Analyzing Monograph Usage of Approval and Firm Orders for Collection Development

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Introduction

What this project is about and why are we doing it?

Firm orders and approval plans are two widely adopted collection development methods among libraries. Approval plans involve establishing book selection parameters with book vendors. Then based on set selection criteria, newly published books are delivered to libraries automatically. Firm orders, on the other hand, require librarians to select books individually and purposefully. In recent years, libraries have gone through a series of transformation in our ways of collecting and delivering resources due to significant advancements in technology and changes of user behavior. Patron driven acquisitions is a good example of this fast-paced changing environment. Considering that we are facing very different user groups and demands, is firm order still a viable practice for collection development and does it still deserve the time of subject librarians?

When we discussed this questions among librarians at University of Houston (UH), we generated a series of questions instead of answers. Can we really do without firm orders? Will it be detrimental to meeting user needs if we do away with it? Are there any differences among subjects? At our library, the firm order fund is divided into three subject area groups (SAGs). Is there a difference in terms of usage pattern among these groups? In order to answer these questions, three librarians decided to run a study to find out whether there were significant differences of circulation rates of the books selected via these two methods.

Methods

Data Source:
We used Sierra to pull records of books that we acquired from January 2011 to September 2014.

Data Collection Parameters:

We created two item-level lists for all titles in Sierra. The first list included titles identified as ordered on approval fund code, and the second included titles identified as not on approval fund due to our funding order code structures. The parameters for both approval and firm order items were the following: Ordered on or after January 1, 2011; print monographs with appropriate fund code status; location code that indicates within UH main campus. Based on item level data we also were able to delete titles from our sample that were considered to be reserve copies. We recognized the need to eliminate these high circulating titles in order to avoid skewing our data.

	Input Criteria (OPAC)	Output Variables
Approval	Format = Print Monograph Order Fund Code = Approval Order Status = Paid	Bibliographic Record Number Call Number Title Format Code Order Date Fund Code Location Total Circulation
Firm Order	Format = Print Monograph Order Fund Code ≠ Approval Order Status = Paid Order Fund ≠ Reserve Status Order Date ≥ 01/01/2011	

After data cleaning, the final lists had a total number of titles identified as approval orders equal to 21,521 and firms orders equal to 24,139. Since the call numbers were outputted for every item, the team was able to break down both lists by LC classification, sub-classification, and by circulations totals.

Analysis:
We used both Excel and SPSS to run analysis based on: LC classification and UH's Collection Development Subject Area Groups (i.e., SAGs: Sciences, Social Sciences, and Humanities) and a LC subclass analysis for the B class.

