The Economics of a Domestic Approval Plan

A study of the efficiency and effectiveness of a domestic blanket approval plan as compared with traditional acquisitions procedures based upon a unit cost study carried out at four libraries in the state university system of Florida. Comparative costs are measured both in terms of internal systems savings and the level of service provided the academic community.

LOOKING BACK over the past two decades, one can see that three major issues seem to have dominated discussions among academic librarians: (1) The relative merits of the Library of Congress Classification System as compared with the Dewey Decimal; (2) the role of the computer in library operations; and (3) blanket approval plans as a means for systematic collection growth. All three have generated considerable amounts of impassioned rhetoric at professional gatherings and a corpus of polemical writing, but only a relatively small amount of research aimed at evaluating how the Library of Congress Classification System, the computer, or approval plans have advanced or retarded the academic library's progress toward its stated educational objectives. Nevertheless, the trend toward the Library of Congress Classification System continues to accelerate, the use and abuse of the computer is increasingly evident, and the number of academic

libraries utilizing approval plans grows with each passing year as does the number of firms offering them.

This situation suggests at least two possibilities: (1) That academic librarians may be inclined to rush willy-nilly into anything which carries the magic connotation of being innovative or experimental; or (2) that there is something inherently rational about all three of these developments-that they are related to a slowly evolving network for the acquisition, bibliographical control, and dissemination of knowledge on a global scale which overarches the individual libraries which are its constituent parts. In all probability, both possibilities have been operative. But I would prefer to believe that the latter has been by far the most important-that these trends reflect the intuitive genius and pragmatically oriented intellect of the profession probing several promising routes into the future. With respect to approval plans, what is needed at the present moment is a solid body of research which will calm some of the controversy by moving us from opinion and prejudice into documented facts.

In short, we need more than the profession's traditional crutch of self-evident truths or recourse to majority opin-

Dr. Axford is university librarian at Ari-

zona State University, Tempe.

This paper was originally delivered at the Third International Seminar on Approval and Gathering Plans in Large and Medium Size Libraries, February 17–19, 1971, West Palm Beach, Florida.

ion to justify what we are doing. We need not, perhaps, go quite so far as a participant in last year's seminar suggested and establish an agency similar to the Library Technology Project to study all aspects of this technique of building research collections. Yet surely those of us who are convinced of both the efficiency and effectiveness of approval plans would do well to follow Thoreau's advice (slightly paraphrased), "You have built your castles in the air. Now put foundations under them."

Research into the operation of approval plans, though slim in terms of the general interest in the subject, does exist. For instance, for several years the University of Nebraska has gathered very detailed statistics on the number of titles received, the breakdown by LC class, average prices, and discounts. Florida Atlantic University has compiled similar data since 1968. The University of Oklahoma Library has produced a solid vendor performance study of major significance which tested one company's claim "that monographs eligible for coverage under its approval plan would be sent within the same week of publication, and that 80 percent of these would be received before the title's first appearance in one of the trade bibliographies."1 Finally, there has been at least one dissertation in which approval plans have come under scrutiny. I refer to the work of G. Edward Evans at the University of Illinois in which he compared the use of books received through approval plans and those ordered individually by librarians and members of the faculty.2

Much of the published and unpublished research on approval plans and the verbal exchanges between proponents and opponents share the common attribute of viewing approval plans largely in isolation from the total acquisitions and processing effort. This is analogous to designing a powerful new

automobile engine without facing up to the necessity of also redesigning the entire drive train to achieve the desired level of performance. The present study avoids this pitfall since much of the data on approval plans per se has been extracted from a research project intended to derive costs of the technical services divisions of five of the seven libraries in the State University System of Florida covering operations for fiscal 1968/69. The goal of the study was to measure both efficiency (i.e., the optimal use of human resources) and effectiveness, the level of achievement in terms of established program goals.

The methodology of the study was as follows.

1. Each department of the Technical Services Division defined in the clearest possible terms the functions for which it was responsible.

2. A diary study was carried out for each position in each department in order to distribute salary/wages and hours worked over the functions performed.

3. The total dollars and minutes spent on each function over a year's operation were then divided by the total volumes fully processed by the division.

Here it should be noted that the project was not a true time and motion study, nor was it intended to be. The object was to determine the average costs per function rather than the determination of a standard time per unit produced. Put another way, we wanted to determine what it was costing to acquire and process a book, including the costs of inefficient supervision, rather than what it should cost.

