USING THE SOCIAL SCIENCE RESEARCH NETWORK TO AID AND TO PROMOTE RESEARCH

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The Social Science Research Network is a depository for academic scholarship. SSRN allows academic papers and abstracts to be accessible worldwide. Most papers may be downloaded from the SSRN database free of charge, but some links are to commercial sites. Posting papers to SSRN and subscribing to its site are not inherently complicated. However, it is possible for academic departments, particularly law schools, to use SSRN more efficiently and more flexibly than SSRN's architects envisaged. For instance, one can establish a faculty working paper series with archived issues that are forever easily accessible, a much cheaper manner of establishing a working paper series than traditional ways, and a more permanent format than envisaged by standard SSRN systems. This article explains how SSRN works and how it can be used more effectively.

I INTRODUCTION

The Social Science Research Network, known as "SSRN", is a website produced by Social Science Electronic Publishing Incorporated, an independent privately held corporation operating in Rochester, New York. SSRN allows academic papers and abstracts to be accessible worldwide. Most papers may be downloaded from the SSRN database free of charge, but some links are to commercial sites. SSRN links with Google Scholar and other Internet search engines to promote the download of SSRN papers for academic research.

SSRN comprises a number of specialised research networks in the social sciences, defining that term broadly, including, for example, the Economics Research Network, the Legal Scholarship

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Network and the Corporate Governance Network. Academics and researchers are able to link to these networks to subscribe to electronic journals (chargeable), browse the electronic library and upload their own papers free of charge.

SSRN provides a number of ways to promote an author's paper. Full papers and abstracts can be viewed on an individual author's page, on an institution page containing work of a school or faculty, or as part of a subject matter e-journal. Authors can upload papers to an individual author page that hosts just their own work. Institutions may also have a page reflecting the work of the entire academy. A full faculty or school subscription to SSRN gives the university in question its own school-specific e-journal or Research Paper Series, described in Part II B and Part IV of this article.

SSRN's core purpose is to enable authors to circulate working papers for comment by the scholarly community, but the SSRN site also hosts papers that have been published in hard or electronic copy journals or as books. The core purpose of SSRN influences the way in which it operates, the way in which it is accessed, and the way in which it distributes papers that are posted on the site. However, it is possible to use the SSRN site and data in ways that give them much more functionality and that are beneficial to authors, to academic institutions, and to scholarship in general. This article attempts to provide a guide to using the SSRN site and services, including use in ways that are not envisaged by SSRN. The article is lightly referenced because most facts are found on the SSRN site itself and most additional ideas in the article for the use of the SSRN site were conceived by the first-named author and developed by the three authors. An SSRN "Frequently Asked Questions" page addresses some of the material in the article. In dealing with that material, the authors have endeavoured to amplify it and to present it in a more intuitive and discursive way than is generally the practice of FAQ pages. The material is not repeated unless necessary for readers to understand points made in the article.

The article uses the terms "school", "institution", "faculty" and "university" to some extent interchangeably. The reason is that scholarly institutions can interact with SSRN at a variety of levels. SSRN's systems will engage with users at whatever level is convenient to the user. Indeed, institutional clients of SSRN do not have to be universities or parts of universities. SSRN's systems are useful for any organisation that has members or employees who are scholarly authors or researchers.

II SSRN SERVICES

A Author Pages

Author pages are a free service. An example is: http://ssrn.com/author=115459 (or search for "John Prebble SSRN author" in Google). Authors (or their assistants) can upload any academic papers and their abstracts to the SSRN electronic library. Any abstract or paper uploaded onto the website can be found by users on the SSRN website or by using Google to search for papers on a topic mentioned in the heading or abstract of the paper.

Papers can be uploaded, edited or removed by the author at any time. Authors can choose whether to upload the paper or only an abstract and citation. All papers must have an abstract but it is not necessary to upload the full text. Any papers can be uploaded to the author's page, including unpublished or past articles. Unpublished articles should be filed under the category "working paper series", and accepted or published articles under the category "accepted paper series". Once a paper is accepted for publication, the author should update its status accordingly. There is no need to wait for actual publication.

Confusingly, these categories do not refer to any series that is analogous to the research paper series discussed later in this article. Instead, the terms "accepted paper series" and "working paper series" are used merely to differentiate the two categories. Again this distinction no doubt reflects the original purpose of SSRN to facilitate collaboration and criticism among colleagues, since it easily identifies articles that are still a work in progress. Unfortunately, the SSRN search engine does not have the capability to refine a search to one category (for example, only working papers), although listed search results clearly indicate whether the paper is working or accepted.

In addition, abstracts may be included in subject-specific e-journals, together with links to full papers. Authors from universities that have a research paper series have priority for publication in subject e-journals, but it is uncommon for a paper to be rejected by the editor. An author can select the most appropriate subject e-journal or e-journals for the paper to be included in, or allow SSRN to select. The author can select up to twelve e-journals. Where a paper is distributed via the subject-specific e-journals, it can reach up to 15,000 people with an interest in that subject. SSRN editors, who are mostly university faculty members, decide which papers should be included in e-journals. Authors can select any of their papers to appear in e-journals, although papers over a year old will not be distributed to subscribers of that journal. That is, a paper over a year old can be found when browsing the journal, but it will not be distributed to subscribers in the form of an email.

Authors may edit papers at any time. Reasons for editing might include changing the status of a paper from "working" to "accepted", or rewriting or adding to take account of comments or second thoughts. When a paper is edited it receives a fresh date of submission. As a result, in a list of publications ordered by submission date it becomes the most recent. However, an edited paper retains its SSRN history, such as number of downloads, number of citations, and so on. Contrast the action of deleting and re-loading a paper. In that event, the date of submission changes in the same manner, but the paper loses its SSRN history.

