markets and States	Ostrom	aer-10	D0-O1-Q2	T	1
60 (75)	703 (707)	The Regulation of Entry	Djankov et al.	qje-02	L1-M1	D	0.25
61 (54)	696 (872)	By Force of Habit	Campbell ; Cochrane	jpe-99	G1	T	1
62 (93)	695 (612)	Are Emily and Greg More Employable than Lakisha an	Bertrand ; Mullainathan	aer-04	J1-J7	D	1
63 (179)	691 (435)	Experimental Analysis of Neighborhood Effects	Kling et al.	ecma-07	I3-R2-R3	D	1
64 (50)	680 (912)	Corruption	Shleifer ; Vishny	qje-93	D7-K4	T	1
65 (381)	664 (281)	Misallocation and Manufacturing TFP in China and I	Hsieh ; Klenow	qje-09	L6-O4	D	1
66 (51)	663 (909)	Productivity Growth, Technical Progress, and Effic	Fare et al.	aer-94	O4	D	0.25
67 (52)	661 (886)	A Simple Estimator of Cointegrating Vectors in Hig	Stock ; Watson	ecma-93	C3-E4	D	1
68 (45)	654 (978)	Credit Cycles	Kiyotaki ; Moore	jpe-97	E5-E3-E2	T	0.50
69 (3742)	653 (30)	Do Consumers Respond to Marginal or Average Price	Ito	aer-14	D1-L9	D	1
70 (254)	651 (355)	Market Size, Trade, and Productivity	Melitz ; Ottaviano	restud-08	F1	T	0.50

The comparison of Tables 3 and 10 shows that our normalization leads to an increase in the number of AER (+3) and QJE (+2) articles in the top-70. On the other hand ECMA (-2) and JPE (-3) have a few less articles. The normalization also leads to a ranking that contains more recent articles. Indeed, all the 14 articles that are in red date are published after 2002.<sup>13</sup> Consequently, the age of articles is more evenly distributed in the list of Table 10 than in the list of Table 3. More precisely, among the articles appearing in Table 3, 35 were published in the period 1991-1995, 24 in 1996-2000, and 11 in 2001-2005. Among those in Table 10, 20 were published in 1991-1995, 11 in 1996-2000, 13 in 2001-2005, 13 in 2006-2010, and 13 in 2011-2015. Given this evidence, and because there is no reason to believe that the quality of articles in

<sup>13</sup>There are even two articles published in 2014: “A Macroeconomic Model with a Financial Sector” by Brunnermeier and Sannikov, and “Do Consumers Respond to Marginal or Average Price” by Ito, both published in AER.

the top-5 has changed between 1991 and 2015, it seems preferable to measure academic influence through normalized citations.

## 6 Lists by JEL codes

Many articles have several JEL codes (at the two digit level). In our data, the majority of articles (75%) use less than 3 codes, but 10% of them have more than 5 codes. In the analysis of this section we only use JEL codes at the letter level. For example, if an article has C70, C72, and D63 as JEL codes, then at the letter level it has two JEL codes: C (with a weight 0.66) and D (with a weight 0.33). At this letter level, 90% of the articles have at most two JEL codes.

In the left panel of Table 11 we present the usage of JEL codes (in percentage) for our different time periods.<sup>14</sup> The right panel shows the average of the normalized citation per subperiod and JEL code. To find the meaning of a JEL code one can click on it (in the pdf version of this report).

Table 11: JEL codes:

Usage (pct)								Average of year-normalized citations							
	rank	All	91-95	96-00	01-05	06-10	11-15		rank	All	91-95	96-00	01-05	06-10	11-14
D	1	26.5	24.6	23.7	25.4	29.3	29.0	O	1	73.4	156.7	74.9	65.7	51.5	42.8
C	2	13.0	14.0	14.0	14.0	12.6	10.5	F	2	72.8	63.2	64.0	94.3	77.7	60.5
J	3	10.6	10.8	11.8	10.5	10.0	9.9	R	3	64.2	129.5	100.2	58.7	57.5	41.0
E	4	8.4	11.2	8.5	7.7	7.1	7.5	C	4	62.6	89.0	74.8	59.9	51.9	40.0
G	5	7.2	7.4	8.0	7.8	5.6	7.2	G	5	59.5	68.1	83.1	64.7	47.8	40.7
L	6	6.7	6.5	6.0	6.9	6.5	7.2	J	6	58.2	75.3	61.1	61.3	51.4	45.8
O	7	5.5	5.8	7.0	5.1	5.2	4.9	E	7	56.4	51.8	60.8	53.3	60.1	57.7
F	8	4.7	5.2	4.3	5.3	4.6	4.1	I	8	53.1	52.7	61.8	56.8	54.2	45.1
H	9	3.9	3.4	3.9	4.3	4.0	4.1	Q	9	52.6	66.8	53.5	33.4	51.6	55.7
I	10	3.7	2.3	3.1	3.7	4.5	4.8	D	10	49.0	59.0	51.5	49.2	50.5	38.6
R	11	1.8	1.2	1.3	2.1	1.8	2.6	P	11	47.5	40.2	57.1	64.6	37.9	31.0
Q	12	1.8	1.9	2.4	1.4	1.2	2.2	Z	12	46.5	41.0	101.3	49.3	52.2	31.9
N	13	1.6	1.4	1.3	1.8	1.5	1.8	L	13	46.4	48.2	49.3	46.9	49.7	40.1
K	14	1.3	1.1	1.3	1.1	1.3	1.7	K	14	43.3	48.0	105.6	46.8	35.5	20.0
M	15	1.3	1.5	0.9	1.1	2.1	1.0	M	15	42.5	52.8	46.4	44.0	44.9	26.0
Z	16	0.8	0.1	0.4	0.7	1.7	1.2	N	16	42.3	51.6	18.1	42.9	41.9	49.6
P	17	0.7	0.8	1.0	0.7	0.7	0.4	H	17	38.7	39.6	46.7	34.5	40.2	35.9
A	18	0.4	0.7	0.5	0.4	0.2	0.1	A	18	38.7	35.1	49.4	35.7	50.7	24.1
B	19	0.2	0.2	0.7	0.1	0.1	0.1	B	19	29.9	9.5	29.3	84.0	17.4	13.9

The most popular code is D (Microeconomics) with 26.5% of all JEL codes being in that category. In addition, this field of economics is getting more and more popular as the percentage of the D code has climbed from 24.6% in 91-95 to 29.0% in 11-15. However, in terms of citations it is only ranked 10th with 39.4 citations on average. The JEL code with the highest average citation is O (Economic Development, Innovation, Technological Change, and Growth). Only 5.5% of the JEL codes are in this category but they receive on average 69.8 citations (with a stunning 215.5 average in 91-95). Codes F (International Economics) and R (Urban, Rural, Regional, Real Estate, and Transportation Economics) have also a higher rank in terms of average citations than in terms of usage.

The fact that not all JEL codes receive the same amount of citations means that in the list of Tables 3 and 10 some fields are over-represented compared to their sizes. The simplest way to give each field a fair chance is to present lists by JEL codes. For all lists presented in this section the articles published in 2015 are excluded as for them it is impossible to normalize their citations.

<sup>14</sup>Kelly and Bruestle (2011) have studied in more detail the evolution of JEL codes usage from 1970 to 2007.

## 6.1 Code D: Microeconomics

Table 12 reports the number of published articles with at least one JEL code D, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. This table should be compared with Table 1. The JEL code D is used very frequently.

Table 12: Nb of articles with at least one JEL code D

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	699 (100) (23.1)	88 (12.6) (17.7)	70 (10.0) (16.2)	104 (14.9) (17.7)	184 (26.3) (28.3)	253 (36.2) (29.7)
aer (s)	280 (100) (9.3)	44 (15.7) (8.8)	35 (12.5) (8.1)	59 (21.1) (10.1)	59 (21.1) (9.1)	83 (29.6) (9.7)
aer (all)	979 (100) (32.4)	132 (13.5) (26.5)	105 (10.7) (24.3)	163 (16.6) (27.8)	243 (24.8) (37.4)	336 (34.3) (39.4)
ecma (r)	543 (100) (18.0)	109 (20.1) (21.9)	75 (13.8) (17.4)	105 (19.3) (17.9)	114 (21.0) (17.5)	140 (25.8) (16.4)
ecma (s)	144 (100) (4.8)	18 (12.5) (3.6)	25 (17.4) (5.8)	43 (29.9) (7.3)	31 (21.5) (4.8)	27 (18.8) (3.2)
ecma (all)	687 (100) (22.7)	127 (18.5) (25.5)	100 (14.6) (23.1)	148 (21.5) (25.2)	145 (21.1) (22.3)	167 (24.3) (19.6)
jpe	433 (100) (14.3)	98 (22.6) (19.7)	86 (19.9) (19.9)	100 (23.1) (17.0)	65 (15.0) (10.0)	84 (19.4) (9.8)
qje	350 (100) (11.6)	56 (16.0) (11.2)	58 (16.6) (13.4)	74 (21.1) (12.6)	71 (20.3) (10.9)	91 (26.0) (10.7)
restud	571 (100) (18.9)	85 (14.9) (17.1)	83 (14.5) (19.2)	102 (17.9) (17.4)	126 (22.1) (19.4)	175 (30.6) (20.5)
All	3,020 (100) (100)	498 (16.5) (100)	432 (14.3) (100)	587 (19.4) (100)	650 (21.5) (100)	853 (28.2) (100)

Table 12 shows that out of 6,816 articles 3,020 have at least one JEL code D. It appears in all journals but slightly less in QJE and slightly more in RESTUD. Table 13 summarizes the distributions of year-normalized citations for JEL code D per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 13: Year-normalized citations for JEL code D

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	631	53.32	63.16	0	3	7	16	35	66	126	157	300	546
aer (s)	271	43.04	76.37	0	2	5	9	23	47	100	137	300	959
aer (all)	902	50.23	67.52	0	3	6	13	30	60	120	152	300	959
ecma (r)	517	50.93	58.14	0	5	7	16	31	65	109	168	299	523
ecma (s)	136	37.81	53.93	0	2	3	10	24	43	77	119	318	393
ecma (all)	653	48.20	57.49	0	4	7	15	29	61	103	164	308	523
jpe	417	44.28	66.42	0	3	5	12	26	53	96	147	216	958
qje	333	82.43	132.03	0	5	8	17	41	93	193	255	811	1,231
restud	545	31.20	37.86	0	2	4	8	18	40	73	99	187	361
All	2,850	49.02	73.09	0	3	6	12	28	58	112	160	321	1,231

Table 14 lists the top 50 articles with at least one JEL code D. The articles are ranked according to their year-normalized number of citations weighted by the percentage of JEL code D among their JEL codes. The number in parentheses is the number of weighted citations (i.e., without the normalization per year).

For example, the article “Corruption and Growth” is ranked first both after the normalization (column  $\tilde{R}$ ) and before the normalization (R). It received 1,516 citations which are normalized to 1,231. As indicated by the column labeled ‘pct’ all the JEL codes of this article are in the D category. Regarding the article “A Theory of Fairness, Competition, and Cooperation”, only 50% of its JEL codes are in the D category. Therefore its total number of citations (either normalized or not) is divided by two in this table. Finally, articles which are ranked below 50 after the normalization but above 50 before are in red.

Table 14: Top 50 articles for  $T = 1991 - 2014$  Code D, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	1231 (1516)	Corruption and Growth	Mauro	qje-95	100%	D	1
2 (2)	963 (1406)	Loss Aversion in Riskless Choice	Tversky ; Kahneman	qje-91	100%	E	1
3 (6)	959 (964)	Risk Aversion and Incentive Effects	Holt ; Laury	aer(s)-02	100%	E	1
4 (3)	958 (1374)	A Theory of Fads, Fashion, Custom, and Cultural Ch	Bikhchandani et al.	jpe-92	100%	T	1
5 (5)	908 (1137)	A Theory of Fairness, Competition, and Cooperation	Fehr ; Schmidt	qje-99	50%	T	0
6 (4)	811 (1163)	A Simple Model of Herd Behavior	Banerjee	qje-92	100%	T	1
7 (7)	751 (755)	Understanding Social Preferences with Simple Tests	Charness ; Rabin	qje-02	100%	E	1
8 (9)	546 (663)	ERC	Bolton ; Ockenfels	aer-00	50%	T	0.50
9 (1128)	523 (24)	Dynamic Mechanism Design	Pavan et al.	ecma-14	100%	T	1
10 (8)	507 (681)	Incorporating Fairness into Game Theory and Econom	Rabin	aer-93	50%	T	1
11 (11)	481 (603)	Doing It Now or Later	O'Donoghue ; Rabin	aer-99	100%	T	1
12 (32)	468 (315)	Incentives and Prosocial Behavior	Benabou ; Tirole	aer-06	75%	T	0.25
13 (35)	465 (313)	A Model of Reference-Dependent Preferences	Koszegi ; Rabin	qje-06	100%	T	1
14 (10)	441 (659)	Formal and Real Authority in Organizations	Aghion ; Tirole	jpe-97	100%	T	0
15 (197)	400 (128)	Are Risk Aversion and Impatience Related to Cognit	Dohmen et al.	aer(s)-10	100%	E	0.25
16 (14)	394 (541)	Protection for Sale	Grossman ; Helpman	aer-94	50%	T	0.50
17 (22)	393 (395)	Giving According to GARP	Andreoni ; Miller	ecma(s)-02	100%	E	1
18 (67)	392 (247)	Do Women Shy Away from Competition	Niederle ; Vesterlund	qje-07	67%	E	0.50
19 (12)	384 (551)	Anomalies in Intertemporal Choice	Loewenstein ; Prelec	qje-92	100%	D	1
20 (15)	374 (536)	Entry, Exit, and Firm Dynamics in Long Run Equilib	Hopenhayn	ecma-92	100%	T	1
21 (13)	363 (542)	Back to Bentham	Kahneman et al.	qje-97	100%	D	0.67
22 (23)	361 (391)	Intrinsic and Extrinsic Motivation	Benabou ; Tirole	restud-03	100%	T	0.75
23 (1419)	348 (16)	Risk Shocks	Christiano et al.	aer-14	40%	D	0.33
24 (19)	344 (417)	Participation in Heterogeneous Communities	Alesina ; La Ferrara	qje-00	100%	D	0.50
25 (16)	340 (456)	Corruption	Shleifer ; Vishny	qje-93	50%	T	1
26 (49)	331 (279)	A Smooth Model of Decision Making under Ambiguity	Klibanoff et al.	ecma-05	100%	T	0.33
27 (51)	330 (278)	Neighbors as Negatives	Luttmer	qje-05	67%	D	1
28 (17)	321 (431)	Allocative Efficiency of Markets with Zero-Intelli	Gode ; Sunder	jpe-93	100%	E	1
29 (28)	321 (348)	"Coherent Arbitrariness"	Ariely et al.	qje-03	100%	E	1
30 (25)	318 (386)	Risk Aversion and Expected-Utility Theory	Rabin	ecma(s)-00	100%	T	1
31 (129)	317 (173)	Eliciting Risk and Time Preferences	Andersen et al.	ecma-08	100%	E	0.75
32 (18)	308 (418)	The Probability Weighting Function	Prelec	ecma-98	100%	D	1
33 (380)	306 (79)	Depression Babies	Malmendier ; Nagel	qje-11	67%	D	1
34 (38)	300 (302)	Last-Minute Bidding and the Rules for Ending Secon	Roth ; Ockenfels	aer(s)-02	100%	T	0.50
34 (38)	300 (302)	Social Value of Public Information	Morris ; Shin	aer-02	100%	T	0.50
36 (299)	299 (96)	Social Preferences, Beliefs, and the Dynamics of F	Fischbacher ; Gächter	aer(s)-10	50%	E	0
37 (94)	299 (201)	Ambiguity Aversion, Robustness, and the Variationa	Maccheroni et al.	ecma-06	100%	T	0.33
38 (20)	298 (409)	Distributive Politics and Economic Growth	Alesina ; Rodrik	qje-94	50%	D	1
39 (42)	295 (297)	Consumption over the Life Cycle	Gourinchas ; Parker	ecma-02	100%	D	1
40 (24)	290 (390)	Learning, Mutation, and Long Run Equilibria in Gam	Kandori et al.	ecma-93	50%	T	0.67
41 (21)	277 (405)	Resistance to Reform	Fernandez ; Rodrik	aer-91	100%	T	1
42 (113)	275 (185)	A Dual-Self Model of Impulse Control	Fudenberg ; Levine	aer-06	100%	E	1
43 (27)	271 (372)	Is Inequality Harmful for Growth	Persson ; Tabellini	aer-94	50%	D	0
44 (46)	262 (284)	The Economic Costs of Conflict	Abadie ; Gardeazabal	aer-03	100%	D	0.50
45 (47)	261 (283)	Does Market Experience Eliminate Market Anomalies	List	qje-03	100%	E	1
46 (54)	259 (273)	Temptation and Self-Control	Gul ; Pesendorfer	ecma-01	100%	T	1
47 (82)	258 (218)	Deception	Gneezy	aer(s)-05	75%	T	1
48 (26)	255 (381)	Golden Eggs and Hyperbolic Discounting	Laibson	qje-97	33%	D	1
49 (81)	250 (220)	Inequality Aversion, Efficiency, and Maximin Prefe	Engelmann ; Strobel	aer-04	100%	E	0
50 (40)	248 (301)	Economics and Identity	Akerlof ; Kranton	qje-00	40%	T	1

