

BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, DC 20268-001

Annual Compliance Report, 2011

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Docket No. ACR2011

**INITIAL COMMENTS OF THE
AMERICAN CATALOG MAILERS ASSOCIATION (ACMA)**

(February 3, 2012)

Pursuant to Commission Order No. 1095 (January 3, 2012), ACMA is pleased to sponsor these comments. Concurrently, we are filing workbook ACMA_Graphs.xlsx, which documents Graphs 1 through 8.

Through catalogs, distributed mostly through the mail, at Standard Flats, Carrier Route Flats, and High-Density Flats rates, ACMA members make a wide range of goods and services available to consumers and businesses. Many of these are difficult to find or otherwise unavailable. Typically, postage represents 40 to 60 percent of member marketing costs. Catalogs account for a high proportion of the non-saturation flats in the Standard mailstream. The rates for them, then, are critically important to both catalogers and the Postal Service.

I. A Review of the Reported Costs for Flats in the Postal System Raises Serious Questions about their Validity and Reliability, so Much so that They Do Not Provide a Basis for Conclusions about Levels of Corresponding Rates.

One of the steps in reviewing the appropriateness of rates is to look at the relation between corresponding revenues and costs. In comments over almost two years, ACMA has pointed to signs of serious problems in the costs for flats.¹ Much of our focus has been narrow, on particular volume components and cost elements. But attention to aggregates is also needed.

A difficulty in reviewing aggregates has been the question of how to recognize changes in the *mix of the mail*, such as changes in worksharing. For example, mail becoming more highly presorted or dropshipped would be expected to have downward cost trends, at least on those accounts. If the effects of increases (or decreases) in worksharing could be removed, a more fundamental focus on inherent costs would be facilitated.

An appropriate way of quantifying cost changes not due to changes in worksharing is to develop a *cost index*, similar to the familiar *rate index*.² Suppose a product could pass through as many as 14 work centers, designated a through n. “a” might be acceptance (with V_a being the volume accepted), “b” transportation (with V_b being the volume transported), and so on. Obviously, for example, V_b would not include

¹ See Docket No. R2010-4, Initial Comments, Aug. 17, 2010, and Reply Comments, Sept. 2, 2010; Docket No. ACR2010, Comments, Feb. 2, 2010, and Reply Comments, Feb. 17, 2011; Docket No. R2011-2, Comments, Feb. 2, 2011; and Docket No. R2012-3, Statement, Nov. 7, 2011.

² One place rate indexes are used is in enforcing rate caps. If a cap is 4 percent, then the rate index would have to be less than or equal to 4 percent. For more general purposes, the Commission began developing rate indexes just after 1970. For example, a statement that parcel rates increased 6 percent, on average, would be based on a rate index.

mail that is dropshipped. A unit cost would exist for each work center. These unit costs would be weighted by the volumes, just as rates are weighted in the rate index. If period 2 were being compared to period 1, the numerator would be the sum-product of the 14 volumes and the unit costs in period 2, and the denominator would be the sum-product of the 14 volumes and the unit costs in period 1.

It turns out that a cost index can be created rather easily, without going through the work of identifying cost centers, estimating associated costs and volumes, and putting them into the formula. Appendix A to these comments is a proof that the rate index divided by the cost coverage is a cost index.³ This index recognizes all cost centers, whatever their number. It is dimensionless. It can be set equal to 100 in any base period. The inputs needed (the rate index and the cost coverage) are readily available.

Increases in factor prices, such as the prices of labor and materials, are key determinants of any increases in a cost index. If factor prices increase 8 percent while the mix of the mail is changing, the cost index would tend to increase 8 percent.⁴ If the cost index increases more than 8 percent, it is reasonable to ask why. Of course, other determinants exist, such as improvements in technology, which would tend to cause the cost index to be below an index of the factor prices.

³ Once thought about, the constant-mail-mix character of the cost index become obvious. The numerator is a quantity-weighted rate index. The denominator is a quantity-weighted revenue divided by a quantity-weighted cost, as all revenues and costs are. Since fixed quantities play an equivalent role in the numerator and denominator, the quotient is not influenced by mix differences. The proof in Appendix A shows this formally.