The SSRN spreadsheet orders papers on writers' author pages according to a variety of rankings. The default order is by number of downloads in the last twelve months. That is, by default SSRN ranks papers according to their current popularity. Alternatively, papers can be organised by title, author, number of downloads, number of citations or by date of posting to the SSRN site. Authors cannot currently order their papers by date of publication, (for papers that have been published) but the SSRN spreadsheet will sort papers into date order if they are uploaded in that order. Thus, if the author wishes to upload his or her backlist of publications, the way to have them organised in date

order on the author's page is by uploading them in publication order, starting from the oldest. Current publications uploaded as written will be out of order if more publications from an author's backlist are added later. One solution is to upload papers as written then, once one's total backlist is uploaded, edit articles that are out of order and re-upload, as explained in the previous paragraph. Alternatively, if a paper has gathered no history, or if the author does not mind losing its SSRN history, the author can delete and re-load. It is difficult to make the order chronological where papers are uploaded by a co-author. The problem is that where someone else has posted a paper (in this case the co-author) the SSRN system does not permit another person to edit and re-upload.

Papers may be uploaded as public or private papers. Public papers form the bulk of papers on SSRN and are the only papers included in SSRN download statistics. Private papers may be displayed on an author's page but will be listed separately from other papers. Private papers do not form part of the SSRN download statistics and are not available to the SSRN public search engine. An author may choose to select a paper as "private" when uploading or SSRN may make the paper private when it is being approved for publication.

There are several reasons why a paper may be listed as private. First, the paper may not be of a sufficient quality for publication. In this case, it may not be advisable to make the paper viewable on the author page. Secondly, the paper may be too slight. If the author thinks the paper is still useful, it may be worth making the paper viewable on their author page. Thirdly, the paper may be identified as not scholarly, such as an obituary. Most authors will choose to display articles in this third category even if they are classified as private. If authors believe SSRN editors have incorrectly classified their papers, they may write to SSRN to have the papers moved to the public category. Any article that an author uploads as a private paper can be made public at any time, so long as SSRN editors accept that the paper is of sufficient quality.

B Full Research Paper Series

A Full Research Paper Series takes the form of a page on the SSRN website that collates papers published by members of a particular school or faculty. Papers can be downloaded by any Internet user and SSRN keeps a public count of the number of downloads.

Examples of a full research paper series home page can be seen at:

Victoria University of Wellington: <www.ssrn.com/link/Victoria-U-Wellington-LEG.html>

Sydney University: <www.ssrn.com/link/Sydney-LEG.html>

Melbourne University: <www.ssrn.com/link/u-melbourne-legal-studies.html>

The word "series" in the term "Research Paper Series" is misleading. Essentially, a Research Paper Series comprises an unsorted subset of papers posted on the SSRN database that have been written by members of a particular school or other academic unit. That subset is sortable and searchable according to protocols of the SSRN database. A "Research Paper Series" becomes

something more recognisable as a "series" if, in addition, there is a school-specific e-journal, as explained in the next paragraph.

The main distinction between the full and basic series is that the full series sets up a school-specific e-journal. The e-journal comprises issues in the form of email messages from SSRN to subscribers that list abstracts of a selection of the school's papers that have been posted to SSRN and that provide links to the full text of papers if they have been uploaded. The email messages go to subscribers. Selections of papers included in issues of e-journals usually comprise papers that members of the school in question have recently posted to SSRN.

Paradigmatically, selections in an issue of a school-specific e-journal comprise working or other unpublished papers, circulated to invite comments before the papers are finalised. While that is the paradigm, editors of school-specific e-journals may select contents of issues however they, or their school, choose. For instance, an issue could consist of a retrospective selection of papers by a faculty member or a collection of papers on related topics by several members, the papers being either published or hitherto unpublished. In this respect, there is a contrast with the subject-specific e-journals that SSRN publishes. SSRN's subject-specific e-journals carry only unpublished papers or papers that have been published in the last twelve months. This date limitation does not apply to school-specific e-journals. Part IV of this article explores ways in which a school-specific e-journal can benefit from this freedom to carry papers more than twelve months old.

SSRN says that most law school journals grow to a subscription of a few thousand within two years. SSRN relies on the school providing potential subscriber lists to begin with. SSRN assigns a staff member, called an Associate Publications Editor (APE) to each research paper series to help the journal grow. One or more people at the university, usually faculty members, should also be appointed as an editor to select papers for inclusion and ensure that the journal is sent out regularly. Research assistants may help, sometimes appointed as assistant editors. Some universities appoint senior librarians as editors.

The frequency of the journal depends on the productivity of the Law School. If papers are regularly being uploaded, an e-journal could be published once a month.

The full research paper series also offers free access to e-submission. This is an online submission tool whereby papers can be offered for publication in a number of different journals simultaneously, the usual method of article submission used in North America. An impressionistic study suggests, however, that authors writing on legal topics who choose electronic submission generally select the service ExpressO² for this purpose rather than SSRN.

¹ Interview with SSRN staff (the authors) in 2011.

^{2 &}lt;a href="http://law.bepress.com/expresso/">http://law.bepress.com/expresso/>.

C Basic Research Paper Series

While similar to the full series described above, the basic series is a cheaper version. It does not include a school- or university-specific Research Paper Series e-journal, branding on author pages, nor a dedicated Associate Publications Editor to promote the e-journal. Nevertheless, SSRN assigns a staff member to answer queries and check on the series.

D University Subscription

When a university subscribes to SSRN its faculty members can subscribe to SSRN subject-matter e-journals. That is, unlike the institutional e-journals described above, which are free to anyone to subscribe to, the subject-matter journals require a fee. Universities pay this fee annually. In return, staff members may subscribe to SSRN e-journals and receive notice of new papers as they are added. There are different levels of subscription fee depending on how many subscribers there are at the institution in question.

