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DOES FIRST-CLASS MAIL CARRY TOO MUCH OVERHEAD?

Executive Summary

- The Postal Service claims that a large fraction of its costs — about 40% — are overhead costs that are unrelated (not "attributable") to specific products. These overhead costs are spread over the Postal Service's various products.

- First-class mail customers pay a disproportionate share of reported overhead costs. The "markup" added for overhead to the direct cost of delivering first-class mail was 90.1% in the last rate case decision. That is over twice the 43.9% average markup authorized for the Postal Service's other products and services.

- Since the mid 1980s, the first-class mail markup has increased relative to the average postal markup.

- First-class mail accounts for 45.1% of the Postal Service's reported attributable costs but because of its high markup, it is estimated to bring in 52.0% of the government agency's total operating revenues and 62.8% of total operating revenues in excess of attributable costs.

- Current law directs the Postal Rate Commission (PRC), the independent federal agency that regulates postal rates, to approve rates for products that (1) cover their attributable costs and (2) that apportion overhead costs among products based on multiple factors. The Postal Service and the PRC interpret one of those factors ("value of the mail service") as justifying higher markups on products whose demands are relatively insensitive to price — notably first-class mail — because the higher prices will not cause much decline in mail volume.

- Indeed, the Postal Service has long argued that insensitivity of demand to price should be the *primary* determinant when apportioning overhead costs. Giving it primacy would push the markup on first-class mail still higher and force first-class mail customers to bear an even greater share of overhead costs.

- But demand for first-class mail is relatively insensitive to price in large part because the Postal Service has a government-granted monopoly on non-urgent letter delivery. Using the artificially low price sensitivity stemming from the postal monopoly as the basis for a high first-class-mail markup contradicts the supposed purpose of the monopoly, which is to increase the availability of reasonably priced basic mail service.

- In addition, overhead costs are probably substantially overstated, which means first-class mail customers are subsidizing other postal products, especially low-markup products outside the postal monopoly, where the Postal Service faces strong competition from private-sector companies.

- In its "transformation plan", the Postal Service asks Congress to give it more pricing flexibility, that is, power to alter rates with less regulatory oversight. Granting the Postal Service that power would likely lead to an increase in the already excessive burden on first-class mail customers.

DOES FIRST-CLASS MAIL CARRY TOO MUCH OVERHEAD?

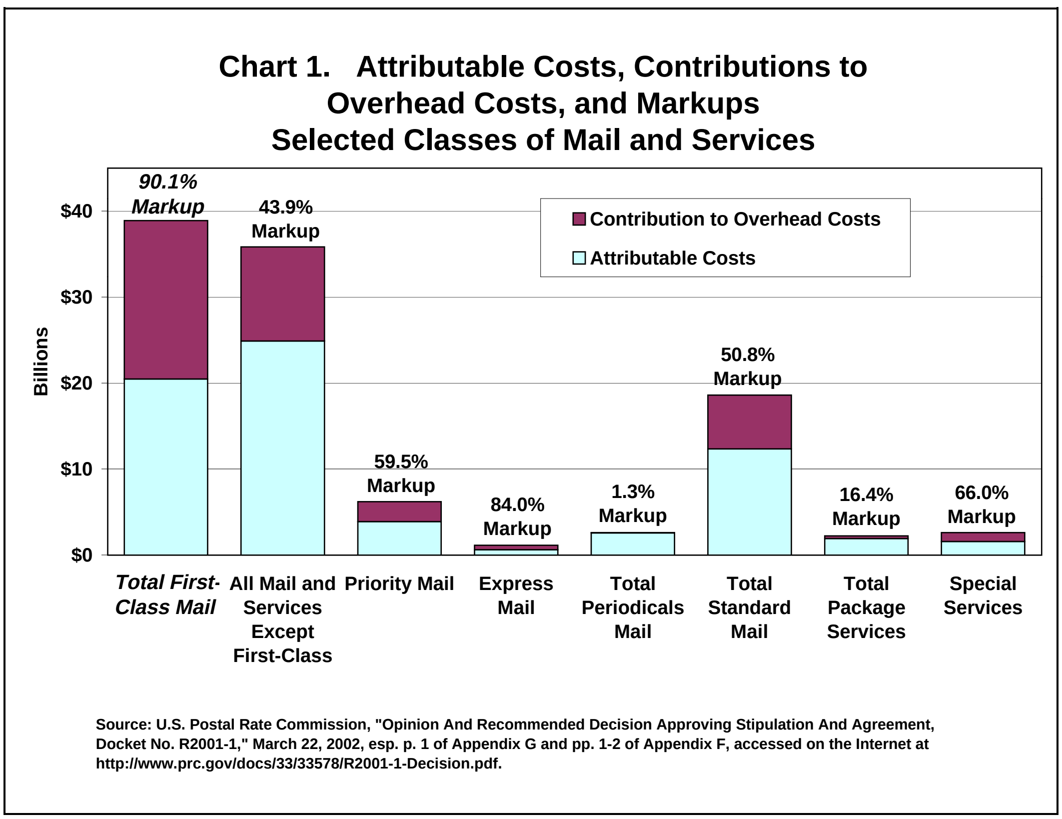
The Postal Service reports that a large percentage of its costs are for overhead, and these costs are apportioned much more heavily to first-class mail than to other postal products. The "markup" added for overhead to the direct cost of delivering first-class mail was 90.1% in the rate case that allowed the agency to increase its prices in mid 2002. That is over twice the 43.9% average markup authorized for the Postal Service's other products and services.[1] The steep markup on first-class mail raises concerns that first-class-mail users are being forced to subsidize other postal products or, at a minimum, required to carry a disproportionate share of the agency's costs.

