Table A1

*Distribution of authors across topics*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Main topic | Assigned papers | Papers co-authored by central banker(s) | | | Share of papers co-authored by central banker(s) |
|  |  | Web of Science Records | CVs | Web of Science Records  Or  CVs |  |
| 0 | 852 | 12 | 20 | 29 | 3.0 % |
| 1 | 1214 | 115 | 163 | 203 | 16.0 % |
| 2 | 1838 | 111 | 190 | 235 | 12.0 % |
| 3 | 1464 | 54 | 101 | 119 | 8.0 % |
| 4 | 2125 | 133 | 265 | 319 | 15 % |
| 5 | 1239 | 20 | 43 | 52 | 4.0 % |
| 6 | 1911 | 105 | 176 | 217 | 11.0 % |
| 7 | 930 | 17 | 26 | 32 | 3.0 % |
| 8 | 1926 | 13 | 27 | 31 | 1.0 % |
| 9 | 1616 | 449 | 615 | 698 | 43.0 % |
| 10 | 1388 | 38 | 57 | 73 | 5.0 % |
| 11 | 1825 | 131 | 200 | 247 | 13.0 % |
| 12 | 3201 | 159 | 186 | 249 | 7.0 % |
| 13 | 1786 | 89 | 140 | 164 | 9.0 % |
| 14 | 2162 | 78 | 89 | 136 | 6.0 % |
| 15 | 1630 | 13 | 27 | 31 | 1.0 % |
| 16 | 1723 | 107 | 171 | 212 | 12.0 % |
| 17 | 1892 | 563 | 623 | 817 | 43.0 % |
| 18 | 1347 | 76 | 65 | 111 | 8.0 % |
| 19 | 1607 | 57 | 84 | 109 | 6.0 % |
| 20 | 1030 | 163 | 202 | 267 | 25.0 % |
| 21 | 1144 | 48 | 83 | 107 | 9.0 % |
| 22 | 1784 | 147 | 213 | 270 | 15.0 % |
| 23 | 629 | 35 | 46 | 55 | 8.0 % |
| 24 | 958 | 50 | 72 | 93 | 9.0 % |
| 25 | 1212 | 31 | 45 | 56 | 4.0 % |
| 26 | 1554 | 75 | 124 | 148 | 9.0 % |
| 27 | 1241 | 13 | 43 | 48 | 3.0 % |
| 28 | 1856 | 45 | 148 | 164 | 8.0 % |
| 29 | 1336 | 20 | 57 | 66 | 4.0 % |
| 30 | 1482 | 55 | 108 | 124 | 8.0 % |
| 31 | 1370 | 127 | 162 | 212 | 15.0 % |
| 32 | 1752 | 72 | 104 | 135 | 7.0 % |
| 33 | 882 | 128 | 159 | 206 | 23.0 % |
| 34 | 1237 | 208 | 298 | 350 | 28.0 % |
| 35 | 1821 | 461 | 569 | 723 | 39.0 % |
| 36 | 1632 | 105 | 144 | 189 | 11.0 % |
| 37 | 1196 | 36 | 80 | 97 | 8.0 % |
| 38 | 1560 | 47 | 144 | 166 | 10.0 % |
| 39 | 1763 | 49 | 92 | 117 | 6.0 % |

*Main topic* refers to the categorization of papers according to their major topic. As every paper is assigned to all topics according to a certain score, we take the highest percentage value to determine the main topic for a paper. This gives us the number of papers assigned to each topic (*Assigned papers*). *Number of Papers Co-authored by central banker(s)*reports the number of papers who have at least one central bank author according to Web of Science (*Based on Web of Science Records*), CV data (*CV data*) or either of the two (*Web of Science Records* or CVs).