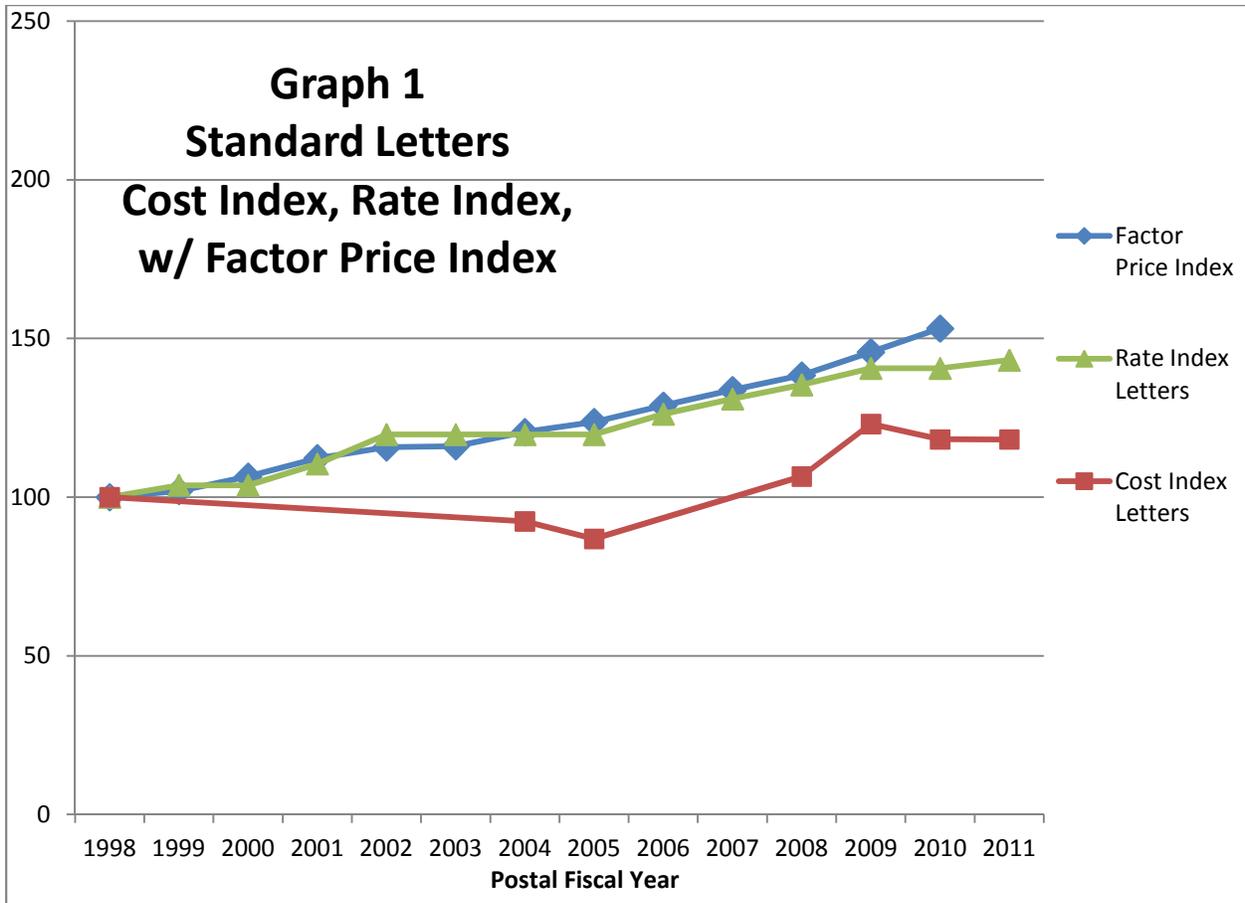
⁴ If some factor prices increase more than others, the standard economic prediction would be that the agency shifts away from use of the inputs that increased the most. If this occurs, the cost index would, on this account, increase less than the factor price index. To the extent the production process is characterized by fixed factor proportions, however, the effects of the shifting would be small. We believe this to be a negligible consideration in the current situation.

An index of the factor prices is available. One is developed by the Postal Service as part of its efforts to measure its total factor productivity (TFP). It was used, for example, by the Commission and the Postal Service in the Joint Report to the President and Congress on Periodicals,⁵ about which more is said *infra*. It is true that the factor price index applies best to the entire Postal Service, and not necessarily as well to categories like letters and flats. However, a case can be made that it applies tolerably well to both, because: a) the index is dominated by labor, b) there is an extent to which the various labor agreements move together, and c) letters and flats are high-volume categories processed by a not-uncommon mix of labor. The graphs below show the factor price index as applicable, at least approximately, to letters and flats.