E Summary of Services

1 Author Page Only

- Any author can post papers or abstracts to SSRN, specifying an appropriate subject
 category or categories. This is so whether or not the author's institution has a university
 SSRN subscription, described in the previous paragraph, or whether or not the author is a
 member of any institution. There is no charge to authors.
- All authors have a direct (but not intuitive) link to their author page. For example, John
 Prebble's author page has the URL, http://ssrn.com/author=115459. One apparent
 shortcoming of SSRN is that author pages do not seem to appear easily by Google search.
 John Prebble Victoria, for instance, yields several John Prebble articles on SSRN, but not
 the author page. In an attempt to overcome this problem, authors often add SSRN author
 page links to their standard email signatures.

2 Basic Series

- A branded, university-specific page on the SSRN website lists all uploaded papers and abstracts by the institution's authors and links to the university website. As mentioned in Part II B, the word "series" is a little misleading as the term applied to this service.
- E-subscription service whereby articles can be submitted for publication in a number of journals simultaneously.
- Priority inclusion in subject-specific e-journals.
- An assigned SSRN staff member as a contact point (that is, a reactive helper).

3 Full Series

• All of the above, plus: an institution-specific, branded e-journal that publishes all submissions from a specific school or other academic unit, up to 50 per year and sends the

abstracts in email form, with links to papers where available, to all subscribers. Larger numbers can be published for increased fees.

- An assigned Associate Publications Editor to compile the e-journal and promote its growth (that is, a proactive helper).
- The university brand on the author pages.

III SEARCHING FOR PAPERS IN THE SSRN E-LIBRARY

A The SSRN e-Library

SSRN organises papers in the following "libraries": accounting, cognitive science, corporate governance, economics, entrepreneurship and research policy, financial economics, health economics, information systems, leadership, legal scholarship, management, marketing, negotiations, political science, social insurance, classics, English and American literature, music and composition, philosophy, and rhetoric and communication.

The libraries may be accessed from the SSRN home page <www.ssrn.com> by selecting "SSRN e-library" or by choosing "Search and Download" on the left-hand functions bar.

As at November 2013, the SSRN database contained approximately 514,008 abstracts and 420,454 full text papers, contributed by 239,102 authors. Each abstract carries title, author contact and affiliation information, an abstract or description of the paper, distribution history in SSRN, reference or references to publication in hard copy journals, availability of the full text of the paper in the electronic paper collection, and number of downloads and abstract views. The majority of authors are from institutions in the United States, but SSRN is blind to jurisdictions and gives all authors the same prominence.

Sometimes, the words "affiliation not supplied to SSRN" follow the name of an author. A common reason appears to be that an author of a multi-author paper has posted the paper on the SSRN site but has omitted to supply affiliation details for one or more co-authors. A similar result occurs where the organisers of a conference post all conference papers to SSRN without supplying details for authors who do not yet have an SSRN affiliation.

The electronic paper collection is a collection of files containing the full text of approximately 385,000 working papers and published papers in downloadable PDF format, again as at April 2013.

The Public Abstract Page presents an "author home page" link for each author, and can be accessed by clicking on the name of the author anywhere that the name appears as a hyperlink on the SSRN database. Each author home page contains affiliation and contact information; current list of abstracts and full text documents available in the SSRN database; and download statistics for papers with full text documents on the SSRN site.

B Searching the SSRN e-Library

1 "Abstract and Author" Search

The first search function is to use the e-Library database search. On the "Abstract and Author" search page, SSRN's search engine searches the fields: author, title, abstract, keywords and date. Searches may be for all or part of a title, author name(s), word(s), a phrase, key word(s) and the SSRN abstract ID number. The search may be limited by date range.

The search engine returns a summary of information (including the title, author, date posted, downloads and journal name) on papers that match the search criteria. Initial results are ranked by total downloads of full-text papers. Search results can be re-sorted using a drop down menu, which provides options to re-sort by abstract title A to Z or Z to A, ascending and descending date posted, and ascending downloads. A "Search Within Results" function can further refine search results.

If the paper has a downloadable PDF file available, it will have a blue dog-eared page icon next to the title (\square). A red dog-eared page icon (\square) denotes a fee-for-download paper. Click on the title of any paper in the search results to be taken to that paper's abstract page for more information and to download the PDF file. Click on an author's name to go to that author's SSRN Author page, to view all of that author's papers that have been posted to the SSRN site.

2 e-Journal or Topic Search

Journals can be browsed by e-Journal or by topic. Clicking the "Journal or Topic" access to the e-Library on the top left side of the e-Library search page opens the SSRN Browse page. This page can also be accessed by clicking on the "Browse" icon in the grey bar in the page header. The Browse page contains the SSRN expandable subject area tree. The tree will initially show all the Research Networks in the SSRN e-Library. Clicking on the "+" sign next to a network opens a view of the next level.

Located within the information button next to each level of subject area tree are details for each subject-matter area: Classification descriptions, links to Top Downloaded Papers, Most Recent Papers, a Sample e-Journal and a link to Submit a Paper.

Some e-Journals are further subdivided into "topics". Topics are subdivisions of e-journals that contain so many papers that they have branched into sub-categories.

It is possible to browse in order of most recent publications, most downloaded publications and alphabetically by title. It is also possible to view the "top ten downloads" for each journal and topic. Part V E of this article has more information on top ten lists.

3 JEL Classification Search

The Journal of Economic Literature (JEL) Classification System can be used to browse articles that have been tagged with JEL codes. JEL classification codes are published by the American

Economic Association.³ They are used widely to classify scholarly papers. Although the expression "JEL Codes" includes "economic[s]", JEL refers to a wider range of topics within SSRN that include at least some legal aspects. For example, the code "H2" refers to "Taxation, Subsidies, and Revenue" while "K1" refers to "Basic Areas of Law".⁴ The "JEL Topic List" is located on the top left side of the e-Library search page and contains a full list of JEL topics. JEL classifications are less precise than e-journal classifications but will loosely group recently uploaded articles by subject area.

It is particularly important for papers that were published more than a year before being posted to SSRN to be correctly labeled with a JEL code or codes. The reason is that SSRN does not distribute such papers in its subject-matter journals. JEL codes help searchers locate these papers.