Table A2

*Papers citing and cited by sequence 7 (Efficient Market Hypothesis)*

|  |  |
| --- | --- |
| Citing Papers | |
| **Sequence** | **Citations** |
| 7 (EMH) | 37380 (44.09%) |
| 8 (Financial Governance) | 13780 (16, 37%) |
| 5 (Financial Market Governance) | 12655 (15.03%) |
| 13 (Finance) | 4194 (4.08%) |
| 19 (Finance) | 3005 (3.07%) |
| **Cited papers** | |
| **Sequence** | **Citations** |
| 44 (Finance) | 33009 (29.02%) |
| 7 (Efficient Market Hypothesis) | 32429[[1]](#footnote-2) (28.0%) |
| 8 (Financial Governance) | 14498 (12.08%) |
| 41 (Finance) | 10888 (9.07%) |
| 33 (Game Theory) | 3432 (3.05%) |

Table A3

*Papers citing and cited by sequence 8 (Financial Governance)*

|  |  |
| --- | --- |
| **Cited papers** | |
| **Sequence** | **Citations** |
| 8 (Financial Governance) | 68132 (59.07 %) |
| 7 (Efficient Market Hypothesis) | 13721 (11.04 %) |
| 0 (Finance) | 5609 (4.08 %) |
| 12 (Game Theory) | 3285 (2.06 %) |
| 5 (Finance) | 2845 (2.07 %) |
| **Citing papers** | |
| **Sequence** | **Citations** |
| 8 (Financial Governance) | 56106 (36.03 %) |
| 41 (Finance) | 36062 (23.16 %) |
| 42 (Financial Crises) | 14048 (9.02 %) |
| 7 (Efficient Market Hypothesis) | 9754 (6.26 %) |
| 44 (Finance) | 6810 (4.37 %) |

Table A4

*Papers citing and cited by sequence 19 (incomplete financial markets)*

|  |  |
| --- | --- |
| **Cited papers** | |
| **Sequence** | **Citations** |
| 13 (Finance) | 6962 (17.94 %) |
| 19 (Finance) | 6354 (16.37 %) |
| 5 (Finance) | 6257 (16.12 %) |
| 1 (Econometrics) | 5565 (14.34 %) |
| 7 (Efficient Market Hypothesis) | 4276 (11.02 %) |
| **Citing papers** | |
| **Sequence** | **Citations** |
| 44 (Finance) | 2170 (18 %) |
| 19 (Finance) | 1773 (14.7 %) |
| 37 (Macroeconomics) | 1669 (13.8 %) |
| 7 (Efficient Market Hypothesis) | 1001 (8.29 %) |
| 43 (Finance) | 686 (5.68 %) |

Table A5

*Papers citing and cited by sequence 42 (Financial Crises)*

|  |  |
| --- | --- |
| **Cited papers** | |
| **Sequence** | **Citations** |
| Financial Governance (8) | 13583 (35.03 %) |
| Financial Crises (42) | 3494 (9.01 %) |
| Macroeconomics (37) | 3346 (8.03 %) |
| Efficient Market Hypothesis (7) | 2530 (6.03 %) |
| Game Theory (12) | 1493 (3.05 %) |
| **Citing papers** | |
| **Sequence** | **Citations** |
| Financial Crises (42) | 6061 (59.3 %) |
| Macroeconomics (37) | 1074 (10.51 %) |
| Finance (41) | 807 (7.9 %) |
| Finance (44) | 799 (7.82 %) |
| Economics of Education (47) | 426 (4.17 %) |

Table A6

*Sequences classified*

|  |  |
| --- | --- |
| Theme | Associated Sequences |
| Finance | 5, 7, 8, 13, 14, 19, 39, 40, 41, 42, 43, 44 |
| Macroeconomics | 6, 9, 11, 18, 22, 26, 29 (?), 32, 37 |
| Endogenous Growth | 0, 24, 25, 38 |
| Econometrics | 1, 16, 23 |
| Consumption under Uncertainty | 2, 15, 17, 21, 27, 31 |
| Game Theory | 3, 12, 28, 33 |
| Globalization | 20, 30, 35, 36, 45 |
| Economics of Education | 34, 47 |
| Insurance | 4 |
| Regulation & Asymmetrical Information | 10 |
| Experiments | 46 |

Table A7

*Average edges of inter-cluster relationships 1990-2007:*

*Average papers vs crises papers*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Average papers | | | | Crises papers | | | |
|  | Macroeconomics | Financial governance | finance (EMH) | Finance (volatility) | Macroeconomics | Financial governance | Finance (EMH) | Finance (volatility) |
| Macroeconomics | 134 | 30 | 12 | 33 | 219 | 82 | 15 | 30 |
| Financial governance | 24 | 262 | 77 | 32 | 29 | 435 | 43 | 34 |
| Finance (EMH) | 21 | 165 | 221 | 95 | 30 | 170 | 371 | 109 |
| Finance (volatility) | 48 | 58 | 80 | 182 | 24 | 95 | 60 | 297 |

The results are rounded to whole numbers.