## 6.2 Code C: Mathematical and Quantitative Methods

Table 15 reports the number of published articles with at least one JEL code C, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 1,288 have at least one JEL code C.

Table 15: Nb of articles with at least one JEL code C

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	174 (100) (13.5)	25 (14.4) (10.5)	15 (8.6) (6.9)	21 (12.1) (7.9)	53 (30.5) (20.1)	60 (34.5) (19.9)
aer (s)	54 (100) (4.2)	7 (13.0) (2.9)	5 (9.3) (2.3)	9 (16.7) (3.4)	10 (18.5) (3.8)	23 (42.6) (7.6)
aer (all)	228 (100) (17.7)	32 (14.0) (13.4)	20 (8.8) (9.2)	30 (13.2) (11.3)	63 (27.6) (23.9)	83 (36.4) (27.5)
ecma (r)	562 (100) (43.6)	119 (21.2) (49.8)	111 (19.8) (51.2)	130 (23.1) (48.9)	98 (17.4) (37.1)	104 (18.5) (34.4)
ecma (s)	204 (100) (15.8)	30 (14.7) (12.6)	32 (15.7) (14.7)	56 (27.5) (21.1)	44 (21.6) (16.7)	42 (20.6) (13.9)
ecma (all)	766 (100) (59.5)	149 (19.5) (62.3)	143 (18.7) (65.9)	186 (24.3) (69.9)	142 (18.5) (53.8)	146 (19.1) (48.3)
jpe	41 (100) (3.2)	4 (9.8) (1.7)	5 (12.2) (2.3)	10 (24.4) (3.8)	12 (29.3) (4.5)	10 (24.4) (3.3)
qje	37 (100) (2.9)	6 (16.2) (2.5)	10 (27.0) (4.6)	6 (16.2) (2.3)	6 (16.2) (2.3)	9 (24.3) (3.0)
restud	216 (100) (16.8)	48 (22.2) (20.1)	39 (18.1) (18.0)	34 (15.7) (12.8)	41 (19.0) (15.5)	54 (25.0) (17.9)
All	1,288 (100) (100)	239 (18.6) (100)	217 (16.8) (100)	266 (20.7) (100)	264 (20.5) (100)	302 (23.4) (100)

This table should be compared with Table 1. ECMA publishes the majority of the articles with a JEL code C: almost 60% over the whole period. The AER is second but compared to Table 1 code C is under-represented. For RESTUD the percentages for code C articles are similar to the percentages for all articles. Finally, for JPE and QJE this is much less present: 3.2% and 2.9% respectively whereas these journals have published 15% and 15.4% of all articles respectively.

Table 16 summarizes the distributions of year-normalized citations for JEL code C per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 16: Year-normalized citations for JEL code C

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	159	48.56	78.63	0	4	7	13	24	54	101	157	507	546
aer (s)	52	53.40	64.95	0	2	5	10	39	73	104	197	357	357
aer (all)	211	49.75	75.37	0	4	6	12	25	55	101	169	440	546
ecma (r)	542	75.31	137.59	0	6	9	16	39	82	162	234	837	1,543
ecma (s)	192	51.74	77.80	0	3	6	14	27	57	106	182	582	613
ecma (all)	734	69.14	125.13	0	5	8	16	35	75	141	218	813	1,543
jpe	39	39.54	42.61	2	3	5	11	34	49	95	129	229	229
qje	35	90.84	177.34	5	6	8	12	31	70	206	564	908	908
restud	207	51.92	133.73	0	2	3	9	20	43	102	169	486	1,468
All	1,226	62.57	119.97	0	4	6	13	30	65	126	200	582	1,543



Table 17 lists the top 50 articles with at least one JEL code C. See for a precise definition of the different variables Section 6.1.

Table 17: Top 50 articles for  $T = 1991 - 2014$  Code C, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	1543 (2252)	Estimation and Hypothesis Testing of Cointegration	Johansen	ecma-91	100%	D	0
2 (2)	1468 (2143)	Some Tests of Specification for Panel Data	Arellano ; Bond	restud-91	50%	D	0
3 (3)	1237 (1850)	Instrumental Variables Regression with Weak Instru	Staiger ; Stock	ecma-97	100%	D	1
4 (4)	1118 (1430)	Efficient Tests for an Autoregressive Unit Root	Elliott et al.	ecma-96	100%	D	1
5 (8)	908 (1137)	A Theory of Fairness, Competition, and Cooperation	Fehr ; Schmidt	qje-99	50%	T	0
6 (5)	880 (1284)	Conditional Heteroskedasticity in Asset Returns	Nelson	ecma-91	67%	D	1
7 (6)	865 (1263)	Heteroskedasticity and Autocorrelation Consistent	Andrews	ecma-91	100%	D	1
8 (7)	849 (1138)	Identification of Endogenous Social Effects	Manski	restud-93	100%	D	1
9 (8)	837 (1137)	Estimating and Testing Linear Models with Multiple	Bai ; Perron	ecma-98	100%	D	0.50
10 (11)	830 (875)	Lag Length Selection and the Construction of Unit	Ng ; Perron	ecma-01	100%	D	1
11 (10)	813 (1090)	Tests for Parameter Instability and Structural Cha	Andrews	ecma-93	100%	D	1
12 (12)	613 (841)	Identification and Estimation of Local Average Tre	Imbens ; Angrist	ecma(s)-94	100%	D	0.50
13 (31)	582 (392)	Large Sample Properties of Matching Estimators for	Abadie ; Imbens	ecma(s)-06	100%	D	1
14 (21)	564 (496)	How Much Should We Trust Differences-in-Difference	Bertrand et al.	qje-04	33%	D	1
15 (15)	546 (663)	ERC	Bolton ; Ockenfels	aer-00	50%	T	0.50
16 (13)	507 (681)	Incorporating Fairness into Game Theory and Econom	Rabin	aer-93	50%	T	1
17 (37)	499 (336)	Estimation and Inference in Large Heterogeneous Pa	Pesaran	ecma-06	100%	D	0
18 (14)	486 (667)	Automatic Lag Selection in Covariance Matrix Estim	Newey ; West	restud-94	100%	D	1
19 (16)	481 (653)	Matching as an Econometric Evaluation Estimator	Heckman et al.	restud-98	100%	D	1
20 (17)	472 (647)	Optimal Tests When a Nuisance Parameter Is Present	Andrews ; Ploberger	ecma-94	100%	D	0.50
21 (18)	440 (598)	Predicting How People Play Games	Erev ; Roth	aer-98	100%	E	0.75
22 (19)	403 (541)	The Evolution of Conventions	Young	ecma-93	100%	T	1
23 (38)	377 (332)	A Panic Attack on Unit Roots and Cointegration	Bai ; Ng	ecma-04	100%	D	1
24 (260)	374 (63)	Optimal Bandwidth Choice for the Regression Discon	Imbens ; Kalyanaraman	restud-12	83%	D	0.50
25 (20)	372 (505)	Stochastic Volatility	Kim et al.	restud-98	100%	D	0.33
26 (33)	369 (389)	Identification and Estimation of Treatment Effects	Hahn et al.	ecma(s)-01	100%	D	1
27 (24)	357 (457)	Social Distance and Other-Regarding Behavior in Di	Hoffman et al.	aer(s)-96	100%	T	1
28 (34)	344 (373)	Efficient Estimation of Average Treatment Effects	Hirano et al.	ecma-03	100%	D	1
29 (22)	334 (488)	Bargaining and Market Behavior in Jerusalem, Ljubl	Roth et al.	aer-91	100%	E	0.25
30 (25)	330 (443)	A Simple Estimator of Cointegrating Vectors in Hig	Stock ; Watson	ecma-93	50%	D	1
31 (23)	324 (484)	Matching as an Econometric Evaluation Estimator	Heckman et al.	restud-97	50%	D	1
32 (26)	314 (427)	Characterizing Selection Bias Using Experimental D	Heckman et al.	ecma-98	75%	E	0.25
33 (27)	308 (422)	Monotone Comparative Statics	Milgrom ; Shannon	ecma-94	100%	T	1
34 (40)	302 (304)	Determining the Number of Factors in Approximate F	Bai ; Ng	ecma-02	50%	D	1
35 (480)	298 (31)	Intersection Bounds	Chernozhukov et al.	ecma-13	100%	D	0.33
36 (35)	291 (372)	Asymptotic Inference about Predictive Ability	West	ecma-96	100%	D	1
37 (32)	290 (390)	Learning, Mutation, and Long Run Equilibria in Gam	Kandori et al.	ecma-93	50%	T	0.67
38 (46)	290 (255)	A Cognitive Hierarchy Model of Games	Camerer et al.	qje-04	100%	E	0.67
39 (47)	289 (254)	Determinants of Long-Term Growth	Sala-i-Martin et al.	aer-04	67%	D	0.17
40 (28)	286 (410)	An Improved Heteroskedasticity and Autocorrelation	Andrews ; Monahan	ecma(s)-92	100%	D	1
41 (233)	282 (73)	The Model Confidence Set	Hansen et al.	ecma-11	100%	D	0.67
42 (29)	280 (401)	Social Norms and Community Enforcement	Kandori	restud-92	100%	T	1
43 (43)	272 (273)	Maximum Likelihood Estimation of Discretely Sample	Ait-Sahalia	ecma-02	100%	D	1
44 (30)	270 (394)	Optimal Inference in Cointegrated Systems	Phillips	ecma-91	100%	D	1
45 (36)	263 (353)	Global Games and Equilibrium Selection	Carlsson ; van Damme	ecma-93	100%	T	0
46 (117)	249 (136)	On the Failure of the Bootstrap for Matching Estim	Abadie ; Imbens	ecma(s)-08	100%	D	1
47 (60)	247 (208)	The Willingness to Pay-Willingness to Accept Gap,	Plott ; Zeiler	aer-05	100%	E	1
48 (95)	245 (154)	Estimation and Confidence Regions for Parameter Se	Chernozhukov et al.	ecma-07	100%	D	1
49 (39)	243 (305)	Linear Regression Limit Theory for Nonstationary P	Phillips ; Moon	ecma-99	100%	D	0.75
50 (65)	237 (200)	Structural Equations, Treatment Effects, and Econo	Heckman ; Vytlacil	ecma-05	100%	D	1

### 6.3 Code J: Labor and Demographic Economics

Table 18 reports the number of published articles with at least one JEL code J, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 1,297 have at least one JEL code J.

Table 18: Nb of articles with at least one JEL code J

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	294 (100) (22.7)	45 (15.3) (21.2)	46 (15.6) (20.2)	49 (16.7) (18.6)	47 (16.0) (18.3)	107 (36.4) (31.8)
aer (s)	150 (100) (11.6)	25 (16.7) (11.8)	14 (9.3) (6.1)	37 (24.7) (14.1)	32 (21.3) (12.5)	42 (28.0) (12.5)
aer (all)	444 (100) (34.2)	70 (15.8) (33.0)	60 (13.5) (26.3)	86 (19.4) (32.7)	79 (17.8) (30.7)	149 (33.6) (44.2)
ecma (r)	90 (100) (6.9)	9 (10.0) (4.2)	18 (20.0) (7.9)	16 (17.8) (6.1)	19 (21.1) (7.4)	28 (31.1) (8.3)
ecma (s)	17 (100) (1.3)	. (. ) (.)	2 (11.8) (0.9)	2 (11.8) (0.8)	8 (47.1) (3.1)	5 (29.4) (1.5)
ecma (all)	107 (100) (8.2)	9 (8.4) (4.2)	20 (18.7) (8.8)	18 (16.8) (6.8)	27 (25.2) (10.5)	33 (30.8) (9.8)
jpe	251 (100) (19.4)	44 (17.5) (20.8)	69 (27.5) (30.3)	67 (26.7) (25.5)	40 (15.9) (15.6)	31 (12.4) (9.2)
qje	301 (100) (23.2)	63 (20.9) (29.7)	52 (17.3) (22.8)	62 (20.6) (23.6)	63 (20.9) (24.5)	61 (20.3) (18.1)
restud	194 (100) (15.0)	26 (13.4) (12.3)	27 (13.9) (11.8)	30 (15.5) (11.4)	48 (24.7) (18.7)	63 (32.5) (18.7)
All	1,297 (100) (100)	212 (16.3) (100)	228 (17.6) (100)	263 (20.3) (100)	257 (19.8) (100)	337 (26.0) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Labor and Demographic Economics is under-represented ECMA (8.2% instead of 21%). On the other hand, this field is relatively more present in JPE and QJE.

Table 19 summarizes the distributions of year-normalized citations for JEL code J per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 19: Year-normalized citations for JEL code J

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	271	58.94	77.57	0	4	8	17	34	68	142	196	370	695
aer (s)	146	41.33	45.91	0	4	6	12	25	52	113	156	221	225
aer (all)	417	52.78	68.63	0	4	7	14	31	62	128	177	342	695
ecma (r)	85	65.29	75.65	0	6	7	25	44	70	143	176	510	510
ecma (s)	14	35.11	37.60	8	8	10	15	24	37	56	156	156	156
ecma (all)	99	61.02	72.14	0	6	8	22	41	70	143	176	510	510
jpe	244	50.66	64.44	0	4	6	14	29	63	117	172	318	547
qje	292	78.55	98.48	0	6	13	26	53	100	165	221	391	1,128
restud	183	46.34	117.67	0	3	6	12	22	44	80	123	339	1,468
All	1,235	58.16	85.38	0	4	7	16	33	70	134	187	342	1,468

Table 20 lists the top 50 articles with at least one JEL code J. See for a precise definition of the different variables Section 6.1.