Product-specific costs, overhead costs, and markups. The Postal Service divides its costs between those it says are related to specific products, which it calls attributable costs, and those it says are unrelated to specific products, which it calls institutional costs.

Costs should be attributed to a product if the costs depend on the product's volume (rising or falling as more or less of the product is produced) or can be avoided by not producing the product. Institutional costs, on the other hand, can be thought of as overhead costs and should be volume independent. They should stay the same whether the volume of any specific postal product remains constant, rises sharply, falls sharply, or the product is discontinued altogether.

Using cost numbers supplied by the Postal Service, the Postal Rate Commission (PRC), which is the independent federal agency with regulatory authority over postal rates, attributed about 60% of postal costs to specific products in the last major rate case and assigned the remainder of costs, almost 40%, to the institutional, or overhead cost, category.[2]

If postal rates were set to cover only attributable costs, the Postal Service's revenues would meet barely 60% of its total costs, based on how costs are now categorized, and the Postal Service would fall far short of its breakeven target. Instead, the procedure is to apply a markup to each product's



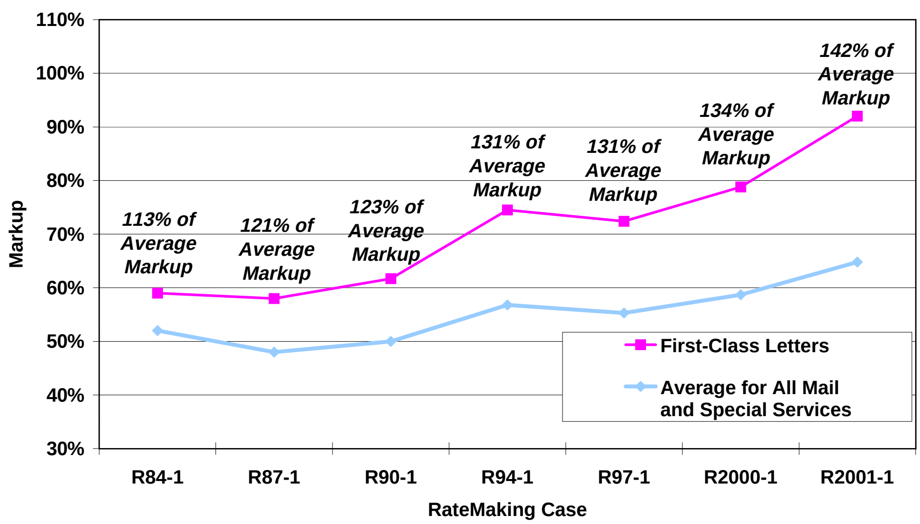
price so that revenues from selling the product meet its attributable costs and a share of institutional costs. Summed over all products, the markups are supposed to generate sufficient revenues to cover total costs, both attributable and overhead. The revenue target also includes a provision for recovering a portion of prior years' losses[3], and there are small adjustments for the Postal Service's Congressional appropriation and net investment income.[4]