Table A8

*Average edges of inter-cluster relationships 2008-2019:*

*Average papers vs crises papers*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Average papers | | | Crises papers | | |
|  | Financial Governance | Finance | Macroeconomics | Financial Governance | Finance | Macroeconomics |
| Financial Governance | 369 | 255 | 62 | 525 | 193 | 96 |
| Finance | 227 | 431 | 91 | 369 | 797 | 120 |
| Macroeconomics | 58 | 96 | 246 | 189 | 119 | 424 |

The results are rounded to whole numbers.

Table A9

*Paper distribution* *of Sequence 42 according to Journals*

|  |  |  |
| --- | --- | --- |
| Journal | Freq | % |
| JOURNAL OF MONEY CREDIT AND BANKING | 178 | 8.01% |
| AMERICAN ECONOMIC REVIEW | 164 | 7.05% |
| ECONOMICS LETTERS | 161 | 7.01% |
| REVIEW OF FINANCIAL STUDIES | 156 | 7.08% |
| JOURNAL OF FINANCIAL ECONOMICS | 127 | 5.03% |
| JOURNAL OF FINANCIAL INTERMEDIATION | 122 | 5.09% |
| JOURNAL OF ECONOMIC DYNAMICS & CONTROL | 115 | 5.07% |
| JOURNAL OF ECONOMIC THEORY | 108 | 5.04% |
| JOURNAL OF MONETARY ECONOMICS | 105 | 4.00% |
| JOURNAL OF FINANCE | 99 | 4.02% |
| REAL ESTATE ECONOMICS | 87 | 4.06% |
| JOURNAL OF INTERNATIONAL ECONOMICS | 86 | 4.01% |
| REVIEW OF FINANCE | 75 | 3.00% |
| EUROPEAN ECONOMIC REVIEW | 67 | 3.03% |
| ECONOMIC THEORY | 66 | 3.08% |
| ANNUAL REVIEW OF FINANCIAL ECONOMICS | 49 | 2.09% |
| INTERNATIONAL ECONOMIC REVIEW | 44 | 2.05% |
| REVIEW OF ECONOMIC STUDIES | 41 | 1.01% |
| ECONOMIC JOURNAL | 36 | 1.08% |
| JOURNAL OF FINANCIAL AND QUANTITATIVE ANALYSIS | 33 | 1.04% |
| ECONOMETRICA | 29 | 1.05% |
| JOURNAL OF ECONOMIC PERSPECTIVES | 29 | 1.05% |
| JOURNAL OF POLITICAL ECONOMY | 29 | 1.05% |
| REVIEW OF ECONOMICS AND STATISTICS | 25 | 1.07% |
| JOURNAL OF DEVELOPMENT ECONOMICS | 24 | 1.02% |
| QUARTERLY JOURNAL OF ECONOMICS | 23 | 1.07% |
| JOURNAL OF ACCOUNTING RESEARCH | 16 | 0.05% |
| SCANDINAVIAN JOURNAL OF ECONOMICS | 15 | 0.00% |
| JOURNAL OF ACCOUNTING & ECONOMICS | 10 | 0.07% |
| MATHEMATICAL FINANCE | 6 | 0.08% |
| CONTEMPORARY ACCOUNTING RESEARCH | 5 | 0.03% |
| JOURNAL OF PUBLIC ECONOMICS | 5 | 0.03% |
| FINANCE AND STOCHASTICS | 4 | 0.09% |
| JOURNAL OF ECONOMETRICS | 3 | 0.04% |
| JOURNAL OF WORLD BUSINESS | 1 | 0.05% |
| JOURNAL OF RISK AND UNCERTAINTY  JOURNAL OF FINANCIAL ECONOMETRICS  Total | 0  0  2143 | 0%  0%  100.00% |