Table 20: Top 50 articles for  $T = 1991 - 2014$  Code J, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	1468 (2143)	Some Tests of Specification for Panel Data	Arellano ; Bond	restud-91	50%	D	0
2 (3)	1128 (993)	How Much Should We Trust Differences-in-Difference	Bertrand et al.	qje-04	67%	D	1
3 (2)	756 (1084)	Changes in Relative Wages, 1963-1987	Katz ; Murphy	qje-92	100%	D	1
4 (6)	695 (612)	Are Emily and Greg More Employable than Lakisha an	Bertrand ; Mullainathan	aer-04	100%	D	1
5 (4)	547 (734)	Wage Inequality and the Rise in Returns to Skill	Juhn et al.	jpe-93	100%	D	1
6 (5)	510 (652)	Labor Market Institutions and the Distribution of	DiNardo et al.	ecma-96	100%	D	0.33
7 (404)	404 (42)	The Growth of Low-Skill Service Jobs and the Polar	Autor ; Dorn	aer-13	67%	T	0.50
8 (17)	391 (393)	Information Technology, Workplace Organization, an	Bresnahan et al.	qje-02	67%	D	1
9 (59)	372 (203)	Stature and Status	Case ; Paxson	jpe-08	100%	D	1
10 (7)	370 (531)	Changes in the Structure of Wages in the 1980's	Bound ; Johnson	aer-92	100%	T	1
11 (15)	367 (398)	The Labor Demand Curve Is Downward Sloping	Borjas	qje-03	100%	D	1
12 (9)	355 (476)	Earnings Losses of Displaced Workers	Jacobson et al.	aer-93	100%	D	0.67
13 (13)	342 (415)	Performance Pay and Productivity	Lazear	aer-00	100%	D	1
14 (12)	339 (425)	Managerial Incentive Problems	Holmstrom	restud-99	100%	T	1
15 (10)	332 (455)	Job Creation and Job Destruction in the Theory of	Mortensen ; Pissarides	restud-94	67%	T	0.50
16 (11)	330 (452)	Minimum Wages and Employment	Card ; Krueger	aer-94	100%	D	1
17 (8)	324 (484)	Matching as an Econometric Evaluation Estimator	Heckman et al.	restud-97	50%	D	1
18 (14)	318 (407)	The Role of Premarket Factors in Black-White Wage	Neal ; Johnson	jpe-96	100%	T	1
19 (16)	318 (398)	High Wage Workers and High Wage Firms	Abowd et al.	ecma-99	100%	D	0.17
20 (42)	300 (253)	The Cyclical Behavior of Equilibrium Unemployment	Shimer	aer-05	60%	T	1
21 (756)	299 (14)	A Grand Gender Convergence	Goldin	aer-14	86%	T	1
22 (30)	294 (319)	Networks in the Modern Economy	Munshi	qje-03	100%	D	1
23 (32)	289 (313)	Performance in Competitive Environments	Gneezy et al.	qje-03	100%	E	0.83
24 (35)	271 (286)	Boys Will Be Boys	Barber ; Odean	qje-01	50%	D	1
25 (20)	262 (351)	Separate Spheres Bargaining and the Marriage Marke	Lundberg ; Pollak	jpe-93	100%	T	1
26 (18)	260 (373)	Optimal Incentive Contracts in the Presence of Car	Gibbons ; Murphy	jpe-92	100%	D	1
27 (93)	248 (156)	Measuring Trends in Leisure	Aguar ; Hurst	qje-07	100%	T	1
28 (22)	248 (340)	Changes in the U.S. Wage Structure 1963-1987	Buchinsky	ecma-94	100%	D	1
29 (34)	248 (301)	Economics and Identity	Akerlof ; Kranton	qje-00	40%	T	1
30 (19)	245 (367)	Africa's Growth Tragedy	Easterly ; Levine	qje-97	33%	D	1
31 (24)	245 (333)	Computing Inequality	Autor et al.	qje-98	67%	D	1
32 (40)	242 (263)	The Skill Content of Recent Technological Change	Autor et al.	qje-03	50%	D	1
33 (224)	242 (77)	Inequality and Unemployment in a Global Economy	Helpman et al.	ecma-10	67%	T	0.67
34 (21)	241 (346)	Job Mobility and the Careers of Young Men	Topel ; Ward	qje-92	100%	T	0.50
35 (29)	235 (322)	Beauty and the Labor Market	Hamermesh ; Biddle	aer-94	100%	D	1
36 (22)	233 (340)	Specific Capital, Mobility, and Wages	Topel	jpe-91	100%	D	1
37 (31)	230 (315)	Estimates of the Economic Returns to Schooling fro	Ashenfelter ; Krueger	aer-94	100%	D	1
38 (25)	229 (328)	Does School Quality Matter	Card ; Krueger	jpe-92	67%	D	1
39 (25)	225 (328)	Social Networks and Labor-Market Outcomes	Montgomery	aer(s)-91	100%	T	1
40 (71)	224 (189)	Selection on Observed and Unobserved Variables	Altonji et al.	jpe-05	50%	D	1
41 (33)	223 (306)	Changes in the Demand for Skilled Labor within U.S	Berman et al.	qje-94	50%	D	1
42 (37)	222 (274)	Ethnicity, Neighborhoods, and Human-Capital Extern	Borjas	aer-95	100%	T	1
43 (28)	221 (323)	Does Compulsory School Attendance Affect Schooling	Angrist ; Krueger	qje-91	67%	D	1
44 (441)	221 (38)	Inequality at Work	Card et al.	aer(s)-12	75%	T	1
45 (27)	219 (327)	The Effects of Human Resource Management Practices	Ichniowski et al.	aer-97	40%	D	1
46 (831)	218 (10)	Measuring the Impacts of Teachers II	Chetty et al.	aer-14	50%	D	1
47 (55)	208 (209)	The Power of the Pill	Goldin ; Katz	jpe-02	100%	D	1
48 (197)	203 (86)	Training, Wages, and Sample Selection	Lee	restud-09	100%	D	1
49 (633)	202 (21)	The Effect of Immigration along the Distribution o	Dustmann et al.	restud-13	100%	D	0
50 (39)	200 (268)	Does Fairness Prevent Market Clearing	Fehr et al.	qje-93	67%	E	0

## 6.4 Code E: Macroeconomics and Monetary Economics

Table 21 reports the number of published articles with at least one JEL code E, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 1,018 have at least one JEL code E.

Table 21: Nb of articles with at least one JEL code E

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	311 (100) (30.6)	65 (20.9) (29.0)	58 (18.6) (34.3)	55 (17.7) (28.5)	54 (17.4) (30.2)	79 (25.4) (31.2)
aer (s)	121 (100) (11.9)	23 (19.0) (10.3)	9 (7.4) (5.3)	25 (20.7) (13.0)	24 (19.8) (13.4)	40 (33.1) (15.8)
aer (all)	432 (100) (42.4)	88 (20.4) (39.3)	67 (15.5) (39.6)	80 (18.5) (41.5)	78 (18.1) (43.6)	119 (27.5) (47.0)
ecma (r)	94 (100) (9.2)	17 (18.1) (7.6)	13 (13.8) (7.7)	17 (18.1) (8.8)	19 (20.2) (10.6)	28 (29.8) (11.1)
ecma (s)	8 (100) (0.8)	1 (12.5) (0.4)	2 (25.0) (1.2)	1 (12.5) (0.5)	1 (12.5) (0.6)	3 (37.5) (1.2)
ecma (all)	102 (100) (10.0)	18 (17.6) (8.0)	15 (14.7) (8.9)	18 (17.6) (9.3)	20 (19.6) (11.2)	31 (30.4) (12.3)
jpe	162 (100) (15.9)	31 (19.1) (13.8)	37 (22.8) (21.9)	33 (20.4) (17.1)	29 (17.9) (16.2)	32 (19.8) (12.6)
qje	146 (100) (14.3)	43 (29.5) (19.2)	29 (19.9) (17.2)	23 (15.8) (11.9)	22 (15.1) (12.3)	29 (19.9) (11.5)
restud	176 (100) (17.3)	44 (25.0) (19.6)	21 (11.9) (12.4)	39 (22.2) (20.2)	30 (17.0) (16.8)	42 (23.9) (16.6)
All	1,018 (100) (100)	224 (22.0) (100)	169 (16.6) (100)	193 (19.0) (100)	179 (17.6) (100)	253 (24.9) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Macroeconomics and Monetary Economics articles are over-represented in the AER (42.4% instead of 32.9%), but under-represented in ECMA (10% rather than 21%).

Table 22 summarizes the distributions of year-normalized citations for JEL code E per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 22: Year-normalized citations for JEL code E

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	291	66.30	87.06	0	4	8	15	36	87	160	218	490	732
aer (s)	120	46.38	71.28	0	3	4	8	22	56	112	150	367	419
aer (all)	411	60.48	83.18	0	3	6	13	32	72	149	213	419	732
ecma (r)	91	55.96	70.32	1	4	10	15	25	66	170	250	330	330
ecma (s)	7	21.96	26.34	0	0	0	1	18	25	77	77	77	77
ecma (all)	98	53.53	68.62	0	2	8	15	24	65	170	250	330	330
jpe	156	57.15	118.99	0	4	6	14	29	60	117	152	654	1,243
qje	140	74.11	115.18	0	4	5	15	38	79	162	278	645	837
restud	171	33.25	57.18	0	1	2	7	19	39	73	101	232	611
All	976	56.43	90.76	0	2	5	12	27	63	131	200	450	1,243

Table 23 lists the top 50 articles with at least one JEL code E. See for a precise definition of the different

variables Section 6.1.

Table 23: Top 50 articles for  $T = 1991 - 2014$  Code E, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	1243 (1047)	Nominal Rigidities and the Dynamic Effects of a Sh	Christiano et al.	jpe-05	100%	T	1
2 (2)	837 (1016)	Monetary Policy Rules and Macroeconomic Stability	Clarida et al.	qje-00	100%	D	0.83
3 (9)	732 (461)	Shocks and Frictions in US Business Cycles	Smets ; Wouters	aer-07	75%	D	0
4 (3)	654 (978)	Credit Cycles	Kiyotaki ; Moore	jpe-97	100%	T	0.50
5 (5)	645 (809)	Why Do Some Countries Produce So Much More Output	Hall ; Jones	qje-99	50%	D	1
6 (4)	611 (820)	Income Distribution and Macroeconomics	Galor ; Zeira	restud-93	100%	T	0.50
7 (411)	523 (24)	A Macroeconomic Model with a Financial Sector	Brunnermeier ; Sannikov	aer-14	57%	T	1
8 (6)	490 (702)	The Federal Funds Rate and the Channels of Monetar	Bernanke ; Blinder	aer-92	100%	T	1
9 (20)	456 (307)	Were There Regime Switches in U.S. Monetary Policy	Sims ; Zha	aer-06	100%	D	1
10 (10)	450 (452)	An Empirical Characterization of the Dynamic Effec	Blanchard ; Perotti	qje-02	100%	D	0.50
11 (7)	419 (509)	Output Fluctuations in the United States	McConnell ; Perez-Quiros	aer(s)-00	100%	T	0.50
12 (36)	405 (221)	Five Facts about Prices	Nakamura ; Steinsson	qje-08	100%	D	1
13 (186)	394 (67)	Debt, Deleveraging, and the Liquidity Trap	Eggertsson ; Krugman	qje-12	86%	D	1
14 (63)	367 (156)	Not All Oil Price Shocks Are Alike	Kilian	aer(s)-09	50%	D	1
15 (13)	367 (387)	Preferences over Inflation and Unemployment	Di Tella et al.	aer(s)-01	100%	T	0.33
16 (538)	348 (16)	Risk Shocks	Christiano et al.	aer-14	40%	D	0.33
17 (8)	347 (507)	Stochastic Trends and Economic Fluctuations	King et al.	aer-91	100%	D	0.25
18 (12)	330 (443)	A Simple Estimator of Cointegrating Vectors in Hig	Stock ; Watson	ecma-93	50%	D	1
19 (11)	306 (447)	The Penn World Table (Mark 5)	Summers ; Heston	qje-91	33%	D	1
20 (235)	304 (51)	Credit Booms Gone Bust	Schularick ; Taylor	aer(s)-12	50%	D	0.50
21 (80)	302 (128)	Can News about the Future Drive the Business Cycle	Jaimovich ; Rebelo	aer-09	100%	T	1
22 (21)	295 (297)	Sticky Information versus Sticky Prices	Mankiw ; Reis	qje-02	100%	T	1
23 (28)	292 (246)	A Unified Framework for Monetary Theory and Policy	Lagos ; Wright	jpe-05	100%	D	1
24 (22)	281 (296)	Monetary Policy Rules Based on Real-Time Data	Orphanides	aer-01	100%	D	1
25 (260)	270 (46)	What's News in Business Cycles	Schmitt-Grohe ; Uribe	ecma-12	83%	D	1
26 (71)	266 (145)	The Time-Varying Volatility of Macroeconomic Fluct	Justiniano ; Primiceri	aer-08	100%	D	1
27 (13)	265 (387)	Long-Run Policy Analysis and Long-Run Growth	Rebelo	jpe-91	50%	T	0.67
28 (179)	264 (69)	When Is the Government Spending Multiplier Large	Christiano et al.	jpe-11	50%	T	1
29 (18)	261 (322)	Optimal Contracts for Central Bankers	Walsh	aer-95	100%	T	1
30 (184)	260 (68)	Identifying Government Spending Shocks	Ramey	qje-11	50%	D	1
31 (269)	260 (44)	Monetary Policy as Financial Stability Regulation	Stein	qje-12	100%	T	1
32 (273)	258 (44)	Macroeconomic Effects of Financial Shocks	Jermann ; Quadrini	aer-12	60%	T	1
33 (148)	258 (83)	The Macroeconomic Effects of Tax Changes	Romer ; Romer	aer-10	50%	D	1
34 (33)	258 (227)	Testing for Indeterminacy	Lubik ; Schorfheide	aer-04	100%	D	1
35 (15)	255 (381)	Golden Eggs and Hyperbolic Discounting	Laibson	qje-97	33%	D	1
36 (16)	252 (362)	Bond Pricing and the Term Structure of Interest Ra	Heath et al.	ecma-92	50%	T	1
37 (108)	252 (107)	The Impact of Uncertainty Shocks	Bloom	ecma-09	43%	D	0.50
38 (611)	250 (11)	Hazardous Times for Monetary Policy	Jimenez et al.	ecma-14	50%	T	0
39 (19)	239 (320)	Fiscal Policy in General Equilibrium	Baxter ; King	aer-93	100%	E	1
40 (45)	235 (207)	Some Evidence on the Importance of Sticky Prices	Bils ; Klenow	jpe-04	50%	D	1
41 (622)	233 (11)	Capital Is Back	Piketty ; Zucman	qje-14	71%	D	0.25
42 (17)	232 (338)	Yield Spreads and Interest Rate Movements	Campbell ; Shiller	restud-91	100%	D	1
43 (23)	226 (289)	Inference When a Nuisance Parameter Is Not Identif	Hansen	ecma-96	50%	D	1
44 (50)	224 (189)	Time Varying Structural Vector Autoregressions and	Primiceri	restud-05	75%	D	1
45 (302)	221 (38)	Credit Spreads and Business Cycle Fluctuations	Gilchrist ; Zakrajsek	aer(s)-12	50%	D	1
46 (629)	218 (10)	Tracing Value-Added and Double Counting in Gross E	Koopman et al.	aer-14	40%	T	0.83
47 (25)	213 (259)	Habit Formation in Consumption and Its Implication	Fuhrer	aer-00	100%	D	1
48 (27)	203 (247)	Financial Contagion	Allen ; Gale	jpe-00	50%	T	1
49 (59)	200 (168)	The Cyclical Behavior of Equilibrium Unemployment	Shimer	aer-05	40%	T	1
50 (31)	198 (240)	Are Recessions Good for Your Health	Ruhm	qje-00	50%	D	1

## 6.5 Code G: Financial Economics

Table 24 reports the number of published articles with at least one JEL code G, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 922 have at least one JEL code G.