The markups and contributions to overhead costs differ from product to product. Chart 1 shows the costs attributed to some of the Postal Service's main product categories in the previously mentioned rate case and the amount of overhead costs expected to be borne by the various categories. The chart also lists the percentage markups. (A product category's markup is the percentage by which its revenues, based on the newly approved rates, are expected to exceed the costs attributed to the product category, all based on estimates for a "test" year. For example, with attributable costs of $20.46 billion and revenues of $38.90 billion, first-class mail has a markup of 90.1%.) Because of first-class mail's a relatively high markup, it accounts for 45.1% of attributable costs but 52.0% of total operating revenues and 62.8% of total operating revenues in excess of attributable costs.[5]

Over the years the PRC has usually authorized above-average markups on first-class mail. This can be seen in Chart 2 which compares, in each of the last seven major ratemaking cases, the markup on first-class letters (the majority of first-class mail) with the average markup on all mail and special services. Throughout these seven rate cases, the markup on first-class mail exceeds the Postal Service's average markup. Further, the first-class markup has increased over time compared to the average markup.

Rick Geddes has looked at rate changes across product categories since the Postal Reorganization Act of 1970 and spotted a pattern.[6] The price of first-class mail has risen significantly relative to the price of products outside the postal monopoly. Geddes specifically points to an increased rate for first-class mail compared to rates for express mail and fourth-class mail (mainly packages). He ascribes this price shift to a weakness in governance that has allowed the Postal Service to favor markets where it faces vigorous competition over the segment of its monopoly where it faces the least competition.[7]

Chart 2. Markup for First-Class Letters Compared to Average Markup for All Classes of Mail and Services Last Seven Major Rate Cases



Source: U.S. Postal Rate Commission, "Opinion And Recommended Decision Approving Stipulation And Agreement, Docket No. R2001-1," March 22, 2002, p. 36 of Appendix G, accessed on the Internet at http://www.prc.gov/docs/33/33578/R2001-1-Decision.pdf.

Markups and the Postal Reform Act of 1970. When Congress passed the Postal Reform Act of 1970, which converted the Post Office Department into the Postal Service, it simultaneously created the PRC to provide regulatory supervision. It may have felt the oversight was needed to prevent the Postal Service from abusing the government-granted statutory monopolies it enjoys on non-urgent letter delivery and on the use of home and business mailboxes.

In evaluating proposed changes in postal rates, the Postal Reform Act requires the PRC to permit rates that are expected to be sufficient for the Postal Service to break even: "Postal rates and fees shall provide sufficient revenues so that the total estimated income and appropriations to the Postal Service will equal as nearly as practicable total estimated costs of the Postal Service."[8]. Whereas the breakeven requirement applies to the Postal Service's total costs, another requirement pertains to each class of mail or type of service. The act directs the PRC to permit rates within each product category that are expected to be sufficient to fully cover the product category's estimated costs and contribute something to overhead costs: "[E]ach class of mail or type of mail service [shall] bear the direct and indirect postal costs attributable to that class or type plus that portion of all other costs of the Postal Service reasonably assignable to such class or type."[9] (Because revenues and costs are estimates and are for a "test year", these requirements are not always met in practice.)

The requirements do not specify what markups and shares of overhead costs should be assigned to each product category. Congress decided to leave that largely in the PRC's hands. It provided general guidance by mentioning in the Postal Reform Act eight additional factors, not requirements, that the PRC should consider in rate cases: a "fair and equitable schedule"; "the value of the mail service ... to both the sender and the recipient"; "the effect of rate increases" on business mailers, Postal Service competitors, and the general public; the availability of reasonably priced non-Postal-Service alternatives; cost savings when mailers help prepare the mail; the simplicity of the rate schedule; "the educational, cultural, scientific, and informational value to the recipient of mail matter"; and, if anything important or worthwhile was left out, "such other factors as the Commission deems appropriate."[10] Because these additional factors are vague, often conflicting, and, as just noted, not requirements, the PRC has considerable discretion in interpreting and weighting these factors.[11]

Postal Service rationale for a steep first-class mail markup. Although the PRC has generally applied an above-average markup to first-class mail, the Postal Service has usually sought even higher first-class markups in rate cases stretching back to the 1970s.[12] It is likely that the Postal Service's pressure has induced the PRC to approve somewhat higher first-class mail markups than it otherwise would have adopted.