4 Browsing by "top" authors, papers and institutions

It is possible to browse "top" authors, papers and institutions. These "top" classifications can be viewed generally or as limited by subject-matter. For example, a list can be generated for all top authors or limited to law authors only. A "top" author, paper or institution is listed in order of total recent downloads of all papers (in the last 12 months). There are also "all time" rankings, "time" starting with SSRN's foundation in 1994. It is also possible to view the list in order of most downloads per paper, most citations, most uploaded papers, and to view each of these lists from the statistics of the last 12 months, or in total. These statistics include only papers where the full text has been posted to the SSRN site. That is, articles or books that display an abstract only and do not have a PDF available for download are not included. One result is that total numbers of papers attributed to authors on their author pages (which include papers posted with only an abstract) are sometimes greater than the number of papers against their names in "top author" lists. Part V of this article amplifies this summary of "top" lists and gives advice about maintaining relevant records.

IV STARTING A LAW SCHOOL RESEARCH PAPER SERIES

A Planning for a Research Paper Series

There are several ways in which to consider an SSRN research paper series. Some schools that already operate a series of working papers independently of SSRN may use the SSRN service to publish this series in an electronic form. The SSRN series would then provide an electronic copy of the existing series. This is within the original purpose of SSRN.

An alternative is to republish issues of a standard, formal, hard copy university law review as an SSRN e-journal, either instead of or in addition to making electronic copies available on one's university or faculty website. This exercise is both conceptually similar to, and conceptually

³ American Economic Association (2013) JEL Classification Codes Guide http://www.aeaweb.org/iel/guide/jel.php>.

 $^{4 \}quad \text{American Economic Association (2013) JEL Classification Codes Guide, above n 3.} \\$

different from, the approach just described. The republication process is similar in that it entails a second, electronic, copy of a publication that has an independent, separate, existence. It is different in that, ordinarily, institutional e-journals publish writing by members of the institution in question, whereas a standard law review publishes contributions from scholars from many institutions. Be that as it may, the merit of such electronic publication is that researchers will often find papers on the SSRN site that search engines might overlook on other sites.

Another perspective is to consider the SSRN research paper series as not a copy of a journal that has a separate existence but as that journal itself. SSRN archiving systems are not designed with this kind of plan in mind, but can readily be supplemented to put such plans into effect, as will be explained. Through its editors, the publishing institution plays an active role in creating issues for the series and (vitally) in keeping a record of past issues on the institution's website. Papers for the series are sorted into issues and published. As papers are selected for publication the editor electronically attaches a cover page to each, with details of the year, issue number, and paper number.

As SSRN publishes each issue the issue receives its own URL. It is crucial for the editor to capture and to record this URL in a list kept for the purpose, perhaps on a research page of the institution. The reason is that although issue by issue SSRN URLs remain constant there is no index to them. As a result, it is difficult to find a particular issue of a particular research paper series. That difficulty does not matter for purposes of SSRN's core mission of circulating working papers because finding an individual paper is not difficult. But the difficulty is crucial if one uses the SSRN website to publish anything in the nature of a year-by-year, issue-by-issue record. Nevertheless, capturing and recording URLs issue-by-issue is not difficult; so the problem is readily overcome. An example of the technique is the archive of the Victoria University of Wellington Legal Research Paper Series, located on the VUW Law Faculty's research pages.⁵ (To the authors' knowledge, this is the only such archive that is publicly available.)

Other institutions may choose a less structured approach and use an SSRN research paper series to circulate papers (usually new papers) that do not form part of a structured journal. This process requires little administrative effort in creating issues, and cover pages, if any, are decorative rather than informative. In fact, the process can proceed almost independently of the institution and of the editor of the research paper series. The reason is that if the institution decides to play only a relatively inactive editorial role in the distribution of its papers, SSRN staff will select and distribute the most recently uploaded papers from the institution's authors, first checking a proof with the editor.

⁵ Victoria University of Wellington "Legal Research Papers" (2013) <www.victoria.ac.nz/law/research/publications/legal-research-papers>.

This last process (leaving most decision-making to SSRN editorial staff) is reasonably effective at distributing papers for comment, but in that respect it can be somewhat redundant, in that relevant SSRN subject-matter e-journals will perform the task more effectively. The process is less efficient in bringing the work of an institution to the notice of its students, alumni, community, and other stakeholders who may subscribe to the series. It is also likely to be inefficient in selecting, sorting, and publishing backlists of authors or of institutions that have only recently established author pages and research paper series.

Even publishing a paper in a research paper series that is conceptualised as an independent e-journal should not prevent subsequent republication of working papers in other formal, peer-reviewed journals, as long as it is made clear that the paper remains a working paper. For this purpose, correct categorisation of a paper as falling within the "working paper series" is helpful.

Where authors have in mind a specific journal for publication, they may be well advised to confirm that pre-publication is permissible under the submission guidelines, or to delay publication in a faculty research paper series. Authors retain intellectual property in their works. It is this right that is exercised in uploading the work to an SSRN page. Thus, in theory it is possible for an article to be freely downloadable on SSRN, electronically published in a university research paper series, and simultaneously published in a formal, peer-reviewed academic journal. Such steps are complementary.

B Procedures for Starting a Faculty Research Paper Series and e-Journal⁶

The first step in starting up a faculty research paper series and e-journal is to contact SSRN and have an Associate Publications Editor (APE) appointed. The APE will be responsible for creating a university page on the SSRN site, which will host articles by authors affiliated with the institution. The APE will be the university's main contact with SSRN and will be responsible for distributing the e-journal.

Once the university has created a research paper series the APE will assist the faculty in putting its authors' papers on the university SSRN page. The faculty should provide a list of authors to the APE, who will move papers that faculty members have already posted to the faculty's page. By this process, all previously posted papers become papers in the faculty's research paper series and searchable as such and able to be distributed in issues of the series.

