

Banks End the “Free Lunch” for Many Services

For many years, retail banks provided their customers a wide range of “free” services. A customer who made a \$100 minimum deposit received “free” chequing, “free” inquiries about past cheques written, “free” money orders, “free” drafts in foreign currencies, and so on. But as a famous economist (Milton Friedman) observed, “there is no such thing as a free lunch.” What was occurring was cross-subsidization.

A major source of profitability in retail banks is the interest rate spread (the difference between the rate at which a bank lends or invests money and the rate it pays its depositors). Banks used this interest rate spread to cover the costs of the many “free” services it provided customers. Recently, banks began using activity-based costing (ABC) to determine the costs of their many individual services. This involved examining how each service (such as a chequing account) used the resources of the bank. These ABC studies found banks have been losing money on customers who hold small balances and make frequent use of the many “free” services. In contrast, customers holding large balances and making limited use of the “free” services were highly profitable to banks. These customers were cross-subsidizing those with small balance accounts. This situation did not escape the attention of banks.

Many banks responded to increased competition by instituting a detailed set of charges. Consider the following charges by Wells Fargo Bank:

◆ Cheque deposits	\$3 per deposit
◆ Foreign cheque deposits	\$5 per deposit
◆ Special statement requests	\$4 per request
◆ Cheque stop payment request	\$10 per request
◆ 24-hour customer service:	
Person-to-person call	\$1.50 per call
Automated call	\$0.50 per call

These charges are based on an analysis of the activities underlying each service. For example, a customer service request via a person-to-person call uses more resources than a request that could be handled with an automated response. Hence, the person-to-person customer service charge of \$1.50 per call exceeded the \$0.50 charge for an automated service call. Customers who hold accounts with large deposit balances have these charges reduced or waived by Wells Fargo.

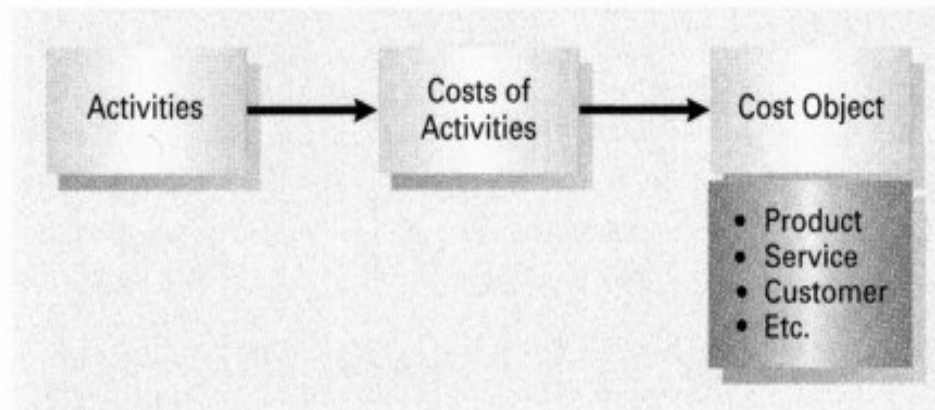
Not surprisingly, such bank charges have attracted much attention. Consumer advocacy groups typically express outrage. One group argued that the charge “will particularly disadvantage those groups who can least afford it—namely, older persons, kids, and the poor.” In contrast, a management consultant called it “a bold move. They are telling the public what the cost of their interactions will be.”

Are there limitations on the extent to which banks are willing to charge for specific services? Yes, for example, ABC studies have documented the costs of having toll-free complaint hot lines. However, (to date) banks have refrained from instituting a charge for using these hot lines. Further, some banks waive customer service call charges if it is determined that the bank did not deliver on a promised set of commitments.

Source: Conversations with executives implementing activity-based costing at several banks.



A specific approach to refining a costing system is **activity-based costing (ABC)**. It focusses on activities as the fundamental cost objects. An **activity** is an event, task, or unit of work with a specified purpose. ABC uses the cost of these activities as the basis for assigning costs to other cost objects such as products, services, or customers:



ABC uses the cost driver notion when deciding how many indirect cost pools to use and the preferred allocation base for each indirect cost pool.

We now consider a retail application of ABC where a key issue is the profitability (revenues minus costs assigned for each product) of individual products or product lines. A **product line** is a grouping of similar products. For example, the soft drink product line at a supermarket (a retailer) would include Coca-Cola, Pepsi, and other nonalcoholic beverage products.