It is not surprising that the Postal Service is attracted to a hefty first-class mail markup. The demand for first-class mail is relatively insensitive to price. Although customers use less first-class mail when it becomes more expensive, the drop in quantity is much smaller in percentage terms than the rise in price. One witness for the Postal Service estimated that if the price of first-class postage rises by 1%, customers will cut their usage by only about 0.2%.[13] In technical language, the demand for first-class mail is said to be price inelastic.[14] Although many postal products appear to have inelastic demands, the demand for first-class mail is thought to be less sensitive to price than many other postal products. Accordingly, when the agency loses money, which happens when its costs exceed its revenues, one of the easiest ways for it to strengthen its bottom line, if it can obtain regulatory approval, is to charge more for a first-class stamp. The higher price will decrease volume, but not by much, and first-class mail revenues will rise. (Of course, the financial improvement will be short lived if the added revenue reduces the government agency's efforts to better control its costs.)

The Postal Service even uses a sophisticated economic theorem, known as the inverse elasticity rule, or Ramsey pricing, to argue that placing an extra high markup on first-class mail is good for the economy.[15] Suppose a multi-product firm has declining costs, so that its products need to be marked up above their marginal costs to fully cover total costs. According to the inverse elasticity rule, the markups will cause the least economic distortion if they are small for products with price sensitive demands and large for products with price insensitive demands. (More precisely, the inverse elasticity rule calls for the markup to be inversely proportional to the price elasticity of demand. For instance, according to the rule, if a declining cost firm offers two products and if one of the products has a demand half as sensitive to price as the other product, it should bear twice as high a price markup.)

The Postal Service and the PRC both bring products' price sensitivities into the ratemaking process by claiming that it relates to the "value of the mail service" factor. But whereas the PRC treats price elasticities of demand as one criterion among many in determining markups, the Postal Service asserts that demand elasticities should be the main criterion, if necessary by persuading Congress to change the law.

In 1992, Postmaster General Anthony M. Frank wrote, "Demand pricing, which considers the 'value of service' to the sender, should be given greater weight in the criteria used as a guide for allocating overhead costs and setting postal rates."[16] In 1995, Postmaster General Marvin Runyon was blunter: "Congress could significantly improve the functioning of the existing ratemaking process ... by an explicit Congressional determination that market demand factors be given substantial weight in the pricing of postal products.... The ratemaking criteria of equity and fairness, while obviously important, should not be allowed to outweigh the need for economic rationality."[17] Early in 2002, when introducing the Postal Service's proposed "transformation plan", Postmaster General John E. Potter hinted at the same objective: "As a commercialized government enterprise ... [p]rices for postal products would still be subject to regulatory review. But we would have the flexibility to adjust prices based on market demand."[18] Perhaps in the hope that it would assist the Postal Service financially, the General Accounting Office has expressed sympathy for the Postal Service's position.[19]

"Yes, your honor, I shot my parents. But please be lenient. After all, I'm an orphan!" But why is the demand for first-class mail so inelastic to begin with? The main culprit is federal laws known as the private express statutes, which state that only the Postal Service can supply non-urgent letter delivery. If the law did not make the Postal Service the sole supplier, customers who are unhappy with the Postal Service's prices (or quality of service) could take their business to private-sector companies offering similar products. With that competition, the demand for the Postal Service's first-class mail product would then be much more price sensitive.

The government defends the monopoly by arguing that it makes it possible to hold down rates for customers in high-cost areas if the Postal Service can charge the rest of us a little bit more. But whether the Postal Service's monopoly is warranted or not, that monopoly is the reason why the demand for first-class mail is highly inelastic! Having created a monopoly which makes first-class mail users captive customers, supposedly for the general good, it seems a breach of faith for the government to then point to the artificially inelastic demand generated by the monopoly to justify charging higher prices to customers within the monopoly. The violation of equity is present to some extent if price sensitivity is only one of many factors considered in setting markups, but the violation would be much greater of price sensitivity became the primary criterion. In addition, placing an artificially high markup on first-class mail in the aggregate contradicts the government's stated purpose of keeping first-class mail reasonably priced.