Circulation Distribution of Print Monograph Collection, Purchased from 2011 to 2014
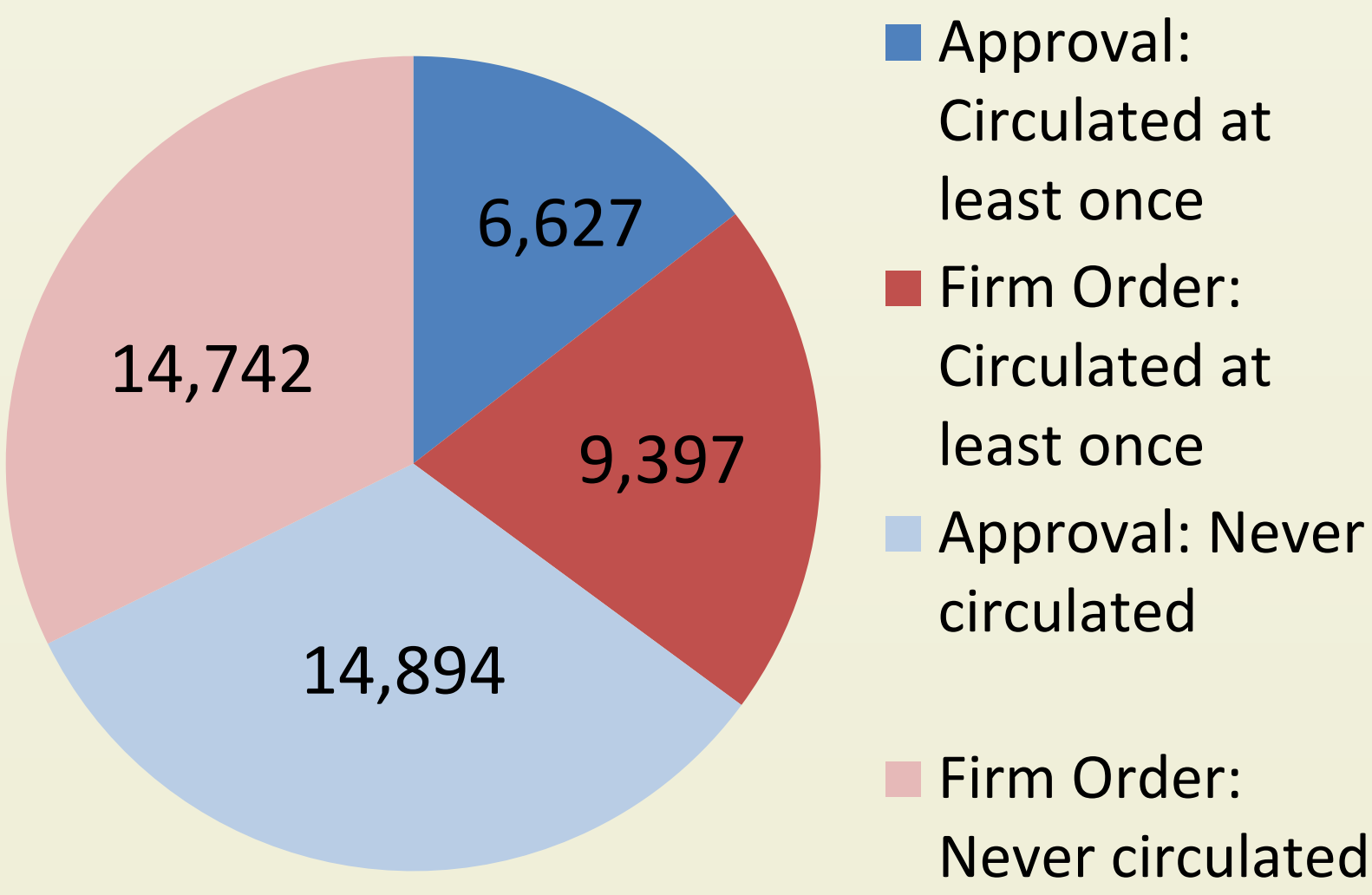
Overall Circulation: Approval vs. Firm Order

	# of titles never circulated	Circulated at least once	% of titles circulated at least once
Approval (N=21,521)	14,894	6,627	**31%**
Firm Order (N=24,139)	14,742	9,397	**39%**