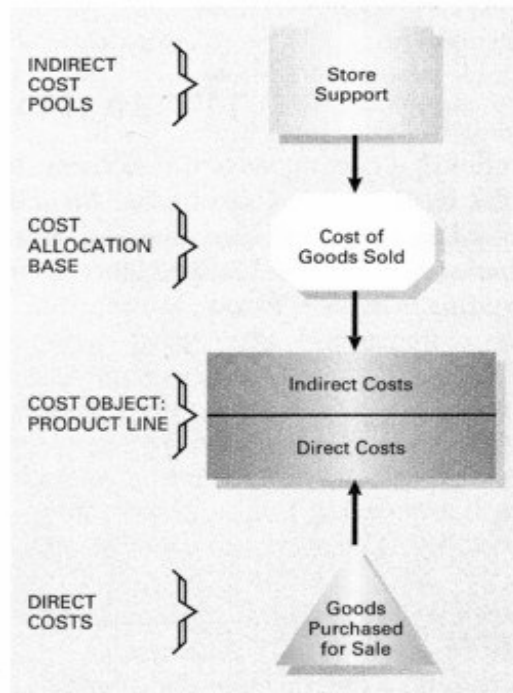
For its Regina store, Family Supermarkets (FS) used a costing system that had a single direct cost category (goods purchased for sale) and a single indirect cost category (store support). Store support costs were allocated to products at the rate of 30% of the cost of goods sold. For example, a coffee product costing \$6.30 is allocated an indirect cost charge of \$1.89 ($\6.30×0.30). Exhibit 4-7, Panel A presents a product line profitability report from the costing system. A costing overview of the system is shown in Panel B. FS's cost of goods sold makes up 76.92% of total costs ($\$100,000 \div \$130,000$). This high percentage is typical of many companies in the merchandising sector. The ranking of product lines on the basis of the percentage of operating income to revenues is (1) fresh produce (7.17%), (2) packaged food (3.30%), and (3) soft drinks (1.70%).

Product Line Profitability at Family Supermarkets with Previous Costing System

**PANEL A: MONTHLY PROFITABILITY REPORT FOR DECEMBER 19_7
(IN THOUSANDS)**

	Soft Drinks	Fresh Produce	Packaged Food	Total
Revenues	<u>\$26,450</u>	<u>\$70,020</u>	<u>\$40,330</u>	<u>\$136,800</u>
Costs:				
Cost of goods sold	20,000	50,000	30,000	100,000
Store support	<u>6,000</u>	<u>15,000</u>	<u>9,000</u>	<u>30,000</u>
Total costs	<u>26,000</u>	<u>65,000</u>	<u>39,000</u>	<u>130,000</u>
Operating income	<u>\$ 450</u>	<u>\$ 5,020</u>	<u>\$ 1,330</u>	<u>\$ 6,800</u>
Operating income ÷ revenues	1.70%	7.17%	3.30%	4.97%

PANEL B: JOB COSTING OVERVIEW



FS has decided to increase the size of its Regina store. It seeks accurate information about the profitability of individual product lines. It is skeptical about the accuracy of the existing product line profitability numbers, because they are based on broad averaging of store support costs. After observing operations at the Regina store, its managers conclude that individual product lines differ greatly in their use of FS's support resources.

Managers then decide to introduce an ABC approach to product line costing. After analyzing its operations and its information systems, they make the following refinements to its costing system:

- ◆ **Guideline 1: *Direct cost tracing.*** FS adds an extra direct cost category—bottle returns. This cost category only applies to the soft drink product line. It was previously included in the store support indirect cost pool.
- ◆ **Guidelines 2 and 3: *Indirect cost pools and cost allocation bases.*** Cost pools representing four separate activity areas, as listed below, were chosen to replace the single store support indirect cost pool. Cost drivers are identified and then used as cost allocation bases.

1. *Ordering* covers purchasing activities. The cost driver is the number of purchase orders. The 19_7 actual cost rate is \$100 per order.
2. *Delivery* covers the physical delivery and receipt of merchandise. The cost driver is the number of deliveries. The 19_7 actual cost rate is \$80 per delivery.
3. *Shelf stocking* covers the stocking of merchandise on store shelves and the ongoing restocking. The cost driver is hours of shelf stocking time. The 19_7 actual cost rate is \$20 per hour.
4. *Customer support* covers assistance provided to customers, including checkout and bagging. The cost driver is the number of items sold. The 19_7 actual cost rate is \$0.20 per item sold.