Third-class mail (now called Standard A mail) consists mostly of advertising, and is also within the postal delivery monopoly. Although the monopoly has reduced the responsiveness of third-class mail users to postal price changes, it is more responsive to price than first-class mail because of nonmail advertising alternatives such as newspapers, television, and radio. Thus, the use of price sensitivity of demand as a factor in setting postal rates has worked to the disadvantage of first-class mail customers relative to third-class mail customers. In addition, because the monopoly has reduced the demand elasticities for both types of mail, users of both have been disadvantaged relative to products that the Postal Service offers in competitive markets.

A helping hand, a disproportionate burden, or outright cross-subsidization? Consider a brief analogy. Suppose three people drive together to an entertainment event. Admission is $5 per person and parking is another $12. Suppose the driver pays the $5 individual charge and $10 towards parking. Suppose the two passengers each pay the $5 individual charge and only $1 towards parking. Total payments exactly equal total costs, but the distribution of payments is very unequal: $15, $6, and $6. The driver is giving the others an almost free ride in terms of the common cost and clearly bearing a disproportionate share of the total costs.

Some would call this a subsidy, noting that the driver would not have to pay so much if the apportionment of the common cost were not so unequal. Whether this is actually a subsidy, however, depends on how "subsidy" is defined. While some would describe the unequal distribution of the common cost as a subsidy, others would say that a subsidy is only present if the driver pays the entire common cost and, in addition, part of the other people's individual costs (i.e., pays more because the others are present than if they were absent.) For instance, the driver might have intended to go to the entertainment even if the other riders could not attend, in which case he would have borne the whole cost. He pays less if the other riders contribute anything at all. According to this argument, there is no subsidy; to the contrary, each person is being helped by the others because each is paying some of the common cost. But this assumes both that unequal distributions of common costs are never subsidies *and* that there is no added cost due to the other riders. For example, with six additional riders the driver might have needed to hire a van!

If the Postal Service's costs are being accurately classified, first-class mail customers are like the driver in the example. They are shouldering a higher-than-average financial load. They would pay less if overhead costs were spread more evenly. Whether that means they are subsidizing other postal customers, however, depends on the definition of "subsidy". Aside from the definitional issue, though, it is peculiar that the Postal Service repeatedly stresses the importance of reasonably priced mail service and then apportions overhead costs in a way that elevates the price of its major core product.

What if costs are misclassified? Suppose in the previous example that the three people misunderstood the charges. The total amount is what they think, but admission is actually $7 per person and parking is $6. That is, the individual costs are greater and the common cost smaller than the numbers used in apportioning payments. By contributing $15, the driver pays personal admission and more than the entire common cost. Meanwhile, the passengers who contribute $6 each, pay less than their personal admissions and none of the common cost. The driver is subsidizing the others, even under the more restrictive definition of the term.

The possible misallocation of costs is a serious issue at the Postal Service, where about two-fifths of costs are supposedly common costs with no relation to specific products. If some of the costs classified as institutional are really associated with specific products, too few costs will be listed as attributable and too many will be listed as institutional. As a result, some products may fail to cover their *true* attributable costs (although covering their *reported* attributable costs) and operate at a loss, while first-class mail, which carries the lion's share of the costs placed in the institutional category, will likely cross-subsidize the money losers.