When this project was completed, data were available which made it possible, within reasonable limitations, to isolate cost factors related to books acquired through approval plans and those acquired in the traditional manner, and to come to some conclusions as to the relative efficiency of both techniques. In order to measure the impact

of an approval plan on a library's level of achievement in terms of its established program goals, a supplementary study was undertaken which was designed to test the effectiveness of an approval plan in expediting current published scholarship to the academic community.

From the unit cost studies of the five participating libraries, three functions were clearly identified which could be eliminated by utilizing an approval plan. They were as follows: (1) Preorder searching; (2) vendor selection;

and (3) typing purchase orders.

Unfortunately, not all of the five libraries isolated each of the above functions in their studies. Consequently, it was necessary in some instances to use the average costs in minutes and dollars. For instance, if only four of the five had isolated vendor selection, the average costs for these four would be used for the fifth.

Table 1 shows the savings achieved by two of the five libraries in the test group which were on approval plans and the savings which could have been achieved by the other three had they been. Table 2 shows the savings which would have accrued to the state university system had all five libraries been on approval plans.

The range of possible savings between institutions is both interesting and significant. At the lower end of the scale, Library 1's figures were 1,073 manhours and \$3,550. At the top, Library 3 could have saved double the number of hours and almost twice as much money as Library 1 had it been on an approval

plan.

The greatest variation in costs was in preorder searching. Two factors apparently were operative. In the first place, Libraries 2 and 4 which reported the highest costs had more than one F.T.E. professional assigned to this function. The two libraries with the lowest costs had no professional engaged in preor-

TABLE 1

SAVINGS ACHIEVED AT TWO LIBRARIES THROUGH AN APPROVAL PLAN, AND THE SAVINGS WHICH COULD HAVE BEEN ACHIEVED BY THE THREE OTHER LIBRARIES IN THE TEST GROUP HAD THEY BEEN ON APPROVAL PLANS.¹

		M	inutes per Vol-	ume			D	ollars per Vol	ume	
	Preorder Searching	Vendor ² Selection	Typing P.O.'s	Per Vol. Total	Total Savings 10,000 Vols.	Preorder Searching	Vendor Selection	Typing P.O.'s	Per Vol. Total	Total Savings of 10,000 Vols.
Library 1	2.80	1.37	2.27	6.44	1.073	.16	.105	60.	.355	3,550
Library 2	2.20	1.67	6.53	10.40	1,733	.12	.14	.19	.45	4,500
Library 3	8.85	1.06	3.15	13.06	2,177	.43	.07	.10	09.	00009
Library 4	7.75	1.06	6.87	15.98	2,663	.38	.07	.23	89.	6,800
Library 5	9.70	1.37	4.13	15.20	2,533	.38	.105	.12	.605	6,050

¹ All data taken from a unit cost study of the technical services division of five libraries in the state university system of Florida covering fiscal 1968/69.

² This function was not isolated in the unit cost studies at Florida and Library 4. The figures used are the average costs in minutes and dollars reported by two other

libraries in the test group.
Figures are for total hours.
Figures are for total dollars

der searching. At Library 1, preorder searching was limited to determining if a given title actually existed. No attempt was made to establish the main entry before placing an order with a dealer. The other libraries in the test group followed the traditional procedure.

The spread in savings actual or potential between the five libraries illustrates an interesting paradox. The more efficient the bibliographic searching and

TABLE 2

SAVINGS WHICH COULD BE ACHIEVED FOR THE STATE UNIVERSITY SYSTEM OF FLORIDA IF ALL FIVE LIBRARIES INCLUDED IN THE STUDY UTILIZED AN APPROVAL PLAN OF 10,000 VOLUMES A YEAR¹

Institution	Hours	Dollars
Library 1	1,073	3,550
Library 2	1,733	4,500
Library 3	2,177	6,000
Library 4	2,663	6,800
Library 5	2,533	6,050
TOTAL	10,179	26,900

Translated into positions, the dollar savings would provide approximately five to six clerical positions for the five libraries.² These figures show that an approval plan, on the average, will save the time of approximately 1½ full-time persons.

acquisition procedures are, the less one will be likely to save by having an approval plan, while the more inefficient they are, the greater will be the savings. The same situation holds true with respect to adjusted discounts; that is, calculating the discount on books received on an approval plan to include labor saved. Table 3 shows the results of computing the discount on approval plan books on this basis for the five libraries which participated in the study. As can be seen, the adjusted discounts run from a low of just over 11 percent to

a high of just over 15 percent. Either figure is highly respectable for an acquisitions program in access of 10,000 volumes covering all areas of study.