⁶ This section of the article is framed in terms of a faculty, but the procedures are appropriate for any academic or other research unit. "Faculty" is used here to denote a division of a university rather than as a collective noun for academic staff.

When authors upload new articles to SSRN, papers will not automatically be added to the faculty's SSRN page. The process to include the paper on that page will depend on whether the series is open or closed.

C Open or Closed Research Paper Series

A research paper series can elect to have either an "open" or a "closed" classification. An open classification means that anyone, affiliated with the institution or not, can select the series when making a new submission to SSRN. Any paper that elects to be in the series will then appear on the series page.

To prevent unwanted (primarily, non-faculty) authors from appearing in a series, SSRN offers a closed classification, which removes the availability of the series from the public. When a series is closed, papers may be submitted only by using a proprietary URL. A closed classification requires authors to login to SSRN, to enter the proprietary URL, and then to submit their papers. The idea is that proprietary URLs are made known only to authors affiliated with the institution in question.

SSRN advises making a school research paper series closed. The present authors recommend not following that advice. There is a remote risk that authors not associated with the faculty will attempt to publish their papers on the faculty's page. However, even if a foreign author does attempt this manoeuvre (which is unlikely), unaffiliated papers will not make their way into the faculty's e-journal. The faculty retains editorial control over the e-journal regardless of whether the research paper series is open or closed. Further, an institution that has an open SSRN page can require SSRN to remove papers from its page.

The merit of an open research paper series is that it has a significantly simpler submission process. Importantly, an open series does not require authors to employ a proprietary URL. In order to encourage faculty members to post their papers not only to SSRN, but also to the faculty page, it is best to limit the number of transactional steps that are entailed. If people post papers to their own author pages, but not to their faculty pages, the situation is remediable, but there are transaction costs.

D Naming an e-Journal

A research paper is identified by two titles when it is distributed to subscribers. The first title describes the category in which the series is housed. A law school research paper series will be housed within the Legal Scholarship Network. The series will then be divided into one of three categories, entitled Law & Economics, Public Law & Legal Theory, and Legal Studies.

The Legal Studies section is the most general and is where most law schools starting a single research paper series will locate themselves. Some people are not keen on the expression "legal studies", which can suggest legal study in a school that is not a law school, but for the category title there is no option. Thus the first title for all general research papers series includes the words "Legal Scholarship Network: Legal Studies Research Paper Series".

The second title is the name that will identify the relevant university. By default, SSRN includes the words "Legal Studies" also in in this second title of a legal e-journal, for example, "Name of University Legal Studies Research Paper Series".

This second title does not have to include the words "Legal Studies". On request, SSRN will change the title to anything of the university's choosing. Some schools choose a full name for their research paper series, for example, "Name of University Legal Research Papers", while others simply put the name of the university as a title. Others use the default form that SSRN provides, which, as mentioned, includes the expression "Legal Studies".

An institution that is a client of SSRN cannot change the title that appears on the institution's SSRN page. Here the title is made up of the category title and the name of the institution. Even research paper series of schools that have requested a different title for their e-journal distribution will still be called names in the form of "Name University Legal Studies Research Paper Series" to the eyes of searcher browsing the SSRN library for a general series.

E Announcing a new SSRN Research Paper Series

When a university launches a research paper series, SSRN sends an email to its subscribers to announce the arrival of a new electronic journal and to invite people to subscribe. This announcement includes a small memorandum provided by the university about the faculty, (assuming that the faculty is the unit to organise the series). Typically, this memorandum may include notes about history, achievements, aspirations, goals, and perhaps publishing policy for the new e-journal. SSRN does not make it clear that the memorandum is retained after the initial announcement. First, it is repeated at the bottom of every issue. Secondly, the memorandum is used for the university or faculty description that can be found on the list of school research paper series. The memorandum can be amended at any time.

There are two pieces of advice about research paper series memoranda. First, it is advisable to review one's memorandum every year or so. Secondly, it can be a mistake to delegate drafting to marketing people or to people who have over-inflated aspirations about what goals the institution can realistically hope to attain in the medium term. The memoranda of some research paper series do not reflect credit on the judgment of their drafters.

F Composing an e-Journal Issue

Ordinarily, editors of research paper series, or librarians or SSRN staff on their behalf, put a mixture of papers into an issue in the manner of an ordinary law review. Often, these are simply the papers that faculty members have posted to the SSRN site since the last issue. But institutions that subscribe to SSRN may organise issues of their research paper series in whatever manner seems best to them. As mentioned, editors may select, for instance, suites of papers on related topics or by particular authors.

Once the papers have been chosen, the editor or an assistant advises the APE of the selection. The APE will send the university a proof of the e-journal to be approved.

Where a research paper series is a periodical that exists solely within SSRN, as explained in section IV A of this article, an assistant will ordinarily compose a cover page for each issue. This cover page could be anything of the university's choosing but will usually include the name of the research paper series and the university logo as well as citation information including year, volume and paper numbers. Within each issue, cover pages will ordinarily be identical, except that each paper bears an individual sequential number for the volume in question.

The cover is electronically attached to each paper within the issue using a PDF editor such as Adobe Professional. In many cases, a previously published article that is being republished in an SSRN research paper series will already have a cover. In this case, the SSRN cover can be attached on top. It does not matter if a paper has more than one cover.

Ideally, if the papers to be included in an e-journal issue were decided before their authors posted them to SSRN, their covers could be included as the initial pages of their PDFs and they would arrive with covers attached on the SSRN website. This process and timetable is rarely practical. Authors, or institutions, or both, generally prefer to post papers sooner rather than later. The solution is for an assistant to gain access to the PDFs projected for any particular issue and to attach the covers. This process entails SSRN staff, usually the APE, granting permission to the assistant to edit the papers in question, and making the papers available to him or her. (Ordinarily, only authors or assistants who post papers for them can edit papers on the SSRN site.) With access, the assistant attaches a cover page and reposts the PDF on the SSRN site.