A. Before Looking at Standard Flats, It Is Helpful to Review the Results for Standard Letters.

Graph 1 shows the rate index, cost index, and factor price index for Standard Letters, which is *designated* (by the Postal Service and accepted by the Commission) as a product. The base year is (FY) 1998 and the end year is 2011, except that the factor price index for 2011 is not yet available. Since 1998, the rates for Standard Letters have increased 43.2 percent, which is shown by the rate index. Through 2010, the factor price index has increased 53.1 percent. Thus, based on a simple projection of the factor price index to 2011, the increase in rates for Standard Letters is about 17 percentage points below the increase in factor prices.

⁵ "Periodicals Mail Study: Joint Report of the United States Postal Service and Postal Regulatory Commission," September 2011.

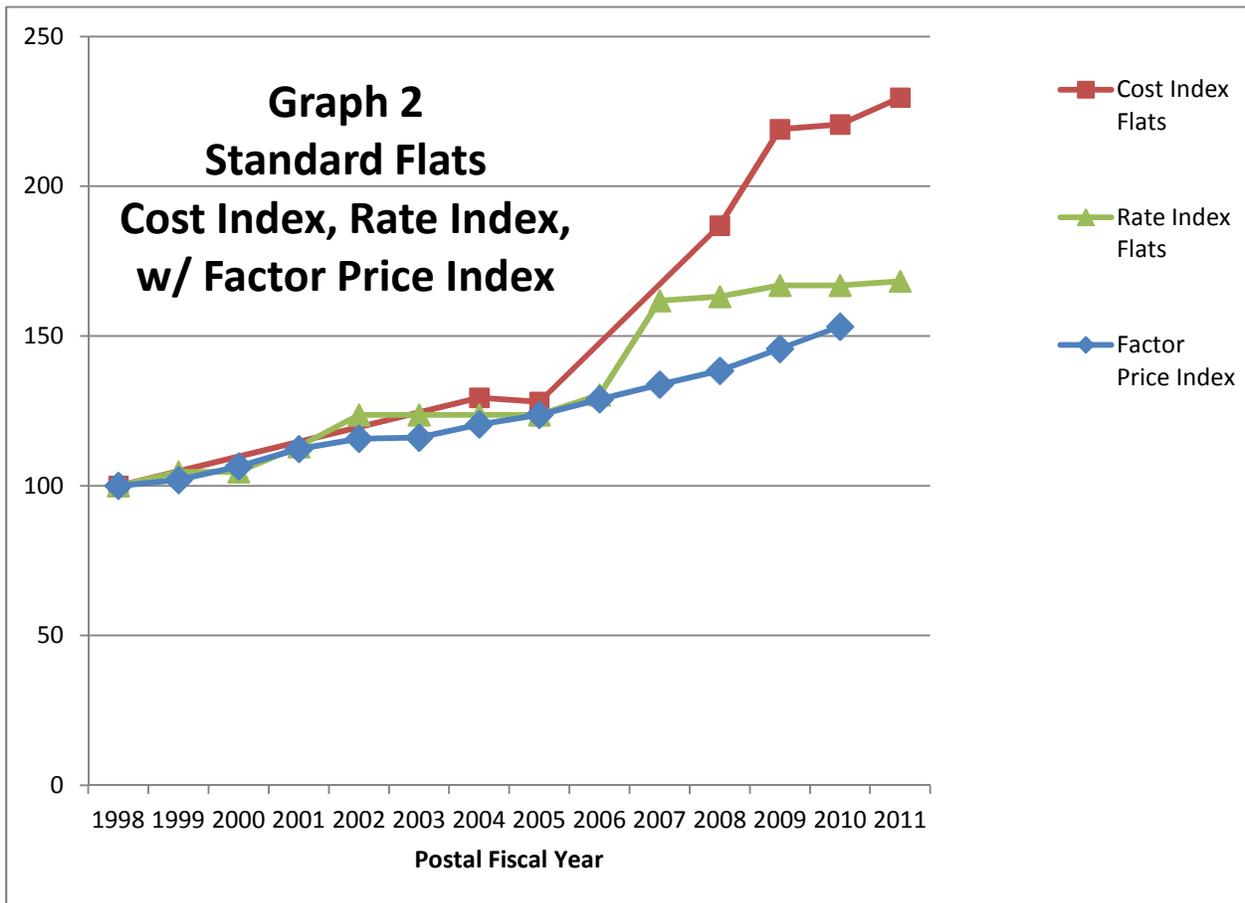


As shown by the bottom line on the graph, the cost index for letters has increased only 18.2 percent. This being below the increase in factor prices is explained, at least in part, we suspect, by increases in OCR and barcode read rates, a decrease in remote encoding, and an increase in delivery point sequencing (DPSing). As a result of the interplay between the rates and the costs, the cost coverage of Standard Letters

has increased.⁶ Allowing some leeway for variations over time, nothing on this graph stands out as being outside explainable bounds.⁷

B. The Same Indexes for Standard Flats.

Graph 2 shows, for the same period, the rate index, cost index, and factor price index for Standard Flats, also designated as a product. The picture here is much different from that for Standard Letters.