The evidence derived from the unit cost studies undertaken by the five libraries of the state university system of Florida clearly support the contention that a blanket approval plan is an efficient method of acquiring current domestic scholarship. As the data show, a well-managed approval plan can save at the minimum one full-time position, with significantly higher savings possible depending upon variances in internal procedures.

The vendor performance study carried out at the University of Oklahoma further bolsters the evidence for the efficiency of approval plans. As already noted, the purpose of this study was to test one company's claim that monographs eligible for coverage under the plan would be sent within the week of publication, and that 80 percent of these titles would arrive in the library before their first appearance in a standard trade bibliography.

The team which carried out the research began by analyzing the fifteen issues of *Publishers' Weekly* from August 28 to December 2, 1968. These contained 8,977 titles. The team concluded that 6,674 (74 percent) fell within the exclusion categories of the library's profile, and 2,303 (28 percent) within. Of the 2,303 which they felt should have been sent by the dealer, 1,792 (78 percent) were located in the library's records; 509 (22 percent) were not located. A subsequent check reduced this latter figure to 466.

A list containing these 466 titles was forwarded to the company's regional office to be checked. The district manager reported as follows.

1. One hundred and ninety-one of the titles on the list had been considered for inclusion on the approval plan but rejected as being

¹Since over 95 percent of the titles received on an approval plan are single volumes, for the purpose of the study, titles and volumes are considered synonymous.

²The average clerical salary at FAU in 1969/70 was \$4.800.

TABLE 3

Dealer Discounts on Approval Plan Books Calculated to Include Labor Dollars Saved Through an Approval Plan

	Titles	Average	Average Dealer	Labor Do	per 10,000		onal Disco		Total Adjusted
	Purchased	Price	Discount	per vol.	vols.	per vol.	vols.	%	Discount
Library 1	10,000	\$8.93	7.16%	\$.36	\$3,550	\$.36	\$8.93	4%	11.16%
Library 2	10,000	8.93	7.16	.45	4,500	.45	8.93	5	12.16
Library 3	10,000	8.93	7.16	.60	6,000	.60	8.93	7	14.16
Library 4	10,000	8.93	7.16	.68	6,800	.68	8.93	8	15.16
Library 5	10,000	8.93	7.16	.61	6,050	.61	8.93	7	14.16

juvenile titles, items of local interest, or nonscholarly.

- 2. Two hundred and seventy-five had been selected for the approval plan, and of these 111 were judged to fit the University of Oklahoma profile and had been shipped. One hundred and thirty-three were judged as not fitting the library's profile.
- 3. Thirty titles could not be accounted for.

The dealer's decisions for not sending certain titles were based on the acquisitions librarian's instructions that the library's profile was to be very strictly interpreted. In other words, err in the direction of exclusion in case of doubt. It is possible that the library's inclusion of 111 titles on the search list which had actually been sent under the approval plan may have been due to main entries on the invoices which differed from those in *Publishers' Weekly* and paperbacks which may have been at the bindery and not located by the library during the study.

Subsequent correspondence regarding the results of the study between the company's district manager and the director of the University of Oklahoma Libraries revealed a broad difference of opinion between the director's concept of what the company should be sending and that of the acquisitions librarian. Whereas the latter's inclination was to narrow the coverage, the former's was to make it as broad as possible. Had the

approval firm operated under the director's interpretation of what come under the library's profile, it is probable that the number of titles rejected for inclusion would have been considerably smaller. This situation clearly illustrates a problem which often confronts a dealer. If the library assumes a Janus-like stance and speaks out of both mouths at once, the dealer can hardly be criticized if he fails to satisfy either. It also points out the managerial responsibilities inherent in an approval plan.

Adjusting the figures to take into account the 111 titles recorded as sent under the approval plan but apparently not located in the library at the time of the study, the approval firm actually exceeded its claim to deliver 80 percent of the titles which fell within the scope of the University of Oklahoma Library's profile within the week of publication and before their first appearance in a trade bibliography. The adjusted average early arrival was thirty-one days. After evaluating all the evidence, the research team concluded that the plan was efficiently providing rapid delivery of current domestic publications to the University of Oklahoma Libraries.

As work progressed on the unit cost studies, a vendor performance study similar to that done at Oklahoma was undertaken. The methodology decided upon was to take a random sample of the titles received by the Florida Atlantic University Library through its ap-

proval plan during fiscal 1968/69 and to check these in the public catalogs of four other university libraries in the state. The libraries in the test group included a private university which did not utilize an approval plan, a state university which did not, and a state university which did not, and a state university which had individual blanket orders with all university presses.