Table 24: Nb of articles with at least one JEL code G

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	244 (100) (26.5)	34 (13.9) (23.0)	32 (13.1) (21.3)	46 (18.9) (23.4)	45 (18.4) (28.5)	87 (35.7) (32.3)
aer (s)	93 (100) (10.1)	11 (11.8) (7.4)	14 (15.1) (9.3)	20 (21.5) (10.2)	16 (17.2) (10.1)	32 (34.4) (11.9)
aer (all)	337 (100) (36.6)	45 (13.4) (30.4)	46 (13.6) (30.7)	66 (19.6) (33.5)	61 (18.1) (38.6)	119 (35.3) (44.2)
ecma (r)	115 (100) (12.5)	13 (11.3) (8.8)	14 (12.2) (9.3)	24 (20.9) (12.2)	20 (17.4) (12.7)	44 (38.3) (16.4)
ecma (s)	19 (100) (2.1)	6 (31.6) (4.1)	2 (10.5) (1.3)	4 (21.1) (2.0)	3 (15.8) (1.9)	4 (21.1) (1.5)
ecma (all)	134 (100) (14.5)	19 (14.2) (12.8)	16 (11.9) (10.7)	28 (20.9) (14.2)	23 (17.2) (14.6)	48 (35.8) (17.8)
jpe	143 (100) (15.5)	23 (16.1) (15.5)	40 (28.0) (26.7)	34 (23.8) (17.3)	18 (12.6) (11.4)	28 (19.6) (10.4)
qje	161 (100) (17.5)	30 (18.6) (20.3)	28 (17.4) (18.7)	41 (25.5) (20.8)	27 (16.8) (17.1)	35 (21.7) (13.0)
restud	147 (100) (15.9)	31 (21.1) (20.9)	20 (13.6) (13.3)	28 (19.0) (14.2)	29 (19.7) (18.4)	39 (26.5) (14.5)
All	922 (100) (100)	148 (16.1) (100)	150 (16.3) (100)	197 (21.4) (100)	158 (17.1) (100)	269 (29.2) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journals, the percentages of both tables should be the same. Financial Economics articles are slightly more present in the AER and QJE and under-represented in ECMA. Table 25 summarizes the distributions of year-normalized citations for JEL code G per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 25: Year-normalized citations for JEL code G

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	221	52.86	62.36	0	4	6	15	29	66	127	167	338	392
aer (s)	91	35.18	45.42	0	1	3	7	19	52	89	114	286	286
aer (all)	312	47.71	58.42	0	2	5	13	26	62	113	165	296	392
ecma (r)	108	64.56	96.11	2	7	11	15	29	78	161	252	440	605
ecma (s)	18	24.47	31.22	2	2	3	5	12	31	66	130	130	130
ecma (all)	126	58.83	90.76	2	5	8	14	26	64	145	250	440	605
jpe	136	81.28	167.09	0	6	8	15	38	82	198	272	696	1,650
qje	153	88.10	120.88	0	6	10	22	55	116	175	271	547	1,077
restud	141	33.93	40.98	0	2	4	8	17	42	74	112	201	213
All	868	59.46	99.84	0	3	6	13	29	68	142	202	417	1,650

Table 26 lists the top 50 articles with at least one JEL code G. See for a precise definition of the different variables Section 6.1.



Table 26: Top 50 articles for  $T = 1991 - 2014$  Code G, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	1650 (2241)	Law and Finance	La Porta et al.	jpe-98	67%	D	1
2 (2)	1077 (1167)	Corporate Governance and Equity Prices	Gompers et al.	qje-03	100%	D	1
3 (3)	696 (872)	By Force of Habit	Campbell ; Cochrane	jpe-99	100%	T	1
4 (4)	605 (734)	Transform Analysis and Asset Pricing for Affine Ju	Duffie et al.	ecma-00	100%	T	1
5 (7)	566 (614)	Liquidity Risk and Expected Stock Returns	Pastor ; Stambaugh	jpe-03	100%	D	1
6 (61)	547 (175)	Did Securitization Lead to Red Screening	Keys et al.	qje-10	100%	D	0.50
7 (5)	455 (680)	Do Investment-Cash Flow Sensitivities Provide Usef	Kaplan ; Zingales	qje-97	100%	D	1
8 (6)	440 (642)	Conditional Heteroskedasticity in Asset Returns	Nelson	ecma-91	33%	D	1
9 (9)	417 (514)	Myopic Loss Aversion and the Equity Premium Puzzle	Benartzi ; Thaler	qje-95	100%	D	1
10 (8)	409 (597)	Long-Term Memory in Stock Market Prices	Lo	ecma-91	100%	D	1
11 (10)	400 (493)	The Effect of Credit Market Competition on Lending	Petersen ; Rajan	qje-95	100%	D	1
12 (421)	392 (18)	A Macroeconomic Model with a Financial Sector	Brunnermeier ; Sannikov	aer-14	43%	T	1
13 (15)	362 (393)	Modeling and Forecasting Realized Volatility	Andersen et al.	ecma-03	67%	D	0.25
14 (11)	358 (486)	Financial Dependence and Growth	Rajan ; Zingales	aer-98	40%	D	1
15 (17)	347 (366)	Institutional Investors and Equity Prices	Gompers ; Metrick	qje-01	100%	D	1
16 (26)	341 (300)	Mutual Fund Flows and Performance in Rational Mark	Berk ; Green	jpe-04	100%	D	1
17 (12)	338 (459)	Endogenously Chosen Boards of Directors and Their	Hermalin ; Weisbach	aer-98	100%	D	1
18 (24)	302 (304)	Determining the Number of Factors in Approximate F	Bai ; Ng	ecma-02	50%	D	1
19 (18)	296 (364)	Momentum Investment Strategies, Portfolio Performa	Grinblatt et al.	aer-95	100%	D	1
20 (20)	286 (358)	Do Investors Trade Too Much	Odean	aer(s)-99	100%	T	1
21 (23)	283 (307)	Overconfidence and Speculative Bubbles	Scheinkman ; Xiong	jpe-03	100%	T	1
22 (13)	280 (419)	Risk Taking by Mutual Funds as a Response to Incen	Chevalier ; Ellison	jpe-97	100%	D	1
23 (14)	275 (401)	Corporate Structure, Liquidity, and Investment	Hoshi et al.	qje-91	67%	D	1
24 (28)	272 (287)	Resurrecting the (C)CAPM	Lettau ; Ludvigson	jpe-01	100%	D	1
25 (29)	271 (286)	Boys Will Be Boys	Barber ; Odean	qje-01	50%	D	1
26 (22)	258 (330)	Understanding Risk and Return	Campbell	jpe-96	100%	D	1
27 (16)	255 (381)	Golden Eggs and Hyperbolic Discounting	Laibson	qje-97	33%	D	1
28 (19)	252 (362)	Bond Pricing and the Term Structure of Interest Ra	Heath et al.	ecma-92	50%	T	1
29 (528)	250 (11)	Hazardous Times for Monetary Policy	Jimenez et al.	ecma-14	50%	T	0
30 (34)	250 (264)	The Geography of Investment	Coval ; Moskowitz	jpe-01	100%	T	1
31 (21)	245 (357)	The Variation of Economic Risk Premiums	Ferson ; Harvey	jpe-91	100%	T	1
32 (33)	244 (265)	Managing with Style	Bertrand ; Schoar	qje-03	75%	D	1
33 (365)	231 (24)	Intermediary Asset Pricing	He ; Krishnamurthy	aer-13	80%	T	1
34 (379)	221 (23)	Managerial Miscalibration	Ben-David et al.	qje-13	100%	D	1
35 (287)	221 (38)	Credit Spreads and Business Cycle Fluctuations	Gilchrist ; Zakrajsek	aer(s)-12	50%	D	1
36 (25)	221 (303)	Tobin's q, Corporate Diversification, and Firm Per	Lang ; Stulz	jpe-94	50%	T	0.50
37 (27)	220 (298)	Stock Markets, Banks, and Economic Growth	Levine ; Zervos	aer-98	40%	D	0.50
38 (35)	217 (263)	Liberalization, Moral Hazard in Banking, and Prude	Hellmann et al.	aer-00	100%	T	0.50
39 (55)	214 (188)	Bad Beta, Good Beta	Campbell ; Vuolteenaho	aer-04	100%	D	1
40 (105)	213 (116)	Microstructure Noise, Realized Variance, and Optim	Bandi ; Russell	restud-08	100%	D	1
41 (295)	212 (36)	The Changing of the Boards	Ahern ; Dittmar	qje-12	60%	D	1
42 (32)	210 (269)	Optimal Debt Structure and the Number of Creditors	Bolton ; Scharfstein	jpe-96	100%	T	0.50
43 (38)	203 (247)	Financial Contagion	Allen ; Gale	jpe-00	50%	T	1
44 (31)	202 (271)	Trading Volume and Serial Correlation in Stock Ret	Campbell et al.	qje-93	100%	T	1
45 (86)	201 (135)	On the Nature of Capital Adjustment Costs	Cooper ; Haltiwanger	restud-06	100%	D	1
46 (397)	200 (21)	Credit Constraints, Heterogeneous Firms, and Inter	Manova	restud-13	40%	D	1
47 (46)	198 (209)	Liquidity Risk, Liquidity Creation, and Financial	Diamond ; Rajan	jpe-01	100%	T	1
48 (37)	198 (253)	Does Public Insurance Crowd Out Private Insurance	Cutler ; Gruber	qje-96	100%	D	1
49 (30)	190 (278)	The Role of Demandable Debt in Structuring Optimal	Calomiris ; Kahn	aer-91	100%	T	1
50 (49)	189 (199)	Dividends and Expropriation	Faccio et al.	aer-01	67%	D	0

## 6.6 Code L: Industrial Organization

Table 27 reports the number of published articles with at least one JEL code L, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 996 have at least one JEL code L.

Table 27: Nb of articles with at least one JEL code L

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	310 (100) (31.1)	35 (11.3) (21.9)	39 (12.6) (28.3)	47 (15.2) (22.9)	70 (22.6) (35.4)	119 (38.4) (40.3)
aer (s)	99 (100) (9.9)	8 (8.1) (5.0)	11 (11.1) (8.0)	26 (26.3) (12.7)	24 (24.2) (12.1)	30 (30.3) (10.2)
aer (all)	409 (100) (41.1)	43 (10.5) (26.9)	50 (12.2) (36.2)	73 (17.8) (35.6)	94 (23.0) (47.5)	149 (36.4) (50.5)
ecma (r)	85 (100) (8.5)	18 (21.2) (11.3)	7 (8.2) (5.1)	14 (16.5) (6.8)	19 (22.4) (9.6)	27 (31.8) (9.2)
ecma (s)	7 (100) (0.7)	1 (14.3) (0.6)	. (. ) (.)	3 (42.9) (1.5)	1 (14.3) (0.5)	2 (28.6) (0.7)
ecma (all)	92 (100) (9.2)	19 (20.7) (11.9)	7 (7.6) (5.1)	17 (18.5) (8.3)	20 (21.7) (10.1)	29 (31.5) (9.8)
jpe	169 (100) (17.0)	32 (18.9) (20.0)	35 (20.7) (25.4)	46 (27.2) (22.4)	25 (14.8) (12.6)	31 (18.3) (10.5)
qje	175 (100) (17.6)	41 (23.4) (25.6)	23 (13.1) (16.7)	31 (17.7) (15.1)	35 (20.0) (17.7)	45 (25.7) (15.3)
restud	151 (100) (15.2)	25 (16.6) (15.6)	23 (15.2) (16.7)	38 (25.2) (18.5)	24 (15.9) (12.1)	41 (27.2) (13.9)
All	996 (100) (100)	160 (16.1) (100)	138 (13.9) (100)	205 (20.6) (100)	198 (19.9) (100)	295 (29.6) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Industrial Organization articles are over-represented in the AER (40.4% vs 32.9%), slightly over-represented in JPE and QJE but drastically under-represented in ECMA (9.4% instead of 21%). Table 28 summarizes the distributions of year-normalized citations for JEL code L per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 28: Year-normalized citations for JEL code L

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	283	47.43	58.36	0	4	7	14	30	57	103	147	313	530
aer (s)	97	35.87	54.07	0	0	3	8	20	41	93	138	358	358
aer (all)	380	44.48	57.45	0	3	6	13	27	54	102	139	313	530
ecma (r)	82	63.89	115.06	2	6	7	12	31	71	121	185	743	743
ecma (s)	6	17.55	25.05	3	3	3	4	8	15	68	68	68	68
ecma (all)	88	60.73	111.80	2	4	6	12	28	65	121	185	743	743
jpe	163	41.66	49.86	0	3	5	13	26	51	85	143	241	310
qje	165	57.45	64.25	0	4	6	16	40	73	122	187	291	469
restud	145	35.25	50.24	0	2	4	7	17	46	81	128	200	427
All	941	46.36	63.94	0	3	5	12	27	56	106	150	310	743

Table 29 lists the top 50 articles with at least one JEL code L. See for a precise definition of the different variables Section 6.1.