Comparison of Approval and Firm Items by Circulation Status

Approval: Circulated at least once — 6,627
Firm Order: Circulated at least once — 9,397
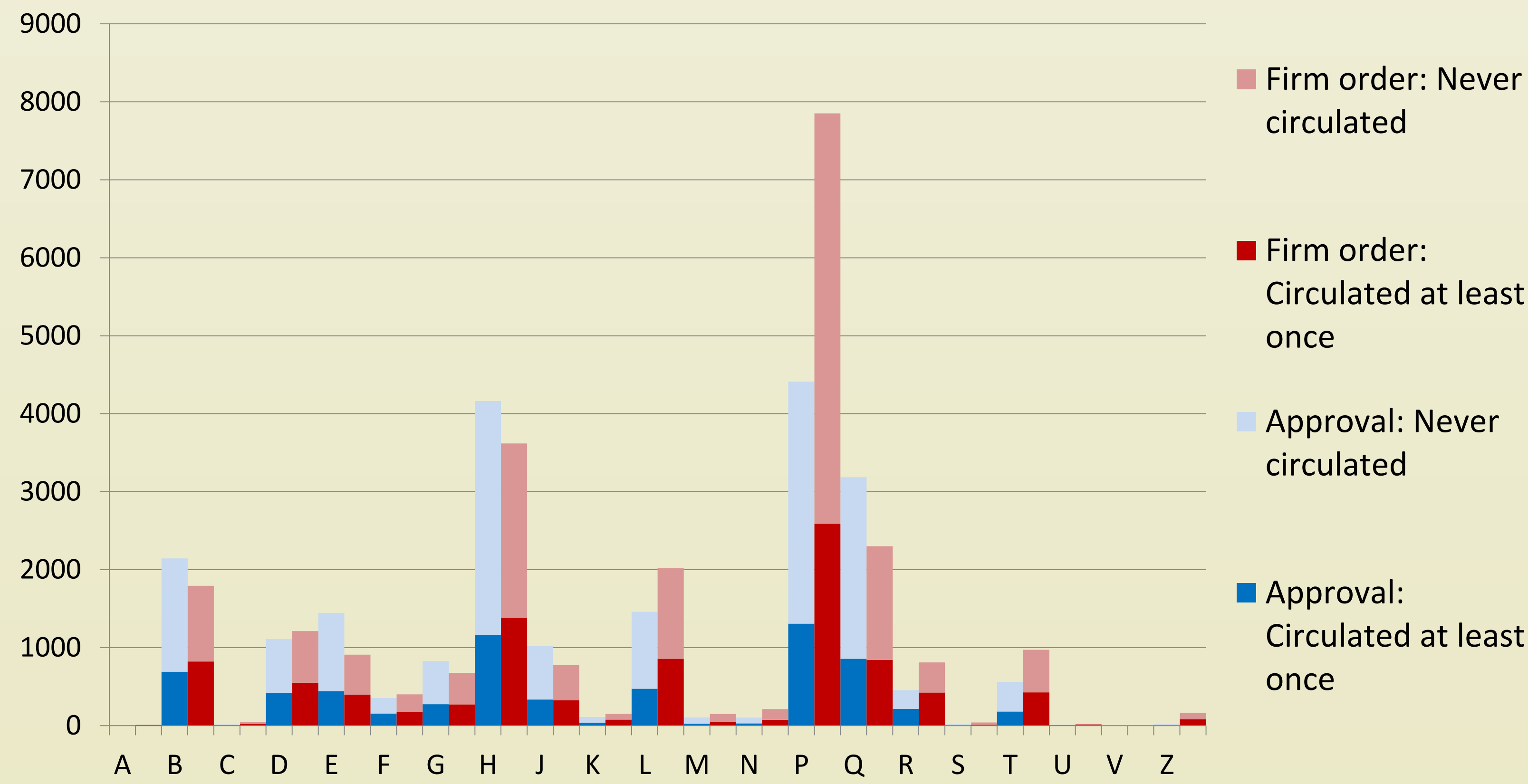Approval: Never circulated — 14,894
Firm Order: Never circulated — 14,742

Percentage of Items Circulated at Least Once among LC Classification: Approval vs. Firm Order

LC	Approval	Firm Order
A	33%	58%
B	32%	46%
C	40%	41%
D	38%	46%
E	31%	44%
F	44%	43%
G	33%	40%
H	28%	38%
J	33%	42%
K	34%	51%
L	32%	43%
M	24%	33%
N	28%	36%
P	30%	33%
Q	27%	37%
R	47%	52%
S	25%	29%
T	32%	44%
U	45%	62%
V	0%	0%
Z	25%	49%

Comparison Based on LC Classification:

Firm order: Never circulated
Firm order: Circulated at least once
Approval: Never circulated
Approval: Circulated at least once