J. Gregory Sidak and Daniel F. Spulber found evidence that the Postal Service has misclassified costs in this fashion by exaggerating overhead costs.[20] For example, the Postal Service routinely listed advertisements for express mail as an institutional cost until the PRC blocked the practice in the late 1970s, and while it classified 90% of city carriers' office time as attributable, it claimed only about 30% of their street time was related to the specific products they delivered.[21] In a number of rate cases over the years, the PRC has expressed dissatisfaction with the Postal Service's classification procedures and pressed it to move various costs from the institutional to the attributable category.[22]

Furthermore, the Postal Service's claim of huge overhead costs can be put to a simple, practical test. If overhead costs are anywhere near as large as the Postal Service asserts, that implies a substantial slice of the agency's production inputs and costs are fixed and do not increase with volume. Consequently, the Postal Service should realize eye-popping economies of scale and improvements in productivity whenever volume increases significantly. In fact, however, no such volume-based productivity gains have materialized. Charles Guy, former Director of the Office of Economics, Strategic Planning at the Postal Service, observes, "Even in the 'Golden Age' of first-class mail growth during the 1980s, when First-Class Mail grew in excess of 4 percent per year, Postal Service management was able to achieve a productivity increase of only 4 percent for the entire decade."[23] Sluggish productivity growth alongside rapid volume growth is strong evidence that overhead costs are much smaller than the Postal Service claims. If so, some of the "overhead" costs paid mainly by first-class mail customers are not really common costs, but the costs of other postal products.

Loss recovery procedure further disadvantages first-class mail users. The Postal Service is allowed to charge higher rates than otherwise in order to recover losses from earlier years. This extra charge, now about $600 million annually, is treated as an overhead cost. Because of first-class mail's high markup, its customers pay a disproportionate share of the loss recovery charge.

Sometimes a product category fails to meet even its reported attributable costs. Given the objective that each product category at least cover its own costs, it would make sense to assign responsibility for recovering that loss to the responsible product category. However, even here the loss goes into the common pool and is mostly recovered through higher first-class mail rates.

Conclusion. The Postal Rate Commission is worried there has been "a shift in the institutional cost burden among the [postal] subclasses, with the monopoly class bearing a greater burden than historically found to be appropriate."[24] Its concern is warranted. The price markup on first-class mail is high and has been rising. First-class mail customers pay a disproportionate share of the Postal Service's costs. They may be cross-subsidizing other postal products, especially products outside the monopoly that face strong private-sector competition and have low markups.

Supposedly, the postal monopoly exists in order to improve the availability of the products within the monopoly, mainly first-class mail but also standard mail, while keeping them generally affordable. It would be consistent with that stated purpose to reduce the markup on first-class mail so that it is closer to the average markup on all Postal Service products, both inside and outside the monopoly.

In the "transformation plan" it proposed in April 2002, the Postal Service asked Congress to change the law so it could adjust rates with less regulatory oversight. Granting the Postal Service that new power would likely result in a larger first-class mail markup and higher rates. That would be bad public policy. If anything, the Postal Service's pricing of first-class mail service should be watched more carefully, not less closely.

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Endnotes

1. U.S. Postal Rate Commission, "Opinion And Recommended Decision Approving Stipulation And Agreement, Docket No. R2001-1," March 22, 2002, esp. p. 1 of Appendix G and pp. 1-2 of Appendix F, accessed on the Internet at http://www.prc.gov/docs/33/33578/R2001-1-Decision.pdf. The 90.1% markup cited for first-class mail is the revenue-weighted average of a 92.0% markup on first-class letters and a 42.6% markup on first-class cards. The markup authorized for all mail and special services, including first-class mail, is 64.8%. The percentages refer to estimates for 2003, which was the "test year" in the rate case.

2. *Ibid.* In the rate case, 61.2% of costs ($45.36 billion) were estimated to be attributable and 38.8% ($28.74 billion) were estimated to be institutional.

3. *Ibid.* Recovering a portion (specifically one ninth) of prior years' losses added about $620 million to the revenue requirement in the rate case's test year.

4. *Ibid.* For purposes of the test year, the Postal Service was assumed to receive a $31 million Congressional appropriation.

5. *Ibid.* For the test year, first-class mail was estimated to have attributable costs of $20.46 billion and revenues of $38.90 billion, meaning revenues would exceed attributable costs by $18.44 billion. Total mail and services were estimated

to have attributable costs of $45.36 billion and revenues of $74.74 billion, meaning total revenues would exceed total attributable costs by $29.38 billion. The percentages in the text were calculated from these numbers.

6. Rick Geddes, *The Postal Reorganization Act Of 1970: Assessment And Proposals For Reform* (Washington, DC: American Enterprise Institute, forthcoming).