⁶ To the extent these results are indicative, one could say that while keeping rate increases below the factor price increases, the Postal Service has made the Standard Letters product more profitable.

⁷ The fact that some points are missing in the cost index does not affect comparisons among points that exist. For example, the level of the index in 2011 does not depend on whether the level in 2001 is known.

Since 1998, the rates of Standard Flats have increased 68.3 percent, 25.1 percentage points more than the rates of Standard Letters. This rate increase is approximately equal to the increase in factor prices. However, the cost index has increased 129.6 percent. Consistent with these results, the cost coverage for Standard Flats has decreased notably, as the Commission has observed.

The obvious question becomes: what could cause the costs for Standard Flats to increase 129.6 percent while the factor prices increased only 68 percent? Making this question even more perplexing is that (a) the preparation of flats has improved (the additional work associated with this preparation being a common lament of mailers), (b) barcode read-rates have improved, and (c) generally, the mechanization has improved. All these should have contributed to making the cost increases lower than the factor price increases, not higher. That is, the reported costs increased 129.6 percent despite these contributions to holding them down.

Changes in the costing procedures could be contributing factors. First, the PAEA made changes in health care costs, but this is included in the factor price index.⁸ Second, the redesign of the In-Office Cost System (IOCS) in 2004 and 2005 is a candidate, but it appears to have decreased the costs of Standard Flats, contributing to making the cost index on the graph an understatement.⁹ Third, the city carrier street cost system was redesigned in Docket No. R2005-1, but it appears to have reduced the

⁸ See Joint Report to the President and Congress on Periodicals, *id.* at O-3.

⁹ See Joint Report to the President and Congress on Periodicals, *id.* fn. 45 at O-4, discussing the misidentification of tallies and their being “erroneously [] assigned to Standard Mail.”

costs of flats as well, contributing further to making the cost index an understatement.¹⁰

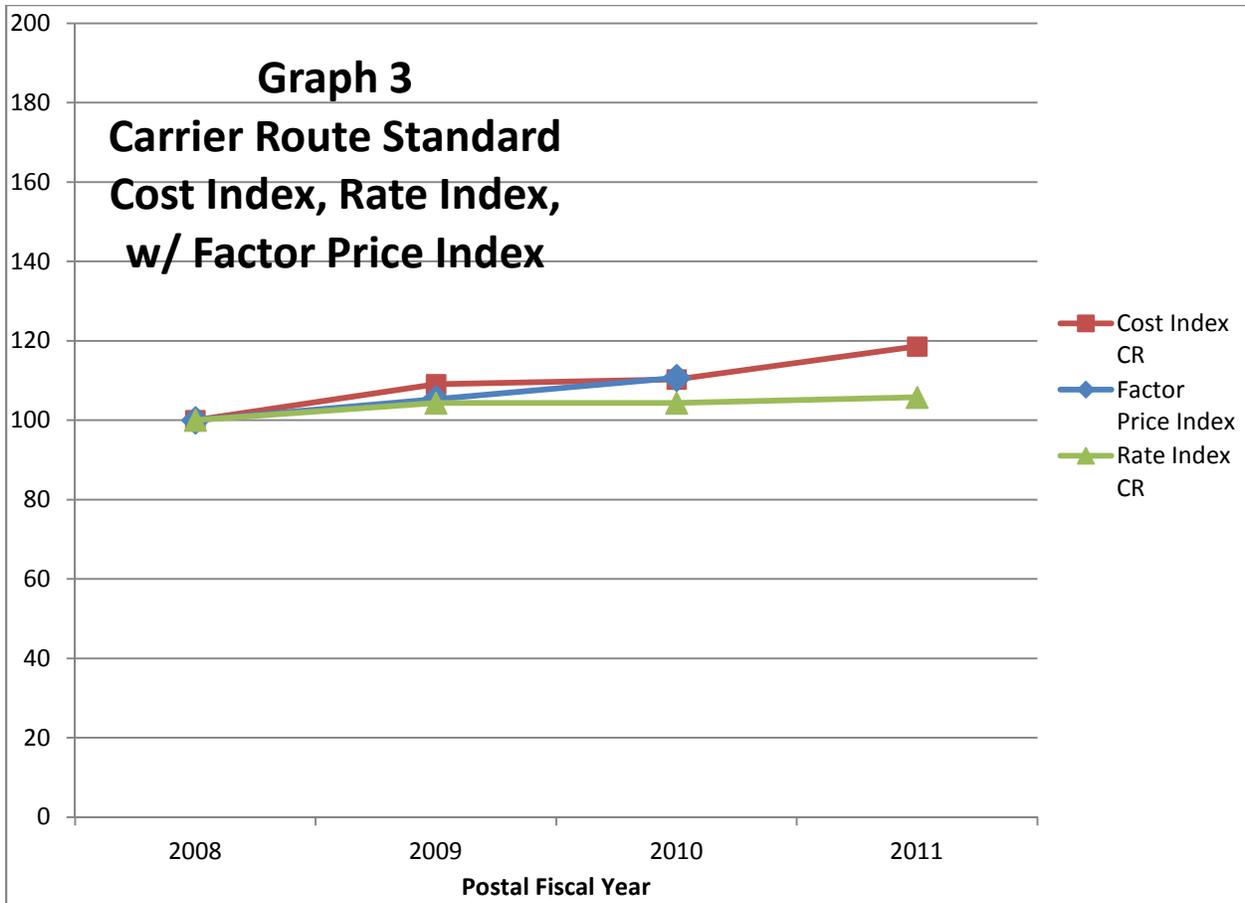
Fourth, there have been other changes in costing. Our review of them does not show significant cost effects for letters or flats, on balance.¹¹ In short, some changes contributed to making the cost index an understatement, but none an overstatement.