Operating personnel at FS provided the following data for December 19_7:

Activity Area	Cost Allocation Base	Amount of Driver Used		
		Soft Drinks	Fresh Produce	Packaged Food
Ordering	\$100 per purchase order	12	28	12
Delivery	\$80 per delivery	10	73	22
Shelf stocking	\$20 per hour	18	180	90
Customer support	\$0.20 per item sold	4,200	36,800	10,200

Exhibit 4-8, Panel A presents a product line profitability report using the ABC system. A costing overview of the ABC system is shown in Panel B. Managers believe the activity-based system is more credible than the previous system. It better distinguishes the different types of activities at FS. It also better tracks how individual product lines use their resources. Rankings of relative profitability (the percentage of operating income to revenues) of the three product lines under the previous costing system and under the ABC system are as follows:

Previous Costing System		ABC System	
1. Fresh produce	7.17%	1. Soft drinks	10.77%
2. Packaged food	3.30	2. Packaged food	8.75
3. Soft drinks	1.70	3. Fresh produce	0.60

The percentage revenue, cost of goods sold, and activity costs for each product line are as follows:

	Soft Drinks	Fresh Produce	Packaged Food
Revenue	19.34%	51.18%	29.48%
Cost of goods sold	20.00	50.00	30.00
Activity areas:			
Ordering	23.08	53.84	27.08
Delivery	9.53	69.52	20.95
Shelf stocking	6.25	62.50	31.25
Customer support	8.20	71.88	19.92

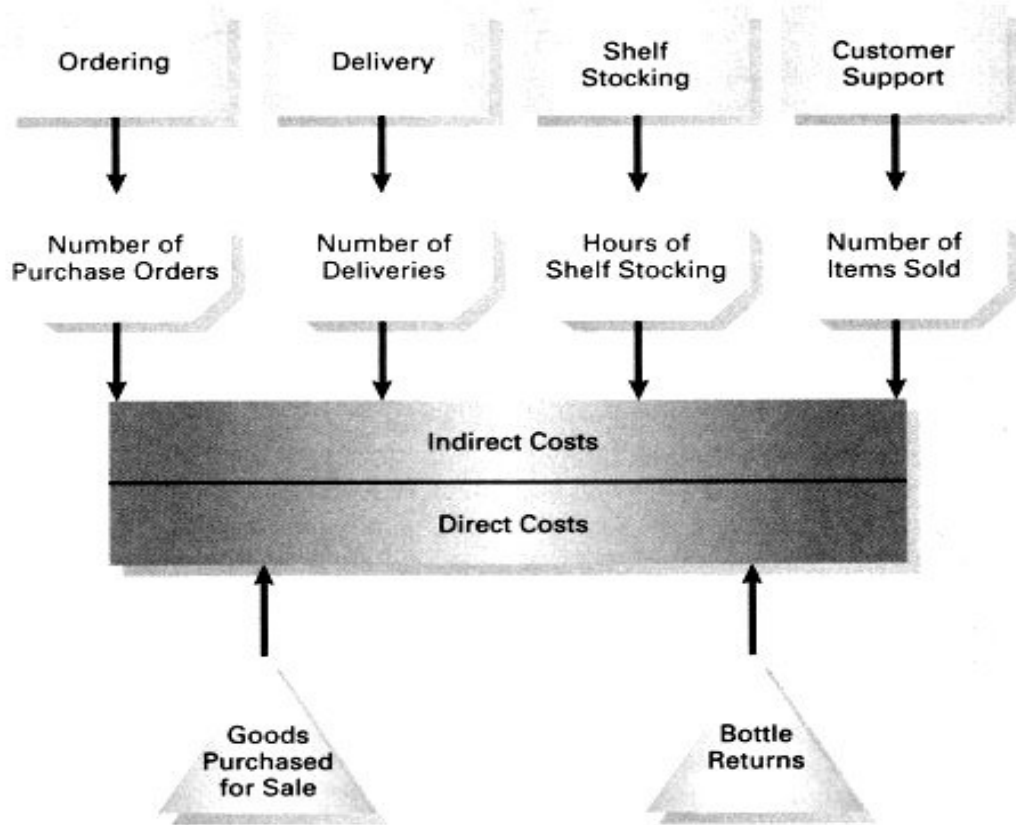
Soft drinks consume less of all resources. Soft drinks have fewer deliveries and require less shelf stocking than does either fresh produce or packaged food. Most major soft drink suppliers deliver merchandise to the store shelves and stock the shelves themselves. In contrast, the fresh produce area has the most deliveries and consumes a large percentage of shelf stocking time. It also has the highest number of individual sales items. The previous costing system assumed that each product line used the resources in each activity area in the same ratio as their respective individual cost of goods sold to total cost of goods sold. Clearly, this assumption was inappropriate. The previous costing system was a classic example of broad averaging via peanut butter costing.