Part IV A explains the advantages and disadvantages of operating an independent journal as an SSRN research paper series. It bears emphasising that once one issue of a research paper series is replaced by the next, the former issue almost disappears into cyber space. While SSRN retains the unique URL for the issue located on each distribution email, there is no list on the SSRN database.

As mentioned, a university can take precautions to save issues of its e-journal. When an e-journal is distributed to subscribers it will include a URL to the e-issue. This URL is not necessarily obvious, but is located at the very top line at: "if this page does not display correctly, please click here. Editors should save these links as HTML documents as issues arrive and post the documents on their faculty websites. In this way an electronic research paper series can offer back issues and can display a table of contents, issue by issue, thus constituting a formal perpetual series.

It is important to save the entire link as an HTML document and to upload that page, rather than merely posting the URL from the distribution email. The reason is outlined in the next paragraph.

If an issue is based on a theme, the editor may want to give that issue a name, for example "Papers by Professor X on Competition Law". The problem is that in the SSRN distribution email there is currently no electronic space for such a name. However, at the top of the table of contents of

every issue before the first item in the table (that is, before the name of the first paper of the issue) there is a space for "announcements", for example to advertise a conference or a vacancy. It is possible to use this space to announce the topic of the issue. This makeshift works well enough for a single issue, but unlike the table of contents itself, an "announcement" is ephemeral. Whatever is put into the announcement space displaces all former announcements, so a fresh announcement in the next issue will displace not only an announcement in the current issue but also all former announcements in all earlier issues. That is, if you manage to locate the URL of a previous issue it will be found to have the same announcement as the latest issue of the research paper series in question. This problem is not as serious as it seems at first impression because most people do not access former issues in this manner. While SSRN retains back issues, they do not display them. If an institution makes an especial effort to retain back issues, it must save the page as an HTML document in order to retain the correct title in the announcement field. The link for an issue on the institution's index of issues goes to this page (also kept by the institution), not back into the SSRN database. The page that is retained continues to work correctly because the URLs that it contains for papers that form the issue lead to the correct papers on the SSRN site.

G Number of Papers and Issues Distributed each Year

Annual institutional subscriptions to SSRN for the full research paper series service vary in cost depending on the number of papers that the series publishes. The basic rate is for 50 papers a year. There is an extra fee per paper over 50, or the institution can pay for, say, an extra 25 or 50 papers. Apart from the first 50 papers it is not necessary to estimate and pay for papers before the start of a subscription year. Additional fees can be paid during the course of the year if it appears that a series will exceed the limit of 50 or such higher limit that has been subscribed for.

The number of issues that a series publishes in a year is to some extent self-limiting. Most editors will be reluctant to inflict large numbers of e-mails each giving notice of a relatively small number of papers on their subscribers; so it is not necessary for SSRN to impose formal limits.

The authors recommend that smaller law schools should begin their subscriptions with the 50-paper minimum limit. A higher limit can be paid for if 50 proves to be insufficient. Larger schools may want to distribute 100 papers or more and, as mentioned, can exceed any limit by paying an extra fee.

The fee to be paid is a commercial matter for negotiation with SSRN and will vary depending on the number of schools at an institution with research paper series and the term of the agreement.

H Hard Copies

A legal research paper may be printed in hard copy and ordered from the SSRN website, but at the date of this article this service is available for customers in the United States only. The hard copy service can be useful for obtaining extra copies of off-prints, should that be necessary.

V SSRN REPORTS AND STATISTICS

SSRN sends regular updates informing authors of how their papers are performing on the SSRN site and publishes tables that compare the performance of authors and papers.

A Top Authors

SSRN compiles rankings of authors in their system by a number of measures, such as number of downloads, total number of papers and numbers of citations. To be ranked, authors must have at least one paper in the SSRN database with a full text PDF available for download. Only full text papers classified as public are used for ranking. That is, private papers and papers with abstracts only are not taken into account. The date the ranking is compiled is listed under the relevant heading, as well as the criterion that the author is ranked by.

Author rankings contain two sets of data. Numbers in parentheses represents the author's rank by the relevant measure. Numbers that are not in parentheses represent the count of the measure (for example the number of downloads or citations) listed at the head of the column.

SSRN collects data for a number of measures. The default measure for top authors is by the number of downloads in the last twelve months. To sort the authors by another measure, click the underlined headings at the head of the ranking spreadsheet to re-sort the columns.

SSRN provides author rankings for the following measures:

- Total New Downloads: total downloads during the last 12 months.
- Number of New Papers: The number of full text papers that have been added to SSRN in the last 12 months. This figure includes papers that were written some time ago but have been recently uploaded.
- New Downloads Per Paper:⁷ A measure of the average number of downloads per paper in the last 12 months. Per paper statistics are counted only where an author has more than five publicly available papers available for download in the SSRN e-library.
- Total number of Downloads: Total lifetime downloads for all of an author's publicly available full text papers.
- Total number of Citations: The total number of times an author's paper has been cited in other papers in the SSRN e-library.
- Number of Papers: The total number of publicly available full text papers in an author's SSRN e-library.

⁷ Comparisons by this criterion can be misleading. Suppose Authors A and B respectively have 10 and 20 papers posted on the SSRN site. All of A's papers and 10 of B's papers record downloads. B's other 10 papers have not attracted any attention. The result will be that A's work appears to be twice as interesting to readers than B's.

- Total Downloads Per Paper: 8 The average number of lifetime downloads per paper for all of an author's publicly available papers.
- Total Citations Per Paper: The average number of times that an author's paper has been cited by other papers in SSRN's e-library.⁹
- Author-Level EigenfactorTM Score (x100): Eigenfactor is a weighted measure of an author's citations. For further explanation and examples of EigenfactorTM Scores see: http://www.eigenfactor.org/methods.htm.

Author rankings are calculated over both the whole SSRN library and over particular disciplines, for example, there is a ranking of "top law authors".