C. Limited Data Are Available for Carrier Route Standard.

Cost coverage information is available for the Carrier Route Standard product beginning in 2008, but is difficult to construct for years before that. Graph 3 shows the cost index, rate index, and factor price index.

¹⁰ The Postal Service's Notice of Filing of Further Revisions to the Testimony of Witness Kelley (USPS-T-16)—Errata, June 17, 2005, Docket No. R2005-1, appears to show, on the same basis, test year figures for carrier costs at the Bradley analysis and the former analysis. It shows a reduction for Standard Flats of 1.894 cents per piece. This is a rather significant reduction. To make 2011 comparable to 1998, it would have to be added back into the costs.

¹¹ The Postal Service included a small number of adjustments in its FY 2007 ACR. The Commission described these as "minor" (ACD, App. B at 1). There were some changes internal to Periodicals. We could not find evidence of a significant effect on Standard Flats. A number of changes were made in the FY 2009 ACR, most described in a USPS Request on August 11, 2008. We found that Proposal 3 would reduce the costs of Standard Letters "slightly" and leave flats "almost unchanged." Proposal 6 would increase non-ECR costs by \$869,000. Over such a large category, this is negligible. Proposal 7 would increase the vehicle service driver (VSD) costs of non-ECR by 14 percent, also negligible, since VSD costs are low. The FY 2009 changes are discussed in App. C of the 2009 ACD. Proposal 4 increased the cost of Standard Letters by \$562,000 and Flats by \$132,000. These are small relative to the totals. Proposal 6 reduced the cost of Letters \$114,000 and reduced Flats \$25,000. Proposal 7 increased the cost of Letters by \$24.9 million and Flats \$18.3 million. Proposal 8 reduced the cost of Letters by \$4.7 million and Flats \$0.8 million. Proposal 9 reduced the cost of Letters by \$19.9 million and Flats by \$20 million. Overall, there were increases and decreases. We did not find changes of significance in the FY 2010 ACD. The changes for FY 2011 are listed on pp. 4-5 of the Postal Service's ACR (December 29, 2011). Our review of them shows a negligible effect on Standard Letters and Flats. On balance, the changes we have been able to trace are small relative to the observed changes in costs. If a document exists that quantifies and sums all changes, by category, we would like to have it.



From 2008 to 2011, a three year period, the rates increased 5.7 percent while the cost index increased 18.6 percent. The unit cost (not shown) increased 17.4 percent.¹² This being just under the cost index is consistent with a small increase in worksharing. Worksharing is limited mainly to dropshipping in Carrier Route, since there are no presort or automation categories within it. Because the rate increases have been below the cost increases, the cost coverage has declined.