Product Line Profitability at Family Supermarkets with Activity-Based Costing

**PANEL A: MONTHLY PROFITABILITY REPORT FOR DECEMBER 19_7
(IN THOUSANDS)**

	Soft Drinks	Fresh Produce	Packaged Food	Total
Revenues	\$26,450	\$70,020	\$40,330	\$136,800
Costs:				
Cost of goods sold	20,000	50,000	30,000	100,000
Bottle returns	400	0	0	400
Ordering	1,200	2,800	1,200	5,200
Delivery	800	5,840	1,760	8,400
Shelf stocking	360	3,600	1,800	5,760
Customer support	840	7,360	2,040	10,240
Total costs	23,600	69,600	36,800	130,000
Operating income	\$ 2,850	\$ 420	\$ 3,530	\$ 6,800
Operating income ÷ revenues	10.77%	0.60%	8.75%	4.97%

PANEL B: JOB COSTING OVERVIEW



4-24 **ABC, retail product line profitability.** Family Supermarkets (FS) found that its ABC analysis (see p. 105) provided important insights. It extends the analysis to cover three more product lines—baked goods, milk and fruit juice, and frozen foods. The revenues, cost of goods sold, store support costs, and activity area usage of the three product lines is as follows:

	Baked Goods	Milk and Fruit Juice	Frozen Products
Financial data:			
Revenues	\$57,000	\$63,000	\$52,000
Cost of goods sold	38,000	47,000	35,000
Store support	11,400	14,100	10,500
Activity area usage (cost driver):			
Ordering (purchase orders)	30	25	13
Delivery (deliveries)	98	36	28
Shelf stocking (hours)	183	166	24
Customer support (items sold)	15,500	20,500	7,900

There are no bottle returns for any of these three product lines.

REQUIRED

1. Use the previous costing system (support costs allocated to products at the rate of 30% of cost of goods sold) to compute a product line profitability report for FS.
2. Use the ABC system (ordering at \$100 per purchase order, delivery at \$80 per delivery, shelf stacking at \$20 per hour, and customer support at \$0.20 per item sold) to compute a product line profitability report for FS.
3. What new insights does the ABC system in requirement 2 provide to FS managers?

4-25 ABC, product costing at banks, cross-subsidization. First International Bank (FIB) is examining the profitability of its Premier Account, a combined savings and chequing account. Depositors receive a 7% annual interest rate on their average deposit. FIB earns an interest rate spread of 3% (the difference between the rate at which it lends money and the rate it pays depositors) by lending money for residential home loan purposes at 10%. Thus, FIB would gain \$60 on the interest spread if a depositor has an average Premier Account balance of \$2,000 in 19_7 ($\$2,000 \times 3\% = \60).

The Premier Account allows depositors unlimited use of services such as deposits, withdrawals, chequing account, and foreign currency drafts. Depositors with Premier Account balances of \$1,000 or more receive unlimited free use of services. Depositors with minimum balances of less than \$1,000 pay \$20 a month service fee for their Premier Account.

FIB recently conducted an activity-based costing study of its services. It assessed the following costs for six individual services. The use of these services in 19_7 by three customers is as follows:

	ABC-Based Cost per "Transaction"	Account Usage		
		Robinson	Skerrett	Farrel
Deposit/withdrawal with teller	\$ 2.50	40	50	5
Deposit/withdrawal with automatic teller machine	0.80	10	20	16
Deposit/withdrawal on prearranged monthly basis	0.50	0	12	60
Bank cheques written	8.00	9	3	2
Foreign currency drafts	12.00	4	1	6
Inquiries about account balance	1.50	10	18	9
Average Premier Account balance for 19_7		\$1,100	\$800	\$25,000

Assume Robinson and Farrel always maintain a balance above \$1,000 while Skerrett always had a balance below \$1,000 in 19_7.

REQUIRED

1. Compute the 19_7 profitability of the Robinson, Skerrett, and Farrel Premier Accounts at FIB.
2. What evidence is there of cross-subsidization across Premier Accounts? Why might FIB worry about this cross-subsidization if the Premier Account product offering is profitable as a whole?
3. What changes at FIB would you recommend for its Premier Account?