Table A10

*Most cited papers in the inter-cluster network* *of Macroeconomics and Financial Governance/Macro-finance 2008-2019*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| list\_ref | Freq | in\_corpus | t9t34 | Seq42 |
| KIYOTAKI N 1997 J POLIT ECON | 32472 | 1 | 1 | 0 |
| BERNANKE B 1989 AM ECON REV | 13806 | 0 | 0 | 0 |
| DIAMOND DW 1983 J POLIT ECON | 9835 | 0 | 0 | 0 |
| STOCK JH 2002 J BUS ECON STAT | 5290 | 0 | 0 | 0 |
| HOLMSTROM B 1997 Q J ECON | 5211 | 1 | 1 | 0 |
| BERNANKE BS 1999 HBK ECON | 4850 | 0 | 0 | 0 |
| REINHART CM 2009 THIS TIME IS DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY | 4464 | 0 | 0 | 0 |
| BLOOM N 2009 ECONOMETRICA | 4080 | 1 | 0 | 0 |
| HOLMSTROM B 1998 J POLIT ECON | 3420 | 1 | 1 | 0 |
| BRUNNERMEIER MK 2009 J ECON PERSPECT | 3277 | 1 | 0 | 0 |

Explanation of the main columns: Freq = Number of times cited, according to Web of Science; In\_corpus = Reports whether the paper is within our corpus of papers or not; T9t34 = reports whether the paper has a value of above 0.2 for the topics 9 and/or 34 (topics on financial crises); Seq 42= reports whether a paper is a member of Sequence 42

Table A11

*Most cited papers in the inter-cluster network of Macroeconomics*

*and Finance 2008-2019*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Freq | in\_corpus | t9t34 | seq42 |
| NEWEY WK 1987 ECONOMETRICA | 32351 | 0 | 0 | 0 |
| HAMILTON J. D. 1994 TIME SERIES ANAL | 12720 | 0 | 0 | 0 |
| BANSAL R 2004 J FINANC | 11005 | 1 | 0 | 0 |
| BLOOM N 2009 ECONOMETRICA | 10370 | 1 | 0 | 0 |
| KIYOTAKI N 1997 J POLIT ECON | 10086 | 1 | 1 | 0 |
| CAMPBELL JY 1999 J POLIT ECON | 9600 | 1 | 0 | 0 |
| EPSTEIN LG 1989 ECONOMETRICA | 9432 | 0 | 0 | 0 |
| DIEBOLD FX 1995 J BUS ECON STAT | 8165 | 0 | 0 | 0 |
| HANSEN LP 1982 ECONOMETRICA | 7686 | 0 | 0 | 0 |
| LUCAS RE 1978 ECONOMETRICA | 6970 | 0 | 0 | 0 |

Explanation of the main columns: Freq = Number of times cited, according to Web of Science; In\_corpus = Reports whether the paper is within our corpus of papers or not; T9t34= reports whether the paper has a value of above 0.2 for the topics 9 and/or 34 (topics on financial crises); Seq 42= reports whether a paper is a member of Sequence 42

Table A12

*Most cited papers in the inter-cluster network of Macroeconomics and Finance 1990-2007*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Freq | in\_corpus | t9t34 | seq42 |
| HANSEN LP 1982 ECONOMETRICA | 14557 | 0 | 0 | 0 |
| KYDLAND FE 1982 ECONOMETRICA | 6601 | 0 | 0 | 0 |
| HALL RE 1988 J POLIT ECON | 6156 | 0 | 0 | 0 |
| MEHRA R 1985 J MONETARY ECON | 5049 | 0 | 0 | 0 |
| LUCAS RE 1978 ECONOMETRICA | 3724 | 0 | 0 | 0 |
| HANSEN GD 1985 J MONETARY ECON | 2300 | 0 | 0 | 0 |
| NEWEY WK 1987 ECONOMETRICA | 2158 | 0 | 0 | 0 |
| HANSEN LP 1983 J POLIT ECON | 2024 | 0 | 0 | 0 |
| CONSTANTINIDES GM 1990 J POLIT ECON | 1918 | 1 | 0 | 0 |
| MANKIW NG 1985 Q J ECON | 1674 | 0 | 0 | 0 |

Explanation of the main columns: Freq = Number of times cited, according to Web of Science; In\_corpus = Reports whether the paper is within our corpus of papers or not; T9t34 = reports whether the paper has a value of above 0.2 for the topics 9 and/or 34 (topics on financial crises); Seq 42= reports whether a paper is a member of Sequence 42.