We know of no changes in technology that should be having noticeable effects on Carrier Route. Under these conditions, changes in factor prices might be expected to be the principal determinant of changes in costs, which appears to be happening. Effects from the FSS may be seen in the future. Although one might wish for

¹² The unit costs, with sources, are shown in ACMA_Graphs.xlsx, tab Carrier Route Std.

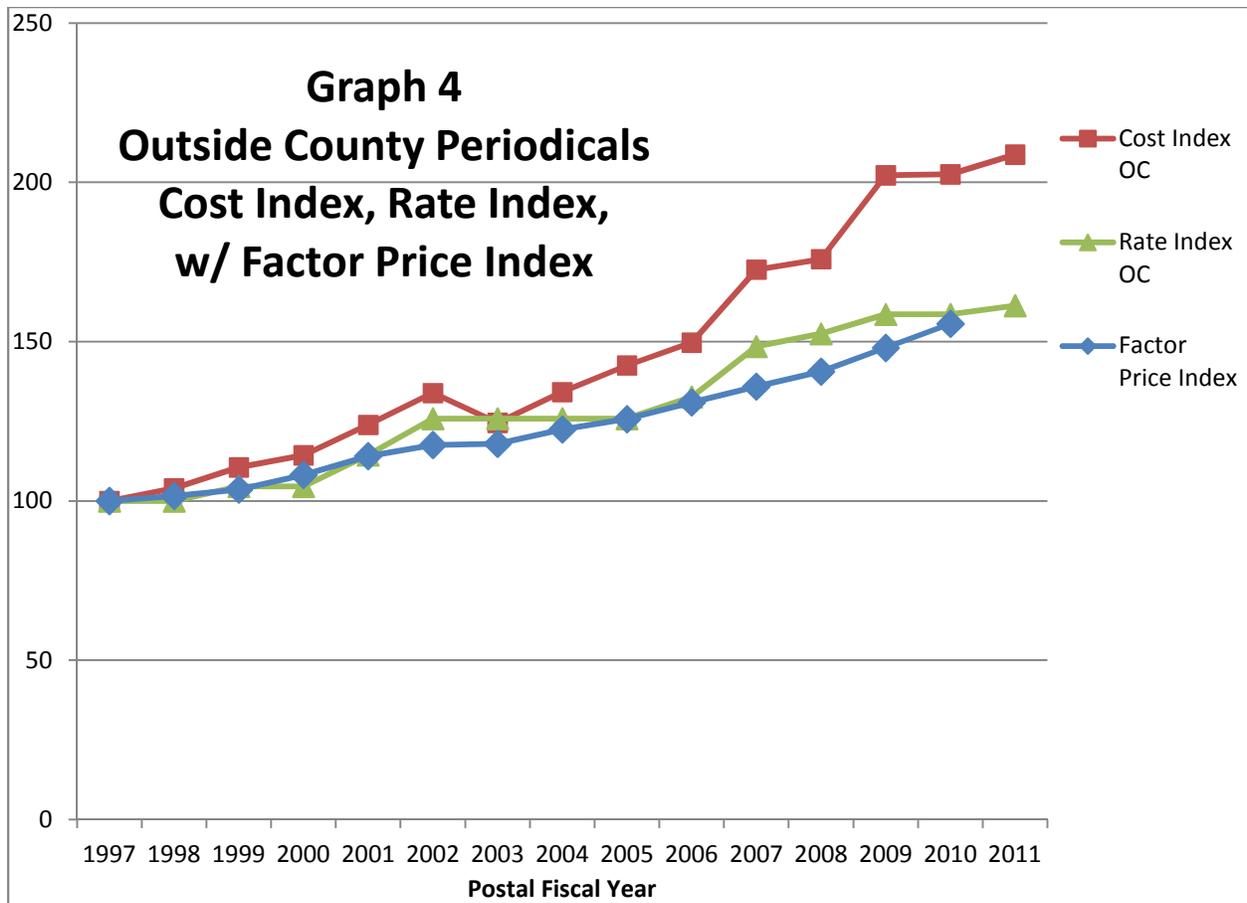
developments to keep the cost index below the factor price index, that does not appear to be happening. This graph, though limited, does not suggest problems with the costing systems.