Table 29: Top 50 articles for  $T = 1991 - 2014$  Code L, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	743 (915)	Automobile Prices in Market Equilibrium	Berry et al.	ecma-95	100%	D	1
2 (2)	655 (710)	The Impact of Trade on Intra-industry Reallocation	Melitz	ecma-03	40%	T	1
3 (3)	530 (678)	Entry, Exit, Growth, and Innovation over the Produ	Klepper	aer-96	100%	T	1
4 (5)	469 (471)	The Regulation of Entry	Djankov et al.	qje-02	67%	D	0.25
5 (4)	427 (526)	Markov-Perfect Industry Dynamics	Ericson ; Pakes	restud-95	100%	D	1
6 (419)	392 (18)	Do Consumers Respond to Marginal or Average Price	Ito	aer-14	60%	D	1
7 (8)	360 (380)	Measuring Market Power in the Ready-to-Eat Cereal	Nevo	ecma-01	100%	D	1
8 (6)	358 (448)	Overconfidence and Excess Entry	Camerer ; Lovall	aer(s)-99	100%	E	1
9 (83)	313 (100)	Multiple-Product Firms and Product Switching	Bernard et al.	aer-10	100%	T	0.67
10 (7)	310 (444)	Competition in the British Electricity Spot Market	Green ; Newbery	jpe-92	100%	T	0
11 (16)	291 (245)	Competition and Innovation	Aghion et al.	qje-05	50%	D	0.40
12 (41)	286 (156)	Reallocation, Firm Turnover, and Efficiency	Foster et al.	aer-08	67%	T	1
13 (9)	276 (379)	Politicians and Firms	Shleifer ; Vishny	qje-94	67%	T	1
14 (10)	269 (366)	Intellectual Human Capital and the Birth of U.S. B	Zucker et al.	aer(s)-98	50%	D	1
15 (35)	267 (168)	Measuring and Explaining Management Practices acro	Bloom ; Van Reenen	qje-07	50%	D	0.25
16 (48)	241 (132)	Trading Tasks	Grossman ; Rossi-Hansberg	aer-08	50%	T	1
17 (39)	241 (162)	Media Bias and Reputation	Gentzkow ; Shapiro	jpe-06	100%	D	1
18 (27)	235 (207)	Some Evidence on the Importance of Sticky Prices	Bils ; Klenow	jpe-04	50%	D	1
19 (21)	233 (234)	Measuring Market Inefficiencies in California's Re	Borenstein et al.	aer-02	100%	D	1
20 (12)	223 (306)	Changes in the Demand for Skilled Labor within U.S	Berman et al.	qje-94	50%	D	1
21 (13)	221 (303)	Tobin's q, Corporate Diversification, and Firm Per	Lang ; Stulz	jpe-94	50%	T	0.50
22 (11)	219 (327)	The Effects of Human Resource Management Practices	Ichniowski et al.	aer-97	40%	D	1
23 (265)	218 (37)	Testing for Altruism and Social Pressure in Charit	DellaVigna et al.	qje-12	50%	D	1
24 (14)	216 (296)	Monetary Policy, Business Cycles, and the Behavior	Gertler ; Gilchrist	qje-94	67%	T	1
25 (31)	207 (174)	A Measure of Media Bias	Groseclose ; Milyo	qje-05	100%	D	1
26 (394)	200 (21)	Credit Constraints, Heterogeneous Firms, and Inter	Manova	restud-13	40%	D	1
27 (24)	198 (215)	On the Evolution of the Firm Size Distribution	Cabral ; Mata	aer-03	100%	D	0.50
28 (15)	195 (291)	Geographic Concentration in U.S. Manufacturing Ind	Ellison ; Glaeser	jpe-97	50%	D	1
29 (49)	193 (130)	Politically Connected Firms	Faccio	aer(s)-06	33%	T	1
30 (17)	190 (244)	Competition and Corporate Performance	Nickell	jpe-96	50%	D	0
31 (19)	188 (241)	The Dynamics of Productivity in the Telecommunicat	Olley ; Pakes	ecma-96	50%	D	1
32 (30)	187 (188)	Integration versus Outsourcing in Industry Equilib	Grossman ; Helpman	qje-02	75%	T	0.75
33 (107)	185 (78)	Market Structure and Multiple Equilibria in Airlin	Ciliberto ; Tamer	ecma-09	80%	E	1
34 (412)	180 (19)	Are Consumers Myopic	Busse et al.	aer-13	67%	D	1
35 (18)	179 (243)	Financial Dependence and Growth	Rajan ; Zingales	aer-98	20%	D	1
36 (416)	176 (18)	Does Management Matter	Bloom et al.	qje-13	33%	D	0.90
37 (612)	174 (8)	Risk Shocks	Christiano et al.	aer-14	20%	D	0.33
38 (20)	174 (238)	The Life Cycle of a Competitive Industry	Jovanovic ; MacDonald	jpe-94	100%	D	1
39 (25)	169 (212)	Measuring Duopoly Power in the British Electricity	Wolfram	aer-99	100%	D	1
40 (69)	165 (104)	Selection, Growth, and the Size Distribution of Fi	Luttmer	qje-07	100%	D	1
41 (75)	163 (103)	Inside the Family Firm	Bennedsen et al.	qje-07	50%	D	0.50
42 (77)	161 (101)	Vertical Relationships between Manufacturers and R	Villas-Boas	restud-07	100%	D	1
43 (338)	159 (27)	Prices, Plant Size, and Product Quality	Kugler ; Verhoogen	restud-12	50%	D	1
44 (199)	159 (51)	What Causes Industry Agglomeration	Ellison et al.	aer-10	40%	D	1
45 (29)	154 (190)	Competition When Consumers Have Switching Costs	Klemperer	restud-95	50%	T	0
46 (37)	152 (165)	Estimating Production Functions Using Inputs to Co	Levinsohn ; Petrin	restud-03	25%	D	1
47 (86)	152 (95)	Internet Advertising and the Generalized Second-Pr	Edelman et al.	aer-07	33%	T	0.67
48 (248)	150 (39)	An Anatomy of International Trade	Eaton et al.	ecma-11	33%	D	0.67
49 (23)	148 (216)	Entry and Competition in Concentrated Markets	Bresnahan ; Reiss	jpe-91	67%	D	1
50 (22)	147 (221)	The Decision to Export in Colombia	Roberts ; Tybout	aer-97	50%	D	1

## 6.7 Code O: Economic Development, Innovation, Technological Change, and Growth

Table 30 reports the number of published articles with at least one JEL code O, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 859 have at least one JEL code O.

Table 30: Nb of articles with at least one JEL code O

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	275 (100) (32.0)	30 (10.9) (23.4)	48 (17.5) (30.4)	54 (19.6) (32.5)	52 (18.9) (29.7)	91 (33.1) (39.2)
aer (s)	70 (100) (8.1)	6 (8.6) (4.7)	7 (10.0) (4.4)	15 (21.4) (9.0)	22 (31.4) (12.6)	20 (28.6) (8.6)
aer (all)	345 (100) (40.2)	36 (10.4) (28.1)	55 (15.9) (34.8)	69 (20.0) (41.6)	74 (21.4) (42.3)	111 (32.2) (47.8)
ecma (r)	52 (100) (6.1)	8 (15.4) (6.3)	8 (15.4) (5.1)	5 (9.6) (3.0)	8 (15.4) (4.6)	23 (44.2) (9.9)
ecma (s)	7 (100) (0.8)	. (. ) (.)	2 (28.6) (1.3)	2 (28.6) (1.2)	1 (14.3) (0.6)	2 (28.6) (0.9)
ecma (all)	59 (100) (6.9)	8 (13.6) (6.3)	10 (16.9) (6.3)	7 (11.9) (4.2)	9 (15.3) (5.1)	25 (42.4) (10.8)
jpe	132 (100) (15.4)	32 (24.2) (25.0)	30 (22.7) (19.0)	22 (16.7) (13.3)	26 (19.7) (14.9)	22 (16.7) (9.5)
qje	207 (100) (24.1)	37 (17.9) (28.9)	42 (20.3) (26.6)	38 (18.4) (22.9)	42 (20.3) (24.0)	48 (23.2) (20.7)
restud	116 (100) (13.5)	15 (12.9) (11.7)	21 (18.1) (13.3)	30 (25.9) (18.1)	24 (20.7) (13.7)	26 (22.4) (11.2)
All	859 (100) (100)	128 (14.9) (100)	158 (18.4) (100)	166 (19.3) (100)	175 (20.4) (100)	232 (27.0) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Code O articles are relatively more present in the AER (39.5 vs 32.9%) and QJE (24.3 vs 15.4%) but less in ECMA (6.6 vs 21%). Table 31 summarizes the distributions of year-normalized citations for JEL code O per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 31: Year-normalized citations for JEL code O

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	252	74.16	111.55	0	6	8	19	39	81	176	265	663	1,070
aer (s)	70	52.08	81.03	0	3	5	12	27	58	103	193	512	512
aer (all)	322	69.36	105.95	0	5	8	16	35	75	175	264	512	1,070
ecma (r)	48	84.35	156.52	2	7	9	14	36	99	181	210	1,055	1,055
ecma (s)	6	41.88	23.13	13	13	13	26	40	53	80	80	80	80
ecma (all)	54	79.64	148.18	2	7	10	15	37	80	178	210	1,055	1,055
jpe	128	54.93	80.42	0	2	4	11	31	60	139	184	426	591
qje	198	108.18	207.63	1	7	12	24	51	104	216	444	1,447	1,609
restud	113	42.19	51.12	1	4	6	10	22	56	110	146	250	268
All	815	73.44	134.72	0	4	7	15	36	78	164	258	645	1,609

Table 32 lists the top 50 articles with at least one JEL code O. See for a precise definition of the different variables Section 6.1.

Table 32: Top 50 articles for  $T = 1991 - 2014$  Code O, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	1609 (2349)	Economic Growth in a Cross Section of Countries	Barro	<a href="#">qje-91</a>	100%	D	1
2 (2)	1447 (2075)	A Contribution to the Empirics of Economic Growth	Mankiw et al.	<a href="#">qje-92</a>	100%	D	1
3 (3)	1429 (1917)	Geographic Localization of Knowledge Spillovers as	Jaffe et al.	<a href="#">qje-93</a>	100%	D	0.67
4 (4)	1070 (1534)	A Sensitivity Analysis of Cross-Country Growth Reg	Levine ; Renelt	<a href="#">aer-92</a>	100%	D	1
5 (5)	1055 (1512)	A Model of Growth through Creative Destruction	Aghion ; Howitt	<a href="#">ecma-92</a>	100%	T	0
6 (6)	767 (1029)	Finance and Growth	King ; Levine	<a href="#">qje-93</a>	100%	D	1
7 (10)	736 (776)	The Colonial Origins of Comparative Development	Acemoglu et al.	<a href="#">aer-01</a>	40%	D	1
8 (7)	663 (909)	Productivity Growth, Technical Progress, and Effic	Fare et al.	<a href="#">aer-94</a>	100%	D	0.25
9 (9)	645 (809)	Why Do Some Countries Produce So Much More Output	Hall ; Jones	<a href="#">qje-99</a>	50%	D	1
10 (8)	612 (893)	The Penn World Table (Mark 5)	Summers ; Heston	<a href="#">qje-91</a>	67%	D	1
11 (12)	591 (728)	R&D-based models of economic growth	Jones	<a href="#">jpe-95</a>	100%	T	1
12 (14)	533 (657)	Growth Empirics	Islam	<a href="#">qje-95</a>	100%	D	1
13 (15)	512 (655)	R&D spillovers and the geography of innovation an	Audretsch ; Feldman	<a href="#">aer(s)-96</a>	50%	D	0.50
14 (11)	491 (734)	Africa's Growth Tragedy	Easterly ; Levine	<a href="#">qje-97</a>	67%	D	1
15 (17)	464 (571)	The Tyranny of Numbers	Young	<a href="#">qje-95</a>	100%	D	1
16 (13)	444 (664)	Does Social Capital Have an Economic Payoff	Knack ; Keefer	<a href="#">qje-97</a>	50%	D	1
17 (16)	426 (611)	Growth in Cities	Glaeser et al.	<a href="#">jpe-92</a>	50%	D	0.25
18 (18)	415 (512)	Economic Growth and the Environment	Grossman ; Krueger	<a href="#">qje-95</a>	50%	D	1
19 (19)	395 (479)	Aid, Policies, and Growth	Burnside ; Dollar	<a href="#">aer-00</a>	67%	D	1
20 (20)	378 (474)	Does Trade Cause Growth	Frankel ; Romer	<a href="#">aer-99</a>	50%	D	1
21 (23)	328 (404)	Time Series Tests of Endogenous Growth Models	Jones	<a href="#">qje-95</a>	100%	D	1
22 (30)	322 (340)	Proofs and Prototypes for Sale	Jensen ; Thursby	<a href="#">aer-01</a>	100%	D	1
23 (33)	321 (323)	R&D Cooperation and Spillovers	Cassiman ; Veugelers	<a href="#">aer(s)-02</a>	100%	D	0
24 (21)	310 (445)	Research Joint Ventures and R	Kamien et al.	<a href="#">aer-92</a>	100%	T	0.33
25 (176)	308 (80)	Trade Liberalization, Exports, and Technology Upgr	Bustos	<a href="#">aer-11</a>	60%	D	0
26 (22)	298 (409)	Distributive Politics and Economic Growth	Alesina ; Rodrik	<a href="#">qje-94</a>	50%	D	1
27 (37)	296 (297)	Reversal of Fortune	Acemoglu et al.	<a href="#">qje-02</a>	40%	D	1
28 (26)	295 (369)	Do Domestic Firms Benefit from Direct Foreign Inve	Aitken ; Harrison	<a href="#">aer-99</a>	50%	D	1
29 (53)	291 (245)	Competition and Innovation	Aghion et al.	<a href="#">qje-05</a>	50%	D	0.40
30 (51)	283 (249)	Economic Shocks and Civil Conflict	Miguel et al.	<a href="#">jpe-04</a>	60%	D	1
31 (25)	271 (372)	Is Inequality Harmful for Growth	Persson ; Tabellini	<a href="#">aer-94</a>	50%	D	0
32 (32)	271 (329)	Population, Technology, and Growth	Galor ; Weil	<a href="#">aer-00</a>	67%	T	0.75
33 (27)	269 (366)	Intellectual Human Capital and the Birth of U.S. B	Zucker et al.	<a href="#">aer(s)-98</a>	50%	D	1
34 (45)	268 (269)	Directed Technical Change	Acemoglu	<a href="#">restud-02</a>	100%	T	1
35 (168)	267 (86)	Learning about a New Technology	Conley ; Udry	<a href="#">aer-10</a>	50%	D	1
36 (123)	266 (112)	Misallocation and Manufacturing TFP in China and I	Hsieh ; Klenow	<a href="#">qje-09</a>	40%	D	1
37 (96)	265 (145)	Trade, Quality Upgrading, and Wage Inequality in t	Verhoogen	<a href="#">qje-08</a>	67%	D	1
38 (24)	265 (387)	Long-Run Policy Analysis and Long-Run Growth	Rebelo	<a href="#">jpe-91</a>	50%	T	0.67
39 (46)	265 (266)	Geographic Localization of International Technolog	Keller	<a href="#">aer-02</a>	100%	D	1
40 (35)	264 (320)	A Reassessment of the Relationship between Inequal	Forbes	<a href="#">aer-00</a>	100%	D	1
41 (34)	258 (323)	The Twin Crises	Kaminsky ; Reinhart	<a href="#">aer-99</a>	40%	D	1
42 (48)	258 (259)	Fear of Floating	Calvo ; Reinhart	<a href="#">qje-02</a>	50%	T	0.75
43 (28)	250 (365)	Financial Intermediation and Endogenous Growth	Bencivenga ; Smith	<a href="#">restud-91</a>	100%	T	1
44 (29)	243 (364)	Long-Run Implications of Investment-Specific Techn	Greenwood et al.	<a href="#">aer-97</a>	100%	D	0.50
45 (31)	232 (333)	Convergence	Barro ; Sala-i-Martin	<a href="#">jpe-92</a>	25%	D	1
46 (36)	220 (298)	Stock Markets, Banks, and Economic Growth	Levine ; Zervos	<a href="#">aer-98</a>	40%	D	0.50
47 (72)	219 (193)	Does Foreign Direct Investment Increase the Produc	Javorcik	<a href="#">aer-04</a>	40%	D	1
48 (60)	219 (220)	Natural Selection and the Origin of Economic Growt	Galor ; Moav	<a href="#">qje-02</a>	100%	T	0.25
49 (39)	216 (296)	The Management of Innovation	Aghion ; Tirole	<a href="#">qje-94</a>	100%	T	0.25
50 (405)	215 (22)	The "Out of Africa" Hypothesis, Human Genetic Dive	Ashraf ; Galor	<a href="#">aer-13</a>	33%	D	1

## 6.8 Code F: International Economics

Table 33 reports the number of published articles with at least one JEL code F, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 543 have at least one JEL code F.