Table A13

*Top tokens per topic (in order of relevance)*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Topic |  |  |  |  |  |  |  |  |  |  |
| 0 | Group | Social | individual | Good | public | Contribution | right | reserve | member | De |
| 1 | Model | Empirical | Use | Data | dynamic | Prediction | develop | Paper | theory | framework |
| 2 | Growth | Capital | model | productivity | income | Investment | human | economic | rate | economy |
| 3 | Economic | Paper | theory | literature | research | Economics | issue | question | discuss | recent |
| 4 | Return | Risk | Stock | Asset | portfolio | Market | investor | premium | factor | equity |
| 5 | Risk | Utility | preference | uncertainty | aversion | probability | decision | expect | choice | loss |
| 6 | Tax | Income | government | Policy | rate | welfare | public | optimal | taxation | effect |
| 7 | Law | Cost | regulation | Policy | environmental | reduce | increase | Reform | enforcement | use |
| 8 | Condition | Rule | Set | preference | mechanism | show | function | Result | allocation | choice |
| 9 | bank | Financial | Crisis | Market | risk | credit | capital | liquidity | banking | asset |
| 10 | earnings | Firm | information | Forecast | analyst | find | disclosure | Accounting | announcement | report |
| 11 | wage | Worker | Labor | Unemployment | employment | job | market | increase | search | work |
| 12 | model | Estimator | method | estimate | estimation | use | parameter | variable | propose | distribution |
| 13 | contract | Optimal | incentive | Agent | may | ex | show | problem | cost | efficient |
| 14 | test | Right | reserve | distribution | series | model | hypothesis | Paper | propose | time |
| 15 | equilibrium | Game | Player | Strategy | payoff | nash | show | Set | play | reserve |
| 16 | equilibrium | Model | economy | Agent | market | show | state | general | consumption | dynamic |
| 17 | policy | Inflation | monetary | Rate | money | rule | reserve | model | price | central |
| 18 | estimate | Measure | Use | Data | index | demand | method | elasticity | bias | paper |
| 19 | problem | Optimal | function | model | solution | condition | method | result | paper | value |
| 20 | rate | Exchange | interest | currency | real | regime | term | reserve | yield | model |
| 21 | network | Local | Effect | region | city | migration | area | location | use | land |
| 22 | trade | Country | international | foreign | export | domestic | right | tariff | reserve | good |
| 23 | audit | Quality | housing | auditor | real | price | house | market | estate | service |
| 24 | information | Agent | private | belief | signal | expectation | learn | rational | model | decision |
| 25 | option | Price | model | volatility | process | pricing | jump | asset | stochastic | time |
| 26 | market | Price | trading | stock | trade | liquidity | investor | trader | order | transaction |
| 27 | firm | Study | Right | reserve | international | performance | Inc | Knowledge | business | country |
| 28 | firm | Fund | performance | manager | shareholder | compensation | ownership | find | corporate | governance |
| 29 | experiment | Subject | behavior | Find | effect | result | decision | choice | individual | treatment |
| 30 | price | Auction | consumer | seller | cost | buyer | demand | good | market | bidder |
| 31 | effect | Find | Data | evidence | use | result | relationship | country | significant | empirical |
| 32 | firm | Market | competition | Cost | industry | product | entry | innovation | increase | effect |
| 33 | change | Us | Year | period | united | states | time | decline | increase | data |
| 34 | debt | Credit | default | Loan | bond | borrower | Risk | mortgage | spread | rating |
| 35 | shock | Model | Cycle | business | aggregate | price | response | dynamic | output | consumption |
| 36 | household | Income | insurance | consumption | health | increase | wealth | program | saving | effect |
| 37 | political | government | Policy | voter | vote | public | party | election | voting | right |
| 38 | firm | Investment | capital | Cash | equity | cost | value | flow | dividend | investor |
| 39 | school | Child | Effect | education | student | woman | Find | high | increase | family |

Table A14

*Accuracy of fit of Web of Science (WoS) data and hand coded data*

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Worked for CB (hand-coded CV) | |
|  |  | No | Yes |
| CB affiliation at time of publication  (author information in WOS) | No | 60731 | 3861 |
| Yes | 1649 | 2962 |

CB affiliation according to WoS data identified 4611 authors. The hand-coding identified 6823 authors. The overlap between the two consists of 2962 authors.