D. The Indexes for Periodicals, another Flats Category.

Periodicals is a class, composed of two categories designated as products, In-County Periodicals and Outside County Periodicals.^{13 14} Graph 4 shows the rate index, cost index, and factor price index for Outside County (OC) Periodicals. The base period is one year earlier than the one on Graphs 1 and 2.

¹³ Some periodicals that remain in their county of origin are mailed at Outside County rates because they do not meet the requirements for In-County rates. Some periodicals pay In-County rates but are delivered outside their county of origin, under a special provision in the PAEA. These happenings do not affect the analysis herein.

¹⁴ Outside County includes the categories of Regular Periodicals, Nonprofit Periodicals, and Classroom Periodicals. The latter two categories receive discounts on certain rate elements, but do not have separate rate schedules or separate rate elements. Science of Agriculture Periodicals is a category within Regular Periodicals. It uses the same rate schedule as Regular Periodicals, but has several rate elements that are unique to it. A small proportion of letter-size pieces exist in each category, proportions small enough to neglect in the analysis in these comments. These categories are clearly a non-homogeneous mixture, somewhat like those in the Standard class.



The rates of OC Periodicals increased 61.3 percent. The factor price index increased 55.6 percent through 2010, so the difference between these two is not significant. That is, the rates of OC Periodicals have increased along with the factor prices, approximately. The cost index, however, increased 108.7 percent. This increase is large on any score, and explains the decline in cost coverage.¹⁵ The

¹⁵ From 1997 to 2011, the cost coverage of OC Periodicals decreased from 96.375 percent to 74.486 percent. For this to occur in the face of a rate increase of 61.3 percent requires a very large cost increase. A revenue of \$96.375 and a cost of \$100 would be a cost coverage of 96.375 percent. A rate increase of 61.3 percent would yield a revenue of \$155.453 (1.613 x 96.375). At this revenue, a cost coverage of 74.486 percent requires a cost of \$208.701 (155.453 ÷ 0.74486), consistent with the increase shown by the cost index.

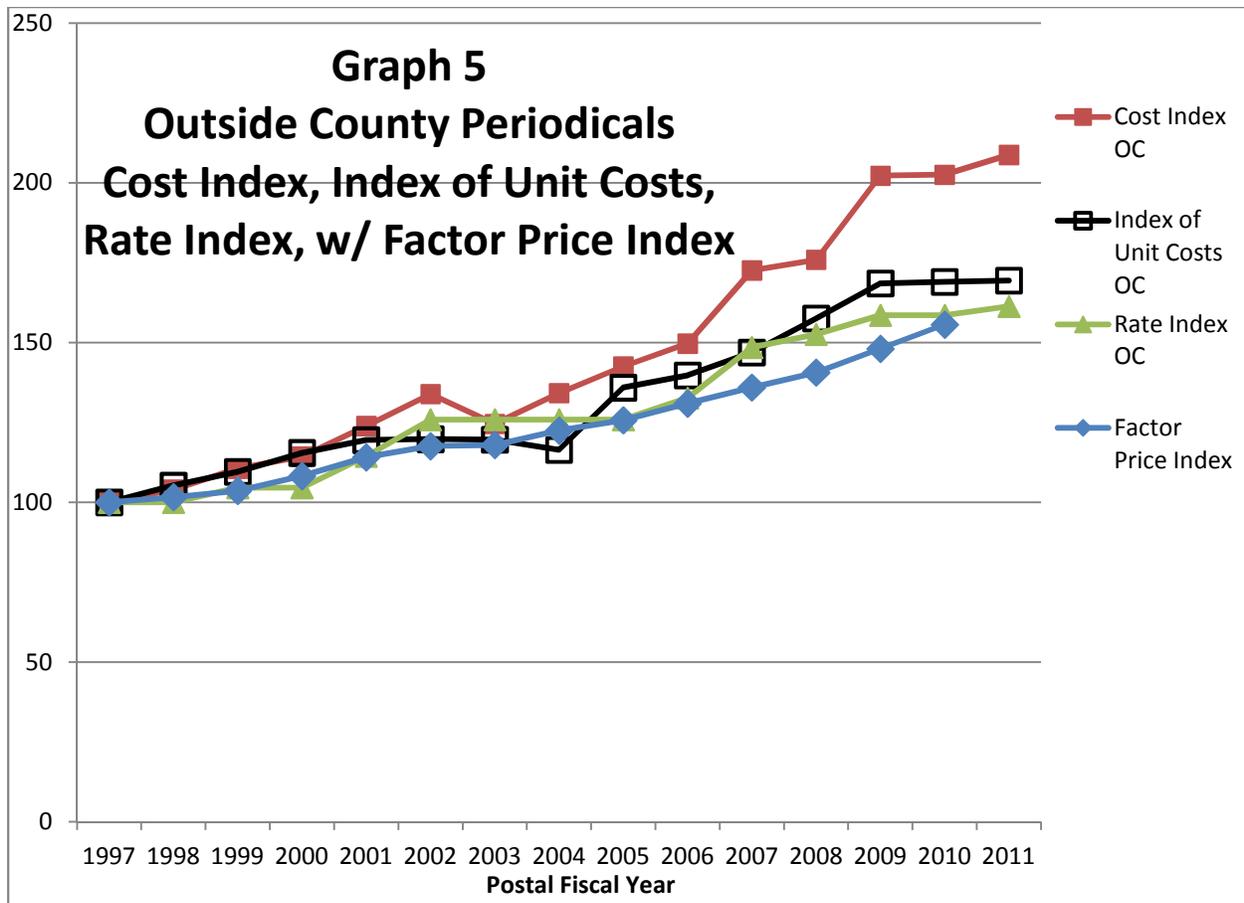
increase in the cost index is just a little below the corresponding increase for Standard Flats, shown in Graph 2, so similar questions arise.¹⁶