Table 33: Nb of articles with at least one JEL code F

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	191 (100) (35.2)	35 (18.3) (34.0)	41 (21.5) (51.9)	39 (20.4) (33.1)	30 (15.7) (27.5)	46 (24.1) (34.3)
aer (s)	57 (100) (10.5)	11 (19.3) (10.7)	7 (12.3) (8.9)	13 (22.8) (11.0)	15 (26.3) (13.8)	11 (19.3) (8.2)
aer (all)	248 (100) (45.7)	46 (18.5) (44.7)	48 (19.4) (60.8)	52 (21.0) (44.1)	45 (18.1) (41.3)	57 (23.0) (42.5)
ecma (r)	23 (100) (4.2)	5 (21.7) (4.9)	. (. ) (. )	6 (26.1) (5.1)	5 (21.7) (4.6)	7 (30.4) (5.2)
ecma (s)	5 (100) (0.9)	2 (40.0) (1.9)	. (. ) (. )	. (. ) (. )	1 (20.0) (0.9)	2 (40.0) (1.5)
ecma (all)	28 (100) (5.2)	7 (25.0) (6.8)	. (. ) (. )	6 (21.4) (5.1)	6 (21.4) (5.5)	9 (32.1) (6.7)
jpe	72 (100) (13.3)	12 (16.7) (11.7)	14 (19.4) (17.7)	20 (27.8) (16.9)	11 (15.3) (10.1)	15 (20.8) (11.2)
qje	105 (100) (19.3)	22 (21.0) (21.4)	10 (9.5) (12.7)	23 (21.9) (19.5)	23 (21.9) (21.1)	27 (25.7) (20.1)
restud	90 (100) (16.6)	16 (17.8) (15.5)	7 (7.8) (8.9)	17 (18.9) (14.4)	24 (26.7) (22.0)	26 (28.9) (19.4)
All	543 (100) (100)	103 (19.0) (100)	79 (14.5) (100)	118 (21.7) (100)	109 (20.1) (100)	134 (24.7) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. International Economics articles are relatively more present in the AER (45.9 vs 32.9%) and QJE (19.1 vs 15.4%) but less in ECMA (5.4 vs 21%). Table 34 summarizes the distributions of year-normalized citations for JEL code F per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 34: Year-normalized citations for JEL code F

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	183	76.38	106.08	0	7	10	22	45	86	182	239	549	972
aer (s)	57	62.34	134.80	1	2	7	13	19	39	125	382	833	833
aer (all)	240	73.05	113.41	0	7	9	16	39	79	174	270	549	972
ecma (r)	23	113.68	204.93	7	15	19	39	56	70	226	369	982	982
ecma (s)	5	13.78	8.51	4	4	4	7	13	19	25	25	25	25
ecma (all)	28	95.84	189.07	4	7	7	20	47	66	226	369	982	982
jpe	71	67.78	74.47	0	2	7	14	33	103	164	198	383	383
qje	100	85.23	112.71	0	5	8	23	50	108	194	229	658	810
restud	84	53.79	87.10	0	5	6	10	26	61	118	188	651	651
All	523	72.79	110.53	0	5	8	16	39	83	168	230	549	982

Table 35 lists the top 50 articles with at least one JEL code F. See for a precise definition of the different variables Section 6.1.



Table 35: Top 50 articles for  $T = 1991 - 2014$  Code F, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	982 (1064)	The Impact of Trade on Intra-industry Reallocation	Melitz	ecma-03	60%	T	1
2 (2)	972 (1054)	Gravity with Gravitas	Anderson ; van Wincoop	aer-03	100%	D	1
3 (3)	833 (733)	Export versus FDI with Heterogeneous Firms	Helpman et al.	aer(s)-04	100%	D	0.83
4 (9)	810 (442)	Estimating Trade Flows	Helpman et al.	qje-08	100%	D	1
5 (13)	651 (355)	Market Size, Trade, and Productivity	Melitz ; Ottaviano	restud-08	100%	T	0.50
6 (94)	549 (93)	New Trade Models, Same Old Gains	Arkolakis et al.	aer-12	100%	D	1
7 (14)	505 (340)	Globalization and the Gains from Variety	Broda ; Weinstein	qje-06	100%	D	1
8 (4)	467 (575)	Globalization and the Inequality of Nations	Krugman ; Venables	qje-95	100%	T	0.50
9 (31)	449 (245)	Distorted Gravity	Chaney	aer(s)-08	100%	T	1
10 (5)	394 (541)	Protection for Sale	Grossman ; Helpman	aer-94	50%	T	0.50
11 (7)	383 (472)	Exchange Rate Dynamics Redux	Obstfeld ; Rogoff	jpe-95	100%	T	1
12 (8)	382 (471)	National Borders Matter	McCallum	aer(s)-95	100%	D	0
13 (15)	381 (335)	Do We Really Know That the WTO Increases Trade	Rose	aer-04	100%	D	1
14 (6)	378 (474)	Does Trade Cause Growth	Frankel ; Romer	aer-99	50%	D	1
15 (10)	369 (371)	Technology, Geography, and Trade	Eaton ; Kortum	ecma-02	67%	D	1
16 (20)	355 (299)	The Variety and Quality of a Nation's Exports	Hummels ; Klenow	aer-05	100%	D	1
17 (11)	341 (369)	Plants and Productivity in International Trade	Bernard et al.	aer-03	67%	D	0.25
18 (12)	295 (369)	Do Domestic Firms Benefit from Direct Foreign Inve	Aitken ; Harrison	aer-99	50%	D	1
19 (21)	282 (297)	Estimating the Knowledge-Capital Model of the Mult	Carr et al.	aer(s)-01	100%	D	1
20 (97)	275 (88)	Labour Market Rigidities, Trade and Unemployment	Helpman ; Itskhoki	restud-10	100%	T	1
21 (42)	273 (172)	Comparative Advantage and Heterogeneous Firms	Bernard et al.	restud-07	100%	T	0.67
22 (27)	264 (265)	Order Flow and Exchange Rate Dynamics	Evans ; Lyons	jpe-02	100%	D	1
23 (17)	258 (323)	The Twin Crises	Kaminsky ; Reinhart	aer-99	40%	D	1
24 (28)	258 (259)	Fear of Floating	Calvo ; Reinhart	qje-02	50%	T	0.75
25 (18)	250 (320)	Real Exchange Rate Behavior	Lothian ; Taylor	jpe-96	100%	D	0.50
26 (58)	239 (131)	An Equilibrium Model of 'Global Imbalances' and Lo	Caballero et al.	aer-08	75%	T	1
27 (88)	230 (98)	Cultural Biases in Economic Exchange	Guiso et al.	qje-09	50%	D	0.67
28 (22)	230 (283)	Exchange Rates and Fundamentals	Mark	aer-95	100%	D	1
29 (38)	227 (200)	The Modern History of Exchange Rate Arrangements	Reinhart ; Rogoff	qje-04	50%	D	1
30 (151)	226 (59)	An Anatomy of International Trade	Eaton et al.	ecma-11	50%	D	0.67
31 (39)	225 (189)	Monetary Policy and Exchange Rate Volatility in a	Gali ; Monacelli	restud-05	67%	T	0
32 (25)	219 (270)	The Case of the Missing Trade and Other Mysteries	Trefler	aer-95	100%	D	1
33 (365)	218 (10)	Tracing Value-Added and Double Counting in Gross E	Koopman et al.	aer-14	40%	T	0.83
33 (365)	218 (10)	A Balls-and-Bins Model of Trade	Armenter ; Koren	aer(s)-14	100%	D	0.50
35 (16)	217 (325)	An Empirical Assessment of the Proximity-Concentra	Brainard	aer-97	100%	D	1
36 (134)	208 (67)	Imported Intermediate Inputs and Domestic Product	Goldberg et al.	qje-10	67%	D	0
37 (19)	206 (301)	Economic Integration and Endogenous Growth	Rivera-Batiz ; Romer	qje-91	67%	T	1
38 (159)	205 (53)	Trade Liberalization, Exports, and Technology Upgr	Bustos	aer-11	40%	D	0
39 (44)	198 (167)	Exchange Rates and Fundamentals	Engel ; West	jpe-05	100%	D	1
40 (142)	198 (63)	Improved Access to Foreign Markets Raises Plant-Le	Lileeva ; Trefler	qje-10	67%	D	0
41 (32)	197 (240)	Aid, Policies, and Growth	Burnside ; Dollar	aer-00	33%	D	1
42 (46)	195 (164)	International Trade and Macroeconomic Dynamics wit	Ghironi ; Melitz	qje-05	100%	T	0.75
43 (23)	193 (282)	Target Zones and Exchange Rate Dynamics	Krugman	qje-91	100%	T	1
44 (36)	192 (208)	Can Vertical Specialization Explain the Growth of	Yi	jpe-03	75%	D	1
45 (28)	191 (259)	Is Learning by Exporting Important	Clerides et al.	qje-98	50%	D	0.67
46 (33)	189 (237)	An Economic Theory of GATT	Bagwell ; Staiger	aer-99	100%	T	1
47 (40)	188 (189)	Can Sticky Price Models Generate Volatile and Pers	Chari et al.	restud-02	67%	D	1
48 (25)	185 (270)	Exchange Rates and Foreign Direct Investment	Froot ; Stein	qje-91	100%	T	1
49 (24)	185 (276)	Transactions Costs and Nonlinear Adjustment in Rea	Michael et al.	jpe-97	100%	D	0
50 (49)	182 (160)	The Long and Short of the Canada-U.S. Free Trade A	Trefler	aer-04	80%	D	0

## 6.9 Code H: Public Economics

Table 36 reports the number of published articles with at least one JEL code H, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 581 have at least one JEL code H.

Table 36: Nb of articles with at least one JEL code H

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	164 (100) (28.2)	21 (12.8) (29.2)	20 (12.2) (23.0)	28 (17.1) (23.5)	34 (20.7) (30.4)	61 (37.2) (31.9)
aer (s)	82 (100) (14.1)	17 (20.7) (23.6)	10 (12.2) (11.5)	24 (29.3) (20.2)	13 (15.9) (11.6)	18 (22.0) (9.4)
aer (all)	246 (100) (42.3)	38 (15.4) (52.8)	30 (12.2) (34.5)	52 (21.1) (43.7)	47 (19.1) (42.0)	79 (32.1) (41.4)
ecma (r)	40 (100) (6.9)	4 (10.0) (5.6)	9 (22.5) (10.3)	11 (27.5) (9.2)	2 (5.0) (1.8)	14 (35.0) (7.3)
ecma (s)	9 (100) (1.5)	2 (22.2) (2.8)	2 (22.2) (2.3)	1 (11.1) (0.8)	3 (33.3) (2.7)	1 (11.1) (0.5)
ecma (all)	49 (100) (8.4)	6 (12.2) (8.3)	11 (22.4) (12.6)	12 (24.5) (10.1)	5 (10.2) (4.5)	15 (30.6) (7.9)
jpe	102 (100) (17.6)	15 (14.7) (20.8)	29 (28.4) (33.3)	20 (19.6) (16.8)	17 (16.7) (15.2)	21 (20.6) (11.0)
qje	92 (100) (15.8)	8 (8.7) (11.1)	7 (7.6) (8.0)	20 (21.7) (16.8)	24 (26.1) (21.4)	33 (35.9) (17.3)
restud	92 (100) (15.8)	5 (5.4) (6.9)	10 (10.9) (11.5)	15 (16.3) (12.6)	19 (20.7) (17.0)	43 (46.7) (22.5)
All	581 (100) (100)	72 (12.4) (100)	87 (15.0) (100)	119 (20.5) (100)	112 (19.3) (100)	191 (32.9) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Public Economics articles are relatively more present in the AER (41.0 vs 32.9%) and JPE (18.0 vs 15.0%) but less in ECMA (8.8 vs 21%). Table 37 summarizes the distributions of year-normalized citations for JEL code H per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 37: Year-normalized citations for JEL code H

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	145	42.00	42.43	0	5	6	14	30	50	98	129	221	241
aer (s)	78	41.98	99.33	1	5	6	11	22	35	67	149	850	850
aer (all)	223	42.00	67.75	0	5	6	13	26	46	90	129	221	850
ecma (r)	39	35.90	39.62	1	2	4	12	22	45	96	159	165	165
ecma (s)	9	22.47	20.06	1	1	1	5	16	33	55	55	55	55
ecma (all)	48	33.38	36.95	1	2	3	11	22	44	74	124	165	165
jpe	98	36.30	45.23	0	2	4	11	23	47	77	131	318	318
qje	86	51.75	45.23	0	5	7	16	39	81	116	150	186	186
restud	89	23.29	23.41	0	2	3	8	17	31	48	65	124	124
All	544	38.69	53.32	0	3	5	11	25	47	92	124	198	850

Table 38 lists the top 50 articles with at least one JEL code H. See for a precise definition of the different variables Section 6.1.