Please note the "worked for CB" columns are filtered by year (all working experiences after the year of publication is not counted). The mismatch of 3861 authors can therefore potentially correspond to the authors who worked for a central bank before the publication, but not at the time of publication. On the other hand, advisory and visiting roles of academics for central banks are not counted from the CV, while the central bank affiliation using WoS can include them. Hence, the cell CB affiliation yes, Worked for CB (hand-coded CV) no (1649) can be partly explained by these advisory and visiting roles.

Table A15

*Average in-betweenness values for average papers vs crises papers for the bibliographic coupling networks formed between finance and macroeconomic clusters*

|  |  |  |
| --- | --- | --- |
|  | For the period 1990-2007 | For the period 2008-2019 |
| Overall mean betweenness | 7910.072 | 7829.052 |
| Crisis papers mean betweenness | 8725.092 | 9671.09 |

Table A16

*Average Edge Formation of Papers in Sequence 37 and Sequence 42*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Mean Edge Sequence 37 | | | | Mean Edge Sequence 42 | | | |
|  | Average paper | Common author | Common central bank author | All central bank authors | Average paper | Common author | Common central bank author | all central bank authors |
| 2011\_2016 | 26.4 | 41.5 | 53.9 | 36.3 | 55.5 | 68.0 | 77.8 | 63 |
| 2012\_2017 | 29.4 | 47.1 | 56.9 | 39 | 61.1 | 77 | 85.8 | 69.4 |
| 2013\_2018 | 39.7 | 64 | 78.7 | 55.9 | 58.9 | 71 | 78.5 | 65.0 |
| 2014\_2019 | 43.4 | 71.9 | 89.8 | 60.3 | 61.1 | 72.4 | 81.7 | 67.9 |

The table above shows the average edge formation of papers in sequence 37 and sequence 42 in relation to specific characteristics of their authors’ (central bank author, author publishing in both sequences, central bank author publishing in both sequences). As is evident from the table, papers in sequence 37 by authors which publish in both sequences contribute more than 50% more to edge formation than average papers per paper. Papers by central bank authors which publish in both sequences contribute on average about twice as much to edge formation than average papers. General papers by central bankers publishing in sequence 37 contribute on average 25% more. Papers in sequence 42 with an author publishing in both sequences contribute more than 20% more to edge formation than the average paper. For papers by central bank Authors which publish in both sequences, they contribute per paper about 40% more to edge formation. Lastly, papers by central bank authors in general also contribute more than 10% more to edge formation than the average paper.