Circulation Distribution Groupings Across LC Subclassification B

Approval = 0   Firm = 0   Approval = 1 - 5   Firm = 1 - 5
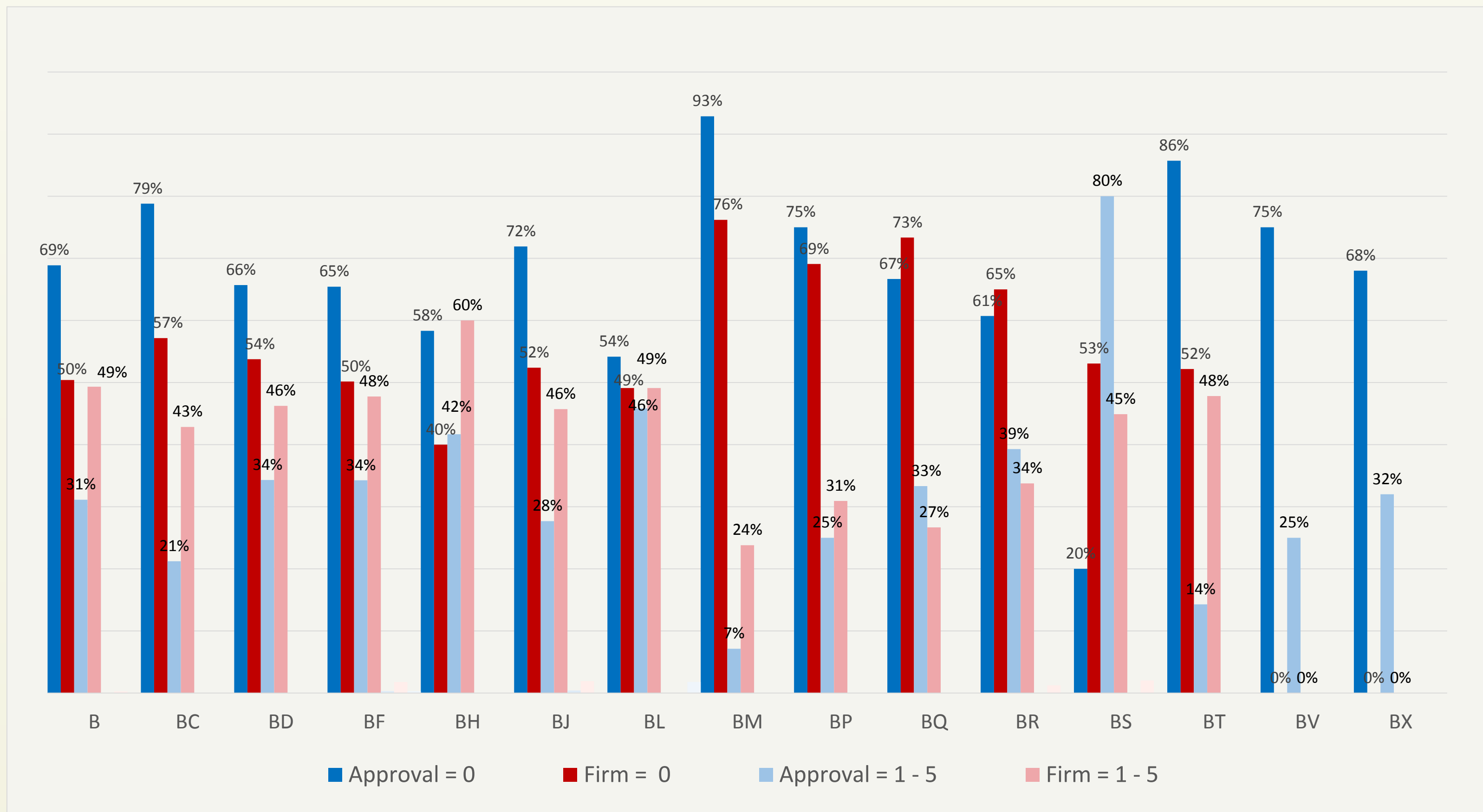
Comparison Across Subject Area Groups:

Subject Area Groups (SAGs)	Approval			Firm Order		
	Titles never circulated	Circulated at least once	% of titles circulated at least once	Titles never circulated	Circulated at least once	% of titles circulated at least once
Humanities	6002	2799	**32%**	7121	4171	**37%**
Social Sciences	6080	2716	**31%**	5438	3855	**41%**
Sciences	2812	1112	**28%**	2183	1371	**39%**

Conclusion and Discussion

This study attempted to answer the question of whether the time and effort subject librarians invested in firm orders was worthwhile. We compared the circulation data of the books collected between 2011 to 2014 through these two methods.

The results indicate that books collected through firm orders get more use:

1. For all the books we collected during the period, books collected via firm order got 8% more use than the ones from approval when they were compared according to "used or never-used" basis.
2. When looking at the LC classification, in all classes, except for F area, firm order books get more use. In some areas we saw more than 10% difference.
3. Comparing to other SAGs, the science group collected a majority of their books via approval plan. Their firm order books get 11% more use than the books from approval.
4. Based on the B sub-classification analysis, we were able to identify at a granular level of distribution and variance in distinct subject areas. We understand that subject librarians select books based on subclass to support specific disciplines that cannot be analyzed at the LC Classification level. There were 15 B sub-classifications purchased in our sample. In 12 out of 15 of these subclasses, the approval items had higher percentages of items that never circulated. Similarly, In 10 out of 15 of the subclasses, approval items also showed lower percentage of items that circulated between one and five times.

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