Table 38: Top 25 articles for  $T = 1991 - 2014$  Code H, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	850 (1032)	Cooperation and Punishment in Public Goods Experim	Fehr ; Gächter	aer(s)-00	100%	E	0
2 (2)	318 (431)	Why Do More Open Economies Have Bigger Governments	Rodrik	jpe-98	67%	D	1
3 (3)	241 (297)	Cooperation in Public-Goods Experiments	Andreoni	aer-95	100%	E	1
4 (29)	221 (94)	Salience and Taxation	Chetty et al.	aer-09	50%	D	1
5 (4)	200 (275)	State Responses to Fiscal Crises	Poterba	jpe-94	100%	T	1
6 (11)	198 (167)	Does Britain or the United States Have the Right G	Parry ; Small	aer(s)-05	100%	D	1
7 (5)	186 (253)	The Behavior of U.S. Public Debt and Deficits	Bohn	qje-98	100%	D	1
8 (142)	186 (32)	The Oregon Health Insurance Experiment	Finkelstein et al.	qje-12	25%	D	0.13
9 (75)	181 (58)	Beyond Markets and States	Ostrom	aer-10	25%	T	1
10 (7)	171 (211)	Incumbent Behavior	Besley ; Case	aer-95	50%	D	1
11 (46)	168 (71)	Taxing Capital	Conesa et al.	aer-09	75%	D	0.67
12 (160)	165 (28)	Bounds on Elasticities with Optimization Frictions	Chetty	ecma-12	50%	D	1
13 (6)	160 (215)	Jeux Sans Frontières	Kanbur ; Keen	aer-93	100%	T	0.50
14 (108)	159 (41)	Unwilling or Unable to Cheat	Kleven et al.	ecma-11	67%	D	0.20
15 (18)	156 (132)	Ethnic Polarization, Potential Conflict, and Civil	Montalvo ; Reynal-Querol	aer(s)-05	50%	T	0.50
16 (58)	156 (66)	E-ZTax	Finkelstein	qje-09	100%	D	1
17 (8)	151 (189)	Public Goods and Ethnic Divisions	Alesina et al.	qje-99	33%	D	1
18 (92)	150 (48)	Teacher Quality in Educational Production	Rothstein	qje-10	33%	D	1
19 (94)	149 (48)	Social Preferences, Beliefs, and the Dynamics of F	Fischbacher ; Gächter	aer(s)-10	25%	E	0
20 (9)	146 (180)	The Effect of Marginal Tax Rates on Taxable Income	Feldstein	jpe-95	100%	D	1
21 (188)	137 (23)	The Impact of Family Income on Child Achievement	Dahl ; Lochner	aer-12	40%	D	0.50
22 (128)	132 (34)	When Is the Government Spending Multiplier Large	Christiano et al.	jpe-11	25%	T	1
23 (129)	131 (34)	Can Hearts and Minds Be Bought	Berman et al.	jpe-11	67%	D	1
24 (132)	130 (34)	Identifying Government Spending Shocks	Ramey	qje-11	25%	D	1
25 (109)	129 (41)	The Macroeconomic Effects of Tax Changes	Romer ; Romer	aer-10	25%	D	1
26 (26)	128 (113)	The Regulation of Labor	Botero et al.	qje-04	25%	D	1
27 (13)	127 (156)	Warm-Glow versus Cold-Prickle	Andreoni	qje-95	100%	E	1
28 (379)	124 (6)	Optimal Taxes on Fossil Fuel in General Equilibriu	Golosov et al.	ecma-14	29%	D	0.50
29 (19)	124 (131)	Using Elasticities to Derive Optimal Income Tax Ra	Saez	restud-01	100%	D	1
30 (37)	120 (81)	Green Markets and Private Provision of Public Good	Kotchen	jpe-06	100%	T	1
31 (21)	116 (126)	Monetary and Nonmonetary Punishment in the Volunta	Masclot et al.	aer(s)-03	50%	T	0
32 (289)	116 (12)	Using Notches to Uncover Optimization Frictions an	Kleven ; Waseem	qje-13	60%	D	0
33 (10)	115 (168)	Willingness to Pay and Willingness to Accept	Hanemann	aer(s)-91	50%	T	1
34 (217)	115 (20)	Comparison Friction	Kling et al.	qje-12	50%	D	0.80
35 (151)	113 (29)	Adjustment Costs, Firm Responses, and Micro vs. Ma	Chetty et al.	qje-11	67%	D	1
36 (22)	113 (122)	Optimal Indirect and Capital Taxation	Golosov et al.	restud-03	100%	T	1
37 (12)	110 (165)	The Proper Scope of Government	Hart et al.	qje-97	50%	T	1
38 (15)	109 (148)	Optimal Income Taxation	Diamond	aer-98	100%	D	1
39 (392)	109 (5)	Measuring the Impacts of Teachers II	Chetty et al.	aer-14	25%	D	1
40 (25)	108 (114)	Gamma Discounting	Weitzman	aer-01	50%	T	1
41 (13)	107 (156)	Income Redistribution in a Common Labor Market	Wildasin	aer-91	100%	T	1
42 (27)	107 (107)	Optimal Income Transfer Programs	Saez	qje-02	75%	T	1
43 (236)	104 (18)	The Aggregate Demand for Treasury Debt	Krishnamurthy ; Vissing	jpe-12	33%	T	1
44 (16)	103 (140)	Federalism and the Soft Budget Constraint	Qian ; Roland	aer-98	75%	D	0.50
45 (104)	103 (44)	The Origins of State Capacity	Besley ; Persson	aer-09	40%	D	0
46 (300)	103 (11)	The Missing Wealth of Nations	Zucman	qje-13	67%	D	0
47 (23)	100 (121)	Comparative Politics and Public Finance	Persson et al.	jpe-00	67%	D	0
48 (405)	98 (5)	Measuring the Impacts of Teachers I	Chetty et al.	aer-14	25%	D	1
49 (307)	96 (10)	A Theory of Optimal Inheritance Taxation	Piketty ; Saez	ecma-13	67%	D	0.50
50 (39)	95 (80)	Dividend Taxes and Corporate Behavior	Chetty ; Saez	qje-05	75%	D	1

## 6.10 Code I: Health, Education, and Welfare

Table 39 reports the number of published articles with at least one JEL code I, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 561 have at least one JEL code I.

Table 39: Nb of articles with at least one JEL code I

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	154 (100) (27.5)	12 (7.8) (22.6)	11 (7.1) (16.4)	24 (15.6) (20.0)	30 (19.5) (23.1)	77 (50.0) (40.3)
aer (s)	76 (100) (13.5)	8 (10.5) (15.1)	10 (13.2) (14.9)	19 (25.0) (15.8)	20 (26.3) (15.4)	19 (25.0) (9.9)
aer (all)	230 (100) (41.0)	20 (8.7) (37.7)	21 (9.1) (31.3)	43 (18.7) (35.8)	50 (21.7) (38.5)	96 (41.7) (50.3)
ecma (r)	41 (100) (7.3)	3 (7.3) (5.7)	6 (14.6) (9.0)	11 (26.8) (9.2)	7 (17.1) (5.4)	14 (34.1) (7.3)
ecma (s)	11 (100) (2.0)	2 (18.2) (3.8)	. (. ) (. )	4 (36.4) (3.3)	2 (18.2) (1.5)	3 (27.3) (1.6)
ecma (all)	52 (100) (9.3)	5 (9.6) (9.4)	6 (11.5) (9.0)	15 (28.8) (12.5)	9 (17.3) (6.9)	17 (32.7) (8.9)
jpe	87 (100) (15.5)	17 (19.5) (32.1)	12 (13.8) (17.9)	23 (26.4) (19.2)	20 (23.0) (15.4)	15 (17.2) (7.9)
qje	137 (100) (24.4)	9 (6.6) (17.0)	23 (16.8) (34.3)	30 (21.9) (25.0)	39 (28.5) (30.0)	36 (26.3) (18.8)
restud	55 (100) (9.8)	2 (3.6) (3.8)	5 (9.1) (7.5)	9 (16.4) (7.5)	12 (21.8) (9.2)	27 (49.1) (14.1)
All	561 (100) (100)	53 (9.4) (100)	67 (11.9) (100)	120 (21.4) (100)	130 (23.2) (100)	191 (34.0) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Code I articles are relatively more present in AER (39.8 vs 32.9%) and qje (25.2 vs 15.4%) but less in ECMA (9 vs 21%) and RESTUD (10.2 vs 15.7%). Table 40 summarizes the distributions of year-normalized citations for JEL code I per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 40: Year-normalized citations for JEL code I

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	130	56.80	53.46	2	8	12	22	42	74	113	184	225	368
aer (s)	74	36.33	31.94	0	3	7	14	24	54	80	111	159	159
aer (all)	204	49.38	47.75	0	7	9	19	35	68	98	137	222	368
ecma (r)	37	68.57	126.50	2	3	6	11	31	80	164	289	733	733
ecma (s)	9	28.29	21.35	3	3	3	13	16	46	59	59	59	59
ecma (all)	46	60.69	114.65	2	3	6	11	30	59	104	173	733	733
jpe	81	47.12	46.57	2	5	7	14	30	60	114	140	200	200
qje	129	72.14	77.64	0	10	13	22	44	101	174	198	313	557
restud	52	23.55	30.74	0	0	2	7	16	29	43	53	189	189
All	512	53.15	64.84	0	5	8	16	32	67	124	174	289	733

Table 41 lists the top 50 articles with at least one JEL code I. See for a precise definition of the different variables Section 6.1.

Table 41: Top 50 articles for  $T = 1991 - 2014$  Code I, normalized per year

$\tilde{R}$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	733 (617)	Teachers, Schools, and Academic Achievement	Rivkin et al.	ecma-05	100%	D	0.67
2 (50)	557 (95)	The Oregon Health Insurance Experiment	Finkelstein et al.	qje-12	75%	D	0.13
3 (2)	368 (388)	The Colonial Origins of Comparative Development	Acemoglu et al.	aer-01	20%	D	1
4 (15)	313 (197)	From the Cradle to the Labor Market	Black et al.	qje-07	100%	D	0.33
5 (3)	290 (363)	Using Maimonides' Rule to Estimate the Effect of C	Angrist ; Lavy	qje-99	100%	D	0.50
6 (9)	289 (254)	Worms	Miguel ; Kremer	ecma-04	67%	D	1
7 (4)	281 (352)	Experimental Estimates of Education Production Fun	Krueger	qje-99	100%	E	1
8 (5)	235 (294)	Do Better Schools Matter	Black	qje-99	100%	D	1
9 (222)	225 (23)	Understanding the Mechanisms through Which an Infl	Heckman et al.	aer-13	60%	E	0.83
10 (6)	222 (273)	Does Head Start Make a Difference	Currie ; Thomas	aer-95	100%	D	1
11 (230)	217 (23)	The Effect of Education on Adult Mortality and Hea	Clark ; Royer	aer-13	75%	D	1
12 (12)	201 (212)	Peer Effects with Random Assignment	Sacerdote	qje-01	50%	D	1
13 (7)	200 (272)	Life Cycle Schooling and Dynamic Selection Bias	Cameron ; Heckman	jpe-98	100%	D	1
14 (10)	198 (240)	Are Recessions Good for Your Health	Ruhm	qje-00	50%	D	1
15 (16)	194 (195)	Longer-Term Effects of Head Start	Garces et al.	aer-02	100%	D	0.67
16 (117)	193 (50)	Accountability and Flexibility in Public Schools	Abdulkadiroglu et al.	qje-11	100%	D	1
17 (28)	189 (160)	The Relationship between Education and Adult Morta	Lleras-Muney	restud-05	50%	D	1
18 (120)	189 (49)	How Does Your Kindergarten Classroom Affect Your E	Chetty et al.	qje-11	50%	E	1
19 (25)	186 (164)	Kidney Exchange	Roth et al.	qje-04	100%	T	0.33
20 (13)	185 (201)	Is More Information Better	Dranove et al.	jpe-03	100%	D	0.25
21 (38)	184 (124)	Estimating Average and Local Average Treatment Eff	Oreopoulos	aer-06	100%	D	0
22 (31)	184 (155)	The Quantity and Quality of Life and the Evolution	Becker et al.	aer-05	100%	D	0.83
23 (183)	181 (31)	The Role of Application Assistance and Information	Bettinger et al.	qje-12	67%	D	0.50
24 (8)	180 (263)	Health Behavior, Health Knowledge, and Schooling	Kenkel	jpe-91	100%	D	1
25 (18)	175 (190)	Rotten Apples	Jacob ; Levitt	qje-03	100%	D	1
26 (11)	174 (223)	Do Doctors Practice Defensive Medicine	Kessler ; McClellan	qje-96	100%	D	1
27 (41)	173 (109)	Experimental Analysis of Neighborhood Effects	Kling et al.	ecma-07	25%	D	1
28 (135)	166 (43)	Financial Incentives and Student Achievement	Fryer	qje-11	100%	D	1
29 (34)	165 (139)	Neighbors as Negatives	Luttmer	qje-05	33%	D	1
30 (14)	165 (200)	The Effects of Class Size on Student Achievement	Hoxby	qje-00	100%	D	1
31 (113)	164 (52)	Estimating the Technology of Cognitive and Noncogn	Cunha et al.	ecma-10	33%	D	0.83
32 (59)	159 (87)	The Impact of Nearly Universal Insurance Coverage	Card et al.	aer(s)-08	100%	T	1
33 (46)	159 (100)	Does Head Start Improve Children's Life Chances	Ludwig ; Miller	qje-07	67%	D	1
34 (123)	150 (48)	Teacher Quality in Educational Production	Rothstein	qje-10	33%	D	1
35 (19)	147 (181)	Finishing High School and Starting College	Evans ; Schwab	qje-95	100%	D	1
36 (21)	147 (178)	Is Hospital Competition Socially Wasteful	Kessler ; McClellan	qje-00	100%	D	1
37 (131)	144 (46)	Does Professor Quality Matter	Carrell ; West	jpe-10	100%	D	1
38 (33)	142 (143)	Economic Status and Health in Childhood	Case et al.	aer-02	33%	T	0
39 (17)	140 (192)	Economic Growth, Population Theory, and Physiology	Fogel	aer-94	50%	T	1
40 (20)	140 (179)	Saving Babies	Currie ; Gruber	jpe-96	100%	D	1
41 (225)	137 (23)	The Impact of Family Income on Child Achievement	Dahl ; Lochner	aer-12	40%	D	0.50
42 (160)	136 (35)	Cash or Condition	Baird et al.	qje-11	67%	E	1
43 (56)	134 (91)	Is the 1918 Influenza Pandemic Over	Almond	jpe-06	50%	D	1
44 (78)	134 (73)	Sources of Advantageous Selection	Fang et al.	jpe-08	100%	T	0.83
45 (64)	132 (83)	Disease and Development	Bleakley	qje-07	50%	D	1
46 (22)	130 (177)	Competition between Private and Public Schools, Vo	Epplé ; Romano	aer-98	67%	T	1
47 (107)	130 (55)	Does Medicare Save Lives	Card et al.	qje-09	100%	D	1
48 (29)	128 (158)	Precautionary Saving and Social Insurance	Hubbard et al.	jpe-95	50%	D	1
49 (144)	128 (41)	Free Distribution or Cost-Sharing	Cohen ; Dupas	qje-10	50%	D	1
50 (23)	124 (169)	Private School Vouchers and Student Achievement	Rouse	qje-98	100%	D	1

## 6.11 Code R: Urban, Rural, Regional, Real Estate, and Transportation Economics

Table 42 reports the number of published articles with at least one JEL code R, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 276 have at least one JEL code R.