In fiscal 1968/69 the Florida Atlantic University Library accepted 10,648 titles through its approval plan. In January 1970, six months after the close of the fiscal year, this file was weeded to remove titles in series, corporate entries, and reprints. An 8 percent sample of the remaining 9,461 titles was then selected. Over the course of the next five months, the 764 titles obtained by this process were checked in the public catalogs of the libraries in the test group, the first one in January, two more in February, and the last the first week of May. It is worth noting at this point that since Library 1 attempted to maintain a policy of giving original cataloging to all approval plan books for which LC copy had not been received after ninety days, the bulk of the titles in the sample group had been fully cataloged before or by October 15, 1969. The time lags between this date and the dates when the catalogs of the libraries in the test group were checked were as follows.

Library 2	10 weeks
Library 3 and Library 4	14 weeks
Library 5	26 weeks

The results of the catalog checks were unexpected and not easy to interpret. They are shown in Table 4.

Because of the very high percentage of titles not found in the public catalogs of the test groups of libraries, university press titles and titles from a selected group of individual publishers noted for scholarly publication were studied separately. A slightly different pattern emerged, which again raised as many questions as it answered. For instance, at Library 2, which had individual blanket orders with all university presses, the percentage of titles not held in the university press group was almost 10 percent higher than for the whole list. Incredible as it may seem, this li-

TABLE 4

RESULTS OF CHECKING AN 8 PERCENT SAMPLE OF APPROVAL PLAN
BOOKS RECEIVED BY FAU DURING 1968/69 IN THE PUBLIC
CATALOGS OF FOUR UNIVERSITY LIBRARIES IN FLORIDA

		L	evel*			
	2	3	4	5	Total	%
Library 1						
Not found	38	1,113	1,550	2,662	4,362	56.2
Older ed. Found	0	75	125	125	325	3.4
On Order	0	0	0	0	0	0
Library 2						
Not found	38	950	1,162	1,750	3,900	40.8
Older ed. Found	0	138	50	88	276	2.9
On Order	0	288	400	1,061	1,749	18.3
Library 3						
Not found	38	1,288	1,688	3,250	6,264	65.6
Older ed. Found	12	175	63	188	438	4.6
On Order	0	0	0	0	0	0
Library 4						
Not found	38	750	838	1,288	2,913	30.5
Older ed. Found	0	63	75	138	276	2.9
On Order	0	38	38	50	126	1.3

[·] Approval firm's assigned level

brary did not hold over 50 percent of the university press titles which had been cataloged several months previously at one of the other libraries studied.

In order to find out if the libraries not on approval plans were acquiring university press titles by traditional techniques, these titles were separated into two groups, those received during the first half of the fiscal year and those received during the second half. At all institutions, the number of titles not held in the first group was substantially lower than in the second. This finding seemed to indicate clearly that the university press titles which had been received through approval plans were being acquired by traditional acquisitions procedures but at a considerably later date. Tables 5, 6, 7, and 8 show the results of this part of the study in detail.

In attempting to interpret the data derived from the catalog checks, several points must be borne in mind. First of all, neither Library 2 nor 4 filed "on order" information in their public catalog, nor did they file temporary entries for titles in cataloging backlogs. Consequently, it is entirely possible that many of the titles not found in the catalog checks were actually owned by these libraries, but not available to the public. Many were probably on order. Although it would have been desirable to obtain this information, not having it does not really affect the overall findings of the study, which revealed a very large number of scholarly titles not available to the academic communities served by these two libraries ten to fourteen weeks after they were available at

TABLE 5

NUMBER OF TITLES NOT IN THE PUBLIC CATALOGS OF THE FOUR OTHER UNIVERSITY LIBRARIES IN FLORIDA AT THE TIME CHECKED1 (Number of University Press Titles Received and Cataloged by Library 1—2,137)

Institution	No. of Titles	Percent
Library 2 ²	975	45.6
Library 3 ³	1,075	50.3
Library 4 ⁴	1,325 413	62.0
Library 4 ⁴ Library 5 ⁵	413	19.3

1 Results of checking university press books received at FAU through blanket approval plan in fiscal 1968/69 and fully cataloged by September 15, 1969, in the public catalogs of four other university libraries in Florida. All figures are based on an 8 percent sample of 9,461 titles. All approval plan books for which LC copy was not available after ninety days were given original cataloging at Library 1.

² Catalog checked in January 1970.

³ Catalog checked in February 1970. Had standing orders with individual university presses.

Catalog checked in February 1970.

⁵ Catalog checked in May 1970. Had blanket approval plan.