B Top Institutions

SSRN compiles rankings of Top Institutions in several subject areas, such as Business Schools, Economics Departments, Law Schools and so on. Some tables are further divided geographically. For example there are tables for United States law schools and everyone else, tactfully called "International Law Schools".

The list of authors associated with each institution can be found by clicking on the "authors" field next to the institution name. The list of authors by institution can be browsed in the same way as the "Top Authors" list, described above.

SSRN provides institution rankings for "Top Authors" and in addition rankings according to the following measures:

- Number of Authors: The number of authors currently affiliated with the organisation that
 have at least one publicly available, full text scholarly paper in the SSRN e-library. This list
 can be viewed by clicking on the "authors" link next to the organisation name.
- Total Downloads Per Author: Total number of downloads divided by the number of authors. This is the average number of all time downloads for all authors affiliated with the organisation. This measure has doubtful validity because the divisor comprises only authors who have papers posted to the SSRN site. Teachers who do not use SSRN, and who may write very little, are not counted. The same observations are relevant to the next two measures.
- New Downloads Per Author: New downloads divided by number of authors.
- Total Citations Per Author: Total number of citations divided by the number of authors.

C Top Papers

SSRN ranks papers by a number of measures:

⁸ Comparisons using this criterion can also be misleading, for the reasons explained in footnote 7.

⁹ Comparisons using this criterion can also be misleading, for the reasons explained in footnote 7.

- Total New Downloads: Total SSRN downloads of a paper in the last 12 months.
- Total number of Downloads: Total lifetime SSRN downloads for a paper.
- Total number of Citations: The total number of times that a paper has been cited by other papers in the SSRN e-library.
- Number of Authors: The number of authors names on the paper
- Total Downloads Per Author: The number of downloads per author for a paper.
- New Downloads Per Author: The number of downloads in the last 12 months per author for a paper.
- Total Citations Per Author: The total number of times that a paper has been cited by other papers in SSRN's e-library divided by the total number of authors.

D Aggregate Statistics

SSRN sends authors monthly statistics about their papers in the e-Library. These aggregate statistics are calculated by adding the data contained in publicly and privately available papers. The statistics may therefore differ slightly from the statistics displayed on the SSRN site, which calculate only publicly available papers with a PDF available for download.

For each individual author, these statistics track total downloads, downloads in the last 12 months, and total abstract views.

SSRN also provides author statistics that are based on publicly available, downloadable papers. These statistics give each author a rank that compares downloads with all other SSRN authors. These author rankings are given for total papers downloaded, papers downloaded in the last 12 months, and number of citations to articles.

SSRN takes various precautions to frustrate attempts to inflate scores. If there is a high download count from one IP address, a request to download a paper may be denied and the message "unusual download activity" displayed. Users can proceed to download either by logging in or by bypassing the message. In the latter case the download will not be counted in the official statistics. ¹⁰ This elegant solution, allowing the download but not counting it for ranking purposes, is typical of the depth of thought that has gone into the construction of much of the SSRN site.

E Top 10 Notifications

SSRN tracks the most popular papers distributed in SSRN e-journals. Top 10 notifications are sent out weekly to the 10 authors who have the most frequently downloaded papers in each e-journal or in sub-types within e-journals.

¹⁰ This is reflected in the SSRN Terms of Use, in which SSRN reserves the right to adjust usage statistics to preserve the integrity of SSRN download counts and other usage statistics.

Top 10 downloads can be viewed by anyone who browses the e-journal. SSRN presents two lists of top 10 papers: "all time hits" and "recent hits" being downloads in the last 60 days. All top 10 download statistics are updated weekly, but there is no easily accessible record of notifications to authors. Scholars who may want to note top ten notifications in performance reports or promotion applications should keep a record.

SSRN does not keep a record of how many "top 10" notifications are distributed to each author.

F Citations

Papers that have their citations in footnotes (primarily law papers) are not counted in the citation statistics. For this reason most law papers are dramatically undercounted in SSRN citation statistics.

The SSRN CiteReader project employs a system to address this problem by extracting references and footnotes from papers posted to the SSRN site. Footnote references are found under the footnotes tab on the public abstract page for each paper. Similarly, citations matched to papers posted to SSRN are found under the citations tab on the public abstract page for the paper.

As at November 2013, the CiteReader project remains in a development stage; many papers have not had their citations and footnote references extracted and checked. In particular, many citations in articles that do not have a bibliography are still to be processed.

SSRN is giving priority to papers without endnote reference sections. As at 13 November 2013 the CiteReader project had extracted over 8.5 million footnotes from 85,000 papers without reference sections. To give an idea of the scale and rate of progress of the project, the comparable figures for December 2011 were 6.9 million footnotes from 60,000 papers. There is a good deal of work to be done.

VI CONCLUSION AND SOME EVALUATION

Institutional and individual use of the Social Science Research Network to its full potential is reminiscent of mediaeval English lawyers developing the forms of action at common law to their full, and previously unsuspected, potential. ¹¹ The unknown barrister who first drafted a tort claim framed as a writ of trespass can have had no idea how that form of action would develop, much less any inkling that a grandchild of trespass, the writ of indebitatus assumpsit, would eventually become a foundation of modern commercial law.

The historic occasion when that development occurred was the dispute that we now know as *Slade's Case*, ¹² where the judges of the courts of King's Bench and Common Pleas met to decide

¹¹ See for example F W Maitland *The Forms of Action at Common Law* (Cambridge University Press, Cambridge, 1909).

¹² Slade v Morley (1602) 4 Co Rep 91a, Yelv 21, Moore KB 433.

jointly that thenceforth English law would recognise and enforce bargains as contracts notwithstanding that the consideration was executed on both sides.

The analogy with the development of the forms of action at common law is as to mode of development rather than as to historical importance, but the analogy may be drawn nevertheless.

When Jensen and Marr founded SSRN in 1994 their primary objective was neither to create an electronic archive for its own sake nor to provide a cheap platform for law schools to publish electronic journals. Rather, it was to make the process of disseminating scholarly research, especially research in economics, much more efficient, primarily with a view to facilitating the circulation of working papers for comment.