Table A17

*Top DE-Keywords by sequence*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sequence | top\_de\_kw\_1 | top\_de\_kw\_2 | top\_de\_kw\_3 | top\_de\_kw\_4 | top\_de\_kw\_5 |
| 0 | Growth | economic growth | endogenous growth | human capital | inequality |
| 1 | Cointegration | unit roots | exchange rates | unit root | long memory |
| 2 | panel data | semiparametric estimation | capital markets | inequality | consumption |
| 3 | renegotiation | nash equilibrium | regulation | repeated games | moral hazard |
| 4 | Risk | uncertainty | expected utility | ambiguity | insurance |
| 5 | exchange rates | stochastic volatility | volatility | asset pricing | panel data |
| 6 | monetary policy | business cycles | inflation | business fluctuations | dynamic programming |
| 7 | asset pricing | g12 | liquidity | market efficiency | mutual funds |
| 8 | corporate governance | moral hazard | g21 | asymmetric information | regulation |
| 9 | unemployment | monetary policy | asymmetric information | regulation | business cycles |
| 10 | asymmetric information | regulation | public goods | repeated games | auctions |
| 11 | monetary policy | inflation | business cycles | unemployment | indeterminacy |
| 12 | Auctions | public goods | bargaining | asymmetric information | risk aversion |
| 13 | stochastic volatility | incomplete markets | option pricing | asset pricing | volatility |
| 14 | panel data | capital markets | semiparametric estimation | instrumental variables | unobserved heterogeneity |
| 15 | Inequality | consumption | precautionary saving | liquidity constraints | saving |
| 16 | panel data | instrumental variables | consumption | Gmm | measurement error |
| 17 | panel data | inequality | risk | instrumental variables | risk aversion |
| 18 | monetary policy | cointegration | inflation | business cycles | exchange rates |
| 19 | cointegration | stochastic volatility | option pricing | long memory | incomplete markets |
| 20 | performance | job satisfaction | china | organizational commitment | international entrepreneurship |
| 21 | incomplete markets | risk aversion | risk | consumption | ambiguity |
| 22 | monetary policy | inflation | business cycles | indeterminacy | learning |
| 23 | cointegration | long memory | panel data | bootstrap | instrumental variables |
| 24 | Growth | economic growth | inequality | human capital | endogenous growth |
| 25 | Growth | inequality | human capital | economic growth | panel data |
| 26 | Money | search | matching model | Inflation | lotteries |
| 27 | risk aversion | incomplete markets | overlapping generations | hyperbolic discounting | ambiguity |
| 28 | Money | search | inflation | matching model | lotteries |
| 29 | Search | money | optimal taxation | incomplete markets | overlapping generations |
| 30 | performance | international entrepreneurship | emerging economies | foreign direct investment | joint venture |
| 31 | risk aversion | optimal taxation | incomplete markets | Ambiguity | uncertainty |
| 32 | Search | money | unemployment | Matching | inflation |
| 33 | experiment | risk aversion | mechanism design | experiments | asymmetric information |
| 34 | instrumental variables | panel data | education | identification | human capital |
| 35 | internationalization | china | performance | emerging markets | institutional theory |
| 36 | Growth | economic growth | foreign direct investment | Inequality | corruption |
| 37 | monetary policy | business cycles | inflation | fiscal policy | unemployment |
| 38 | panel data | economic growth | growth | human capital | inequality |
| 39 | stochastic volatility | realized volatility | option pricing | g12 | long memory |
| 40 | g12 | stochastic volatility | asset pricing | g14 | liquidity |
| 41 | corporate governance | executive compensation | disclosure | capital structure | g32 |
| 42 | financial crisis | g21 | liquidity | systemic risk | monetary policy |
| 43 | panel data | stochastic volatility | bootstrap | partial identification | endogeneity |
| 44 | asset pricing | g12 | stochastic volatility | g14 | g11 |
| 45 | international trade | productivity | economic growth | innovation | trade |
| 46 | experiment | mechanism design | ambiguity | risk aversion | ambiguity aversion |
| 47 | panel data | education | inequality | human capital | economic growth |