TABLE 6

Number of Titles not in the Public Catalogs of the Four Other INSTITUTIONS AT THE TIME CHECKED1 (Number of titles received and cataloged from these publishers by Library 1: Praeger, 275; Wiley, 224; Macmillan, 174; Prentice-Hall, 225; McGraw-Hill, 187)

	Pra No. of	eger	No. of	iley	No. of	emillan	Prenti No. of	ice-Hall	McG No. of	raw-Hill
	Titles	Percent	Titles	Percent	Titles	Percent	Titles	Percent	Titles	Percent
Library 2 ²	175	63.6	125	55.8	88	50.5	125	55.5	75	40.1
Library 3 ⁸	113	41.1	75	33.4	75	43.1	125	55.5	13	6.9
Library 4 ⁴	136	49.4	125	55.8	63	36.2	150	66.6	113	60.4
Library 5 ⁵	13	4.7	0	0	50	28.7	75	33.3	38	20.3

¹ Results of checking the above five publishers' titles received at FAU through blanket approval plan during fiscal 1968/69 and fully cataloged by September 15, 1969, in the public catalogs of four other university libraries in Florida. All figures based on an 8 percent sample of 9,461 titles. All approval plan books for which LC copy was not available after ninety days were given original cataloging at Library 1.

² Catalog checked in January 1970.

³ Catalog checked in February 1970, Had standing orders with individual university presses.

⁴ Catalog checked in February 1970.

⁵ Catalog checked in May 1970. Had blanket approval plan.

TABLE 7

Number of Titles not in the Public Catalogs of the Four Other University Libraries in Florida at the Time Checked¹ (Number of University Press Titles Received and Cataloged by Library 1—1,050)

Institution	No. of Titles	Percent
Library 2 ²	387	36.8
Library 3 ³	412	39.2
Library 4 ⁴	575	54.7
Library 5 ⁵	150	14.2

¹ Results of checking university press books received at Library 1 through blanket approval plan July 1, 1968, through December 31, 1968, and fully cataloged by April 15, 1969, in the public catalogs of four other university libraries in Florida. All figures are based on an 8 percent sample of 9,461 titles. All approval plan books for which LC copy was not available after ninety days were given original cataloging at Library 1.

² Catalog checked in January 1970.

³ Catalog checked in February 1970. Had standing orders with individual university presses.

⁴ Catalog checked in February 1970.

⁵ Catalog checked in May 1970. Had blanket approval plan.

Library 1. In the case of university press titles received during the first half of the fiscal year, the time lag was from twenty-four to forty weeks.

Libraries 3 and 5 both filed "on order" information in the public catalog, and both filed temporary entries for all titles not cataloged. The "on order" information provided some very positive documentation for the effectiveness of an approval plan. At Library 3, the one with individual blanket order plans with all university presses, 18.3 percent (1,749 titles) on Library 1's list were found to be on order. At Library 5, which had an approval plan, the figure dropped to 1.3 percent (126 titles). It is interesting but somewhat confusing

TABLE 8

Number of Titles not in the Public Catalogs of the Four Other University Libraries in Florida at the Time Checked¹ (Number of University Press Titles Received and Cataloged by Library 1—1,087)

Institution	No. of Titles	Percent
Library 2 ²	587	54.0
Library 3 ³	662	63.0
Library 4 ⁴	750	68.9
Library 5 ⁵	262	24.1

¹Results of checking university press books received at Library 1 through blanket approval plan January 1, 1969, through June 30, 1969, and fully cataloged by September 15, 1969, in the public catalogs of four other university libraries in Florida. All figures are based on an 8 percent sample of 9,461 titles. All approval plan books for which LC copy was not available after ninety days were given original cataloging at Library 1.

² Catalog checked in January 1970.

³ Catalog checked in February 1970. Had standing orders with individual university presses.

⁴ Catalog checked in February 1970.

5 Catalog checked in May 1970. Had blanket approval plan.

to note that both libraries missed exactly the same number of new editions of titles for which they held the previous edition (see Table 4).

It seems obvious that the approval plan technique for building research libraries is here to stay. The study reported here clearly demonstrates its efficiency and effectiveness.

REFERENCES

- Kathleen Maher, Diana Lane, Martha Schmidt, and Charles Townley, How Good Is Your Approval Plan, A Vendor Performance Study (University of Oklahoma Libraries, 1969).
- Gayle Edward Evans, The Influence of Book Selection Agents upon Book Collection Usage in Academic Libraries (University of Illinois, Ph.D. diss., 1969).