7. To directly examine changes in markups across postal categories since the 1970 legislation, see PRC, "Opinion And Recommended Decision Approving Stipulation And Agreement, Docket No. R2001-1," *op. cit.*, pp. 36-37 of Appendix G.

8. 39 USC, Sec. 3621.

9. 39 USC Sec. 3622 (b).

10. *Ibid.*

11. Several parties challenged in court the PRC's "two-tier" approach, in which a product category's rate floor is its attributable costs and overhead costs are then assigned based on how the PRC decides to weigh the eight other factors. In *National Association Of Greeting Card Publishers v. USPS*, the Supreme Court ruled that it was within the PRC's regulatory authority to use this approach (462 U.S. 810 (1983)). The decision also mentioned that the PRC could exercise its judgement in deciding how best to attribute costs to product categories, but left the PRC dependent on the data supplied by the Postal Service. "[W]hen causal analysis is limited by insufficient data [from the Postal Service], the statute envisions that the Rate Commission will press for better data, rather than construct an 'attribution' based on unsupported inferences of causation." The court rejected a position the Postal Service had earlier taken in the second postal rate. The Postal Service had argued that only costs which vary in the short-term with a product's volume should be attributed to the product. The Supreme Court wrote that the PRC could also attribute to a product its long-term variable costs and such other costs as the PRC can reliably relate to the product.

12. For a description of some of their disagreements in ratemaking cases regarding first-class mail markups, see U.S. General Accounting Office, "Postal Ratemaking In Need Of Change," GAO/GGD-96-8, November 1995, accessed on the Internet at http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.21&filename=gg96008pdf&directory=/diskb/wais/data/gao.

13. Peter Bernstein, "Direct Testimony Of Peter Bernstein On Behalf of United States Postal Service before The Postal Rate Commission," USPS-T-10, Docket No. R2001-1, September 2001, p. 76, accessed on the Internet at http://www.prc.gov/docs/27/27149/test-usps-t10-bernstein.pdf.

14. A product's demand curve is said to be inelastic if when its price rises by 1%, buyers reduce the quantity they demand by less than 1%.

15. For an explanation of Ramsey pricing and how the Postal Service would like to apply it, see U.S. General Accounting Office, "Pricing Postal Services In A Competitive Environment," GAO/GGD-92-49, March 1992, accessed on the Internet at http://161.203.16.4/d31t10/146151.pdf. Also see GAO, "Postal Ratemaking In Need Of Change," *op. cit.*. The discussion in the text omits many of the complexities of Ramsey pricing.

16. "Comments From the U.S. Postal Service," in Appendix IV of GAO, "Pricing Postal Services In A Competitive Environment," *op. cit.*.

17. "Comments From the U.S. Postal Service," in Appendix II of GAO, "Postal Ratemaking In Need Of Change," *op. cit.*.

18. John E. Potter, "Remarks of Postmaster General John E. Potter," National Press Club, Washington, DC, April 5, 2002, accessed at http://www.usps.com/strategicdirection/_txt/pmgnpcfinal.txt.

19. GAO, "Pricing Postal Services In A Competitive Environment," *op. cit.*; and GAO, "Postal Ratemaking In Need Of Change," *op. cit.*.

20. J. Gregory Sidak and Daniel F. Spulber, *Protecting Competition From The Postal Monopoly* (Washington, DC: AEI Press, 1996), ch. 6, esp. pp. 109-119. The chapter also contains an insightful discussion of the inverse elasticity rule and Ramsey pricing.

21. *Ibid.*, p. 110. (The Postal Service classified city carriers' activities in nearly the same way in the latest major rate case. See PRC, "Opinion And Recommended Decision Approving Stipulation And Agreement, Docket No. R-2001-1" *op. cit.*, p. 2 in Appendix E.)

22. Sidak and Spulber, *Protecting Competition From The Postal Monopoly, op. cit.*, pp. 116-117.

23. Charles Guy, "Renewed Mail Volume Growth No Panacea For Postal Service's Financial Woes," *Issue Brief*, Lexington Institute, June 13, 2002, accessed on the Internet at http://www.lexingtoninstitute.org/ postal/volumegrowth.htm.

24. PRC, "Opinion And Recommended Decision Approving Stipulation And Agreement, Docket No. R2001-1," *op. cit.*, p. 49.