Table 42: Nb of articles with at least one JEL code R

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	77 (100) (27.9)	3 (3.9) (11.5)	8 (10.4) (26.7)	14 (18.2) (22.6)	12 (15.6) (21.4)	40 (51.9) (39.2)
aer (s)	36 (100) (13.0)	6 (16.7) (23.1)	3 (8.3) (10.0)	11 (30.6) (17.7)	8 (22.2) (14.3)	8 (22.2) (7.8)
aer (all)	113 (100) (40.9)	9 (8.0) (34.6)	11 (9.7) (36.7)	25 (22.1) (40.3)	20 (17.7) (35.7)	48 (42.5) (47.1)
ecma (r)	19 (100) (6.9)	2 (10.5) (7.7)	. (. ) (. )	4 (21.1) (6.5)	3 (15.8) (5.4)	10 (52.6) (9.8)
ecma (s)	1 (100) (0.4)	. (. ) (. )	. (. ) (. )	1 (100.0) (1.6)	. (. ) (. )	. (. ) (. )
ecma (all)	20 (100) (7.2)	2 (10.0) (7.7)	. (. ) (. )	5 (25.0) (8.1)	3 (15.0) (5.4)	10 (50.0) (9.8)
jpe	51 (100) (18.5)	8 (15.7) (30.8)	9 (17.6) (30.0)	15 (29.4) (24.2)	11 (21.6) (19.6)	8 (15.7) (7.8)
qje	63 (100) (22.8)	7 (11.1) (26.9)	8 (12.7) (26.7)	14 (22.2) (22.6)	13 (20.6) (23.2)	21 (33.3) (20.6)
restud	29 (100) (10.5)	. (. ) (. )	2 (6.9) (6.7)	3 (10.3) (4.8)	9 (31.0) (16.1)	15 (51.7) (14.7)
All	276 (100) (100)	26 (9.4) (100)	30 (10.9) (100)	62 (22.5) (100)	56 (20.3) (100)	102 (37.0) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Code R articles are relatively more present in AER (39.5 vs 32.9%), JPE (19.0 vs 15.0%) and QJE (23.2 vs 15.4%) but less in ECMA (7.6 vs 21%) and RESTUD (10.6 vs 15.7%). Table 43 summarizes the distributions of year-normalized citations for JEL code R per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 43: Year-normalized citations for JEL code R

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	68	50.82	63.26	3	6	7	13	24	60	159	180	337	337
aer (s)	36	59.24	99.61	2	3	7	16	22	61	154	310	512	512
aer (all)	104	53.74	77.40	2	6	7	14	23	61	154	202	337	512
ecma (r)	19	69.91	83.73	0	0	3	22	38	87	184	346	346	346
ecma (s)	1	198.30	.	198	198	198	198	198	198	198	198	198	198
ecma (all)	20	76.33	86.41	0	2	5	24	41	112	191	272	346	346
jpe	50	85.80	216.31	1	7	8	13	25	77	155	232	1,491	1,491
qje	61	71.60	74.06	4	9	12	24	48	82	167	211	370	370
restud	28	39.45	49.50	4	5	8	10	20	48	109	111	230	230
All	263	64.17	115.66	0	6	8	13	28	70	154	204	426	1,491

Table 44 lists the top 25 articles with at least one JEL code R. See for a precise definition of the different variables Section 6.1.



Table 44: Top 25 articles for  $T = 1991 - 2014$  Code R, normalized per year

$\tilde{R}(R)$	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	1491 (2176)	Increasing Returns and Economic Geography	Krugman	jpe-91	100%	T	1
2 (2)	512 (655)	R&D spillovers and the geography of innovation an	Audretsch ; Feldman	aer(s)-96	50%	D	0.50
3 (3)	426 (611)	Growth in Cities	Glaeser et al.	jpe-92	50%	D	0.25
4 (4)	370 (464)	Zipf's Law for Cities	Gabaix	qje-99	100%	D	1
5 (11)	346 (218)	Experimental Analysis of Neighborhood Effects	Kling et al.	ecma-07	50%	D	1
6 (5)	337 (431)	Productivity and the Density of Economic Activity	Ciccone ; Hall	aer-96	67%	D	0.75
7 (6)	310 (396)	Company-Scientist Locational Links	Audretsch ; Stephan	aer(s)-96	100%	T	0.50
8 (8)	283 (298)	Loss Aversion and Seller Behavior	Genesove ; Mayer	qje-01	100%	D	0.50
9 (43)	250 (80)	The Geographic Determinants of Housing Supply	Saiz	qje-10	67%	D	1
10 (7)	232 (333)	Convergence	Barro ; Sala-i-Martin	jpe-92	25%	D	1
11 (13)	230 (194)	Testing for Localization Using Micro-geographic Da	Duranton ; Overman	restud-05	100%	D	0
12 (27)	211 (142)	Causes of Sprawl	Burchfield et al.	qje-06	100%	D	0
13 (60)	208 (54)	The Fundamental Law of Road Congestion	Duranton ; Turner	aer-11	100%	T	0
14 (62)	204 (53)	The Area and Population of Cities	Rozenfeld et al.	aer(s)-11	100%	D	0.88
15 (12)	202 (213)	Moving to Opportunity in Boston	Katz et al.	qje-01	67%	E	1
16 (98)	202 (21)	The Growth of Low-Skill Service Jobs and the Polar	Autor ; Dorn	aer-13	33%	T	0.50
17 (21)	198 (167)	Uncovering the Distribution of Motorists' Preferen	Small et al.	ecma(s)-05	100%	E	0.67
18 (9)	195 (291)	Geographic Concentration in U.S. Manufacturing Ind	Ellison ; Glaeser	jpe-97	50%	D	1
19 (16)	184 (185)	Technology, Geography, and Trade	Eaton ; Kortum	ecma-02	33%	D	1
20 (23)	180 (158)	Gibrat's Law for (All) Cities	Eeckhout	aer-04	100%	D	1
21 (46)	175 (74)	The Consequences of Mortgage Credit Expansion	Mian ; Sufi	qje-09	33%	D	1
22 (26)	173 (146)	Urban Decline and Durable Housing	Glaeser ; Gyourko	jpe-05	100%	T	1
23 (18)	171 (181)	Nursery Cities	Duranton ; Puga	aer-01	67%	D	0
24 (10)	167 (224)	Workings of a City	Benabou	qje-93	100%	T	1
25 (30)	160 (135)	House Prices, Borrowing Constraints, and Monetary	Iacoviello	aer-05	50%	D	1

## 6.12 Code Q: Agricultural and Natural Resource Economics ; Environmental and Ecological Economics

Table 45 reports the number of published articles with at least one JEL code Q, for each journal and both the full period and our five subperiods. Publications in the AER and ECMA are decomposed in regular and shorter publications. It shows that out of 6,816 articles 244 have at least one JEL code Q.

Table 45: Nb of articles with at least one JEL code Q

	All years	91-95	96-00	01-05	06-10	11-15
aer (r)	75 (100) (30.7)	12 (16.0) (28.6)	9 (12.0) (20.9)	6 (8.0) (14.6)	11 (14.7) (26.8)	37 (49.3) (48.1)
aer (s)	42 (100) (17.2)	8 (19.0) (19.0)	10 (23.8) (23.3)	13 (31.0) (31.7)	5 (11.9) (12.2)	6 (14.3) (7.8)
aer (all)	117 (100) (48.0)	20 (17.1) (47.6)	19 (16.2) (44.2)	19 (16.2) (46.3)	16 (13.7) (39.0)	43 (36.8) (55.8)
ecma (r)	17 (100) (7.0)	2 (11.8) (4.8)	1 (5.9) (2.3)	3 (17.6) (7.3)	1 (5.9) (2.4)	10 (58.8) (13.0)
ecma (s)	3 (100) (1.2)	1 (33.3) (2.4)	. (. ) (. )	1 (33.3) (2.4)	. (. ) (. )	1 (33.3) (1.3)
ecma (all)	20 (100) (8.2)	3 (15.0) (7.1)	1 (5.0) (2.3)	4 (20.0) (9.8)	1 (5.0) (2.4)	11 (55.0) (14.3)
jpe	50 (100) (20.5)	11 (22.0) (26.2)	15 (30.0) (34.9)	11 (22.0) (26.8)	7 (14.0) (17.1)	6 (12.0) (7.8)
qje	34 (100) (13.9)	4 (11.8) (9.5)	4 (11.8) (9.3)	3 (8.8) (7.3)	11 (32.4) (26.8)	12 (35.3) (15.6)
restud	23 (100) (9.4)	4 (17.4) (9.5)	4 (17.4) (9.3)	4 (17.4) (9.8)	6 (26.1) (14.6)	5 (21.7) (6.5)
All	244 (100) (100)	42 (17.2) (100)	43 (17.6) (100)	41 (16.8) (100)	41 (16.8) (100)	77 (31.6) (100)

This table should be compared with Table 1. If all JEL codes were equally represented in each journal, the percentages of both tables would be the same. Code Q articles are relatively more present in AER (46.3 vs 32.9%), JPE (21.6 vs 15.0%) but less in ECMA (8.4 vs 21%) and RESTUD (10.1 vs 15.7%). Table 46 summarizes the distributions of year-normalized citations for JEL code Q per journal (year 2015 is excluded here). They should be compared to the ones of Table 9.

Table 46: Year-normalized citations for JEL code Q

	N	mean	$\sigma$	min	p5	p10	p25	p50	p75	p90	p95	p99	max
aer (r)	64	71.48	76.43	3	6	9	17	45	95	167	226	389	389
aer (s)	41	56.47	78.60	0	1	3	9	24	56	169	208	367	367
aer (all)	105	65.62	77.26	0	3	6	14	41	85	169	226	367	389
ecma (r)	16	56.22	62.03	2	2	6	24	30	76	123	249	249	249
ecma (s)	3	9.41	3.83	5	5	5	5	10	13	13	13	13	13
ecma (all)	19	48.83	59.29	2	2	5	10	27	71	123	249	249	249
jpe	49	37.80	39.69	1	3	5	9	22	55	100	119	171	171
qje	31	51.47	72.82	2	3	11	19	36	56	76	125	415	415
restud	23	29.07	48.59	2	4	4	7	17	27	43	112	226	226
All	227	52.57	66.92	0	3	5	13	28	66	131	184	367	415

Table 47 lists the top 25 articles with at least one JEL code Q. See for a precise definition of the different

variables Section 6.1.

Table 47: Top 25 articles for  $T = 1991 - 2014$  Code Q, normalized per year

$\tilde{R}_i$ (R)	$\tilde{C}_i(C_i)$	Title	Authors	Journal	pct	Type	USA
1 (1)	415 (512)	Economic Growth and the Environment	Grossman ; Krueger	qje-95	50%	D	1
2 (42)	389 (66)	The Environment and Directed Technical Change	Acemoglu et al.	aer-12	67%	T	0.88
3 (14)	367 (156)	Not All Oil Price Shocks Are Alike	Kilian	aer(s)-09	50%	D	1
4 (2)	319 (437)	The Impact of Global Warming on Agriculture	Mendelsohn et al.	aer-94	100%	D	0.67
5 (125)	249 (11)	Optimal Taxes on Fossil Fuel in General Equilibriu	Golosov et al.	ecma-14	57%	D	0.50
6 (3)	243 (305)	Unbiased Value Estimates for Environmental Goods	Cummings ; Taylor	aer(s)-99	100%	D	1
7 (45)	243 (63)	Nudging Farmers to Use Fertilizer	Duflo et al.	aer-11	100%	E	0.83
8 (4)	226 (289)	A Regional Dynamic General-Equilibrium Model of AI	Nordhaus ; Yang	aer-96	100%	T	1
9 (101)	226 (23)	Commodity Price Shocks and Civil Conflict	Dube ; Vargas	restud-13	57%	D	0.50
10 (5)	208 (285)	Environmental Levies and Distortionary Taxation	de Bovenberg ; Mooij	aer(s)-94	100%	T	0
11 (6)	196 (242)	Homegrown Values and Hypothetical Surveys	Cummings et al.	aer(s)-95	100%	T	1
12 (23)	184 (116)	The Economic Impacts of Climate Change	Deschenes ; Greenstone	aer-07	80%	D	1
13 (47)	181 (58)	Beyond Markets and States	Ostrom	aer-10	25%	T	1
14 (8)	171 (211)	Can Markets Value Air Quality	Smith ; Huang	jpe-95	100%	D	1
15 (7)	169 (216)	Optimal Environmental Taxation in the Presence of	Bovenberg ; Goulder	aer(s)-96	100%	T	0.50
16 (11)	167 (177)	Is Free Trade Good for the Environment	Antweiler et al.	aer-01	50%	D	0.33
17 (15)	152 (153)	Induced Innovation and Energy Prices	Popp	aer-02	67%	D	1
18 (10)	145 (178)	Property Rights and Investment Incentives	Besley	jpe-95	50%	D	0
19 (115)	135 (14)	Identifying Supply and Demand Elasticities of Agri	Roberts ; Schlenker	aer-13	100%	D	1
20 (60)	134 (43)	Learning about a New Technology	Conley ; Udry	aer-10	25%	D	1
21 (9)	133 (191)	Rural Reforms and Agricultural Growth in China	Lin	aer-92	50%	D	0
22 (26)	132 (111)	Will U.S. Agriculture Really Benefit from Global W	Schlenker et al.	aer(s)-05	100%	D	1
23 (153)	131 (6)	Knowledge Is (Less) Power	Jessoe ; Rapson	aer(s)-14	33%	E	1
23 (153)	131 (6)	Do Consumers Respond to Marginal or Average Price	Ito	aer-14	20%	D	1
25 (63)	125 (40)	The Geographic Determinants of Housing Supply	Saiz	qje-10	33%	D	1

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## APPENDIX

### A Types

Table 48 shows (pooling all 5 journals) how many articles of each type have been published overall and during each time period.

Table 48: Nb of articles per type and per time period

	All years	91-95	96-00	01-05	06-10	11-15
Data	2,865	473	460	586	608	738
(%)	(42.0)	(33.6)	(38.5)	(41.5)	(45.5)	(50.5)
Expe	477	58	60	83	135	141
(%)	(7.0)	(4.1)	(5.0)	(5.9)	(10.1)	(9.6)
Theo	3,474	877	676	744	594	583
(%)	(51.0)	(62.3)	(56.5)	(52.7)	(44.4)	(39.9)
All	6,816	1,408	1,196	1,413	1,337	1,462
(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

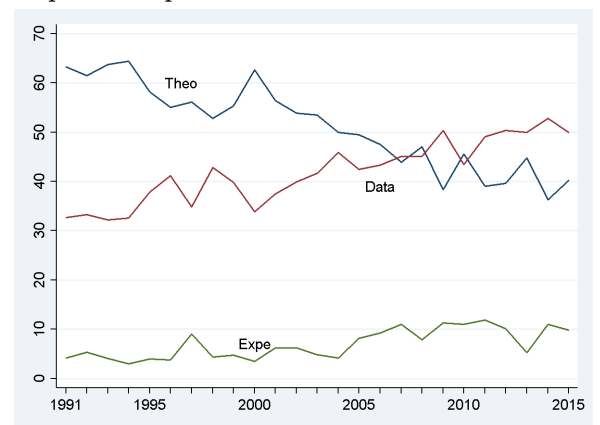


Table 49 details (pooling all years) how many articles of each type have been published in each journal.

Table 49: Nb of articles per journal and per type (all years)

	All types	Data	Expe	Theo
aer (r)	1,555 (100%)	667 (42.9%)	143 (9.2%)	745 (47.9%)
aer (s)	689 (100%)	175 (25.4%)	61 (8.9%)	453 (65.7%)
aer (all)	2,244 (100%)	842 (37.5%)	204 (9.1%)	1,198 (53.4%)
ecma (r)	1,078 (100%)	474 (44.0%)	99 (9.2%)	505 (46.8%)
ecma (s)	351 (100%)	165 (47.0%)	26 (7.4%)	160 (45.6%)
ecma (all)	1,429 (100%)	639 (44.7%)	125 (8.7%)	665 (46.5%)
jpe	1,021 (100%)	456 (44.7%)	36 (3.5%)	529 (51.8%)
qje	1,053 (100%)	558 (53.0%)	59 (5.6%)	436 (41.4%)
restud	1,069 (100%)	370 (34.6%)	53 (5.0%)	646 (60.4%)
All	6,816 (100%)	2,865 (42.0%)	477 (7.0%)	3,474 (51.0%)