SSRN succeeds magnificently in that objective. It was a short and relatively obvious step to provide similar facilities for law and for several other disciplines. But important traces of the original goal remain. One example is the curious division of legal scholarship into the tripartite libraries of Law and Economics, Public Law and Legal Theory, and Legal Studies. The imbalance of the respective numbers of papers in those libraries at 1 April 2013 (8000, 13,000, and 34,000) would surprise few teachers in law schools, but is no doubt partially explained by SSRN's early emphasis on economics. A second example is the use not of "law" as the name of the discipline, but of "legal studies", a term unlikely to be chosen by members of law faculties.

More important substantively is the almost ephemeral nature of, and the lack of indexes to, many of SSRN's e-mail messages. This article addresses two prominent examples: messages that form issues of institutional e-journals like a law school's SSRN legal research paper series; and SSRN's encouraging "top 10" messages to authors. The lack of indexes can be overcome with thought and planning, but the thought and planning are well worth the effort.

Preserving messages that form issues of a series of legal research papers, together with adding electronic covers to papers and imaginative use of a message's "Announcements" field, can convert what are little more than announcements and aides-mémoires into a formal e-journal series that a law school can circulate to its alumni, students, and other stake-holders at very little expense.

In an age when governments are increasingly concerned to measure research performance, preserving almost any statistic that can be counted can be worthwhile. Academics must populate the increasing numbers of forms that report the quality and quantity their scholarship with some data other than the bare names and references of their papers. Counts of "top 10" messages from SSRN, paper download counts, or citations from SSRNs CiteReader (once fully operational) may provide useful evidence of the impact of one's scholarship. Despite obvious limitations, not least of which is the fact that university teachers' participation in SSRN is voluntary and self-selecting, such indicators can hardly fail to add something to the adjectival expressions like "prestigious", "well received" and so on that one finds in so many self-reported performance reports.

Finally, there is the modest function of archiving. Most academics of some years standing have experienced the exasperation of realising that they cannot easily, or perhaps at all, locate a copy of a paper written some years ago. Jensen and Marr's wonderful electronic edifice gives everyone a permanent, searchable repository for their writing, and an almost Swartzian¹³ repository that is always available to all the world. SSRN makes this point explicit on its site, as the response to its "frequently asked question" number 3, explaining that:¹⁴

SSRN is committed to providing authors and readers with the highest quality, most reliable services in the distribution of research. The 232,000+ authors who have contributed their research to SSRN have trusted us with their intellectual output. We are committed to fulfilling that trust. We are scholars, and we respect, above all, our authors' rights in their material. We have never and will never behave opportunistically with our authors' material. You can count on this from SSRN and from each of us that help SSRN perform on its commitments.

The beauty of this statement is that not only is it true, ¹⁵ but that it is in the commercial interests of SSRN to ensure that it continues to be true. Scholars are often concerned about publishers' conflicts of interest between scholarship and commercial imperatives. But SSRN is acutely aware that it can operate only as long as authors of scholarly work trust it. The genius of the founders of SSRN was to fashion a business model where the interests of the owners of the business are to promote the interests of the authors who post their papers on the SSRN site, to treat all authors fairly, and to prevent gaming.

We say above that the SSRN site is "almost Swartzian", not that it represents an epitome of open access. In "SSRN Considered Harmful" James Grimmelmann identified several shortcomings. ¹⁶ For instance, SSRN offers downloads only from its own site and does not operate alternatively as an electronic signpost to papers stored on other sites. Some shortcomings may be functions of the electronic structure of SSRN's site. Grimmelmann appears to suspect that some are driven by a desire to make a profit. ¹⁷ Grimmelman's reservations should not be ignored. Indeed, SSRN from time to time adjusts its systems to move closer to perfect open access. ¹⁸ Nevertheless, the positive

¹³ That is, an open source database of the sort championed by the late Aaron Swartz, an almost mythical figure in cyber circles. See for example Larissa MacFarquhar "Requiem for a Dream" *The New Yorker* (online ed, New York, 11 March 2013).

¹⁴ Social Science Research Network "Frequently Asked Questions" (2013) <www.ssrn.com/update/general/ssrn_faq.html>.

¹⁵ First-named author's conclusion from discussions with the SSRN President (4 July 2013).

¹⁶ James Grimmelman "SSRN Considered Harmful" (26 February 2007) Selected Works http://works.bepress.com/cgi/viewcontent.cgi?article=1013&context=james_grimmelmann>.

¹⁷ At 3.

¹⁸ At 1 is one such example.

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aspects of SSRN appear greatly to outweigh the negative. It must be borne in mind that for scholars to enjoy the benefits of SSRN, SSRN must survive, which means that it must cover its costs and make a profit. Would SSRN as an institution be more efficient and benevolent if it were owned by a non-for-profit? We can never know, but it is not unknown for charities to gouge prices in the belief that they are doing God's work for their primary beneficiaries: something that SSRN shows no sign of doing. Further, SSRN continually tries to improve and to enhance its offerings, and is very receptive to suggestions and requests from its users, ¹⁹ a mind-set more commonly found in the profit sector.

The commercial propaganda of many businesses tries to persuade customers that the interests of the customer and of the business are one, but few businesses achieve this identity of interest with customers as closely SSRN manages. At 5 November 2013, the SSRN browse page recorded that 420,454 full text papers had been posted on the site since it was founded 19 years earlier. If authors had posted papers at an even rate since 1994, each year's increase would be just under five per cent of the total, approximately 21,500. But of the total in November 2013, 66,698 papers, that is, nearly 16 per cent, had been uploaded in the previous 12 months. In short, the rate of authors posting their papers is increasing. There is no credible competition to SSRN. In the opinion of the present authors SSRN's influence is both benign and valuable, but whether one agrees or not SSRN cannot be ignored.

¹⁹ First-named author's experience.