Table A18

*Top ID-Keywords by Sequence*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sequence | top\_id\_kw1 | top\_id\_kw2 | top\_id\_kw3 | top\_id\_kw4 | top\_id\_kw5 |
| 0 | GROWTH | MODEL | ECONOMIC-GROWTH | TRADE | POLICY |
| 1 | MODELS | TIME-SERIES | TESTS | UNIT-ROOT | COINTEGRATION |
| 2 | MODELS | MODEL | CONSUMPTION | DEMAND | EARNINGS |
| 3 | EQUILIBRIUM | INFORMATION | MODEL | COMPETITION | CONTRACTS |
| 4 | CHOICE | UNCERTAINTY | RISK | EXPECTED UTILITY | CONSUMPTION |
| 5 | PRICES | MODELS | RETURNS | CONSUMPTION | RISK |
| 6 | MODEL | MONEY | EQUILIBRIUM | CONSUMPTION | MONETARY-POLICY |
| 7 | INFORMATION | RISK | RETURNS | MARKET | PRICES |
| 8 | INFORMATION | MARKET | PERFORMANCE | INVESTMENT | FIRMS |
| 9 | MODEL | EQUILIBRIUM | INFORMATION | POLICY | COMPETITION |
| 10 | EQUILIBRIUM | INFORMATION | MODEL | GAMES | COMPETITION |
| 11 | MODEL | MONEY | MODELS | MONETARY-POLICY | EQUILIBRIUM |
| 12 | MODEL | INFORMATION | EQUILIBRIUM | COMPETITION | GAMES |
| 13 | MODELS | CONSUMPTION | MODEL | PRICES | VALUATION |
| 14 | MODELS | MODEL | EARNINGS | REGRESSION | RETURNS |
| 15 | CONSUMPTION | INCOME | INEQUALITY | MODEL | LIQUIDITY CONSTRAINTS |
| 16 | MODELS | MODEL | CONSUMPTION | INCOME | BEHAVIOR |
| 17 | MODELS | RISK | MODEL | CHOICE | CONSUMPTION |
| 18 | MODELS | MODEL | MONETARY-POLICY | TIME-SERIES | MONEY |
| 19 | MODELS | MODEL | TIME-SERIES | CONSUMPTION | RISK |
| 20 | PERFORMANCE | MANAGEMENT | KNOWLEDGE | FIRMS | MODEL |
| 21 | RISK | CONSUMPTION | UNCERTAINTY | MODEL | CHOICE |
| 22 | MONETARY-POLICY | MODEL | MODELS | INFLATION | PRICES |
| 23 | MODELS | TIME-SERIES | TESTS | INFERENCE | REGRESSION |
| 24 | GROWTH | MODEL | TRADE | ECONOMIC-GROWTH | INEQUALITY |
| 25 | GROWTH | MODEL | MODELS | TRADE | INEQUALITY |
| 26 | MONEY | PRICES | SEARCH | MODEL | EXCHANGE |
| 27 | RISK | CONSUMPTION | MODEL | CHOICE | INCOME |
| 28 | MONEY | PRICES | PERFORMANCE | MODEL | SEARCH |
| 29 | MODEL | CONSUMPTION | EQUILIBRIUM | GROWTH | SEARCH |
| 30 | PERFORMANCE | MANAGEMENT | KNOWLEDGE | FIRMS | FIRM |
| 31 | RISK | CONSUMPTION | MODEL | UNCERTAINTY | CHOICE |
| 32 | UNEMPLOYMENT | SEARCH | MONEY | MODEL | EQUILIBRIUM |
| 33 | BEHAVIOR | RISK | COMPETITION | EQUILIBRIUM | CHOICE |
| 34 | MODELS | MODEL | INCOME | CONSUMPTION | IMPACT |
| 35 | PERFORMANCE | MANAGEMENT | STRATEGY | FIRM | IMPACT |
| 36 | GROWTH | TRADE | MODEL | ECONOMIC-GROWTH | PRODUCTIVITY |
| 37 | MONETARY-POLICY | MODEL | MODELS | INFLATION | PRICES |
| 38 | GROWTH | MODEL | MODELS | IMPACT | TRADE |
| 39 | MODELS | VOLATILITY | RISK | MODEL | STOCHASTIC VOLATILITY |
| 40 | RISK | RETURNS | MARKET | CROSS-SECTION | INFORMATION |
| 41 | INFORMATION | INVESTMENT | CORPORATE GOVERNANCE | PERFORMANCE | FIRMS |
| 42 | MODEL | RISK | LIQUIDITY | INFORMATION | MARKET |
| 43 | MODELS | INFERENCE | MODEL | TIME-SERIES | REGRESSION |
| 44 | RETURNS | CROSS-SECTION | MARKET | INFORMATION | PERFORMANCE |
| 45 | GROWTH | TRADE | PRODUCTIVITY | INTERNATIONAL-TRADE | IMPACT |
| 46 | INFORMATION | MODEL | CHOICE | BEHAVIOR | COMPETITION |
| 47 | IMPACT | MODEL | MODELS | GROWTH | INCOME |

Table A19

*Network centrality in the largest network component of the co-authorship network for authors of papers in sequence 42 and/or sequence 37 (4025 nodes)*

|  |  |  |
| --- | --- | --- |
| **Central bank affiliation** | **Eigenvector centrality** | **Degree centrality (average number of edges)** |
| No | 0,001620 | 3,224 |
| Yes | 0,003398 | 4,535 |

1. The difference between this number and the number for papers cited by sequence 7 stems from the fact that for the citing papers, we ask them to be at least once assigned to sequence 7, for the cited papers we use the dominant sequence. [↑](#footnote-ref-2)