The Joint Report of the Commission and the Postal Service on Periodicals (*id.*) (hereinafter Report) addressed the cost increases for OC Periodicals in detail for the period 1999 through 2010.¹⁷ However, it focused on increases in *unit costs*, not on increases in a *cost index*. Unit costs are equal to reported costs divided by volumes, and do not correct for the increases in worksharing.

Graph 5 is the same as Graph 4, except that a line has been added to show unit costs, indexed to 1997.

¹⁶ Since both Periodicals and Standard Flats are flats, one might expect the increase in the cost index for each to be about the same. The difference (108.7 percent vs. 129.6 percent, respectively, made somewhat larger by the fact that the Periodicals graph begins one year earlier) may be affected by the fact that Periodicals includes a carrier route category and Standard Flats does not. The exposure of carrier route mail to mail processing is limited.

¹⁷ See Appendix O at 1-6. However, questions about the increases in the costs of flats, and of Periodicals in particular, existed before 1999. See TW et al.-T-1, Docket No. C2004-1, which pointed to increases beginning in 1988.



Because the Report was looking at unit costs (second line down) instead of at a cost index (top line), and thus did not have any measure of the effect that the increased worksharing had had on costs,¹⁸ it was left to guess at what that effect might have been. So it guessed that the decrease in costs that was caused by the additional worksharing might have been approximately equal to the increase in costs that was caused by the

¹⁸ It could be asked whether the cost index shows the effects changes in worksharing *did* have on costs or *should have had* on costs. The revenue relates to the rates actually charged and the volumes actually mailed. The costs relate to the volumes actually handled by each work center; otherwise, they would not be causal. So, if the costs do not relate to the workshare levels that did occur, then the costs are wrong. If an assessment of the validity of the costs is to be made at the end of the analysis, then the analysis must proceed on the assumption that the cost index shows the effects changes in worksharing *did* have.

redesign of the IOCS, which would mean that the increase in unit costs, properly corrected, was approximately equal to the increase in factor prices.¹⁹ The Report then reasoned that if all this were the case, the increase in the costs reported for Periodicals could be explained by surmising that the costs increased with the factor prices and that, somehow, Periodicals “was not able to benefit from the overall productivity gains obtained by the Postal Service and for most Postal Service products” (Report at O-4-5).

But at its increase of 108.7 percent, the cost index is about 45 percentage points above the factor price index. If the Report had seen this gap, between the top line and the bottom line (extended to 2011) on Graph 5, it would not have been tempted to engage in the reasoning process just outlined, and it would not have been able to conclude that the costs being reported for Periodicals are “reasonably accurate for ratemaking purposes” (at 1). It is true that correcting for the redesign of the IOCS would reduce the gap somewhat, but it would still be of considerable magnitude.²⁰ Also to be noted is that even if reality were aligned with the Report’s guess – and the gap is testimony that it is not – the Report did not explain how Periodicals could have missed out on productivity gains during a period in which mail preparation and postal

¹⁹ To make the costs in 2011 comparable to those in 1997, the unit cost line (unfilled squares) would have to be increased to remove the effects of additional worksharing and decreased to remove the effects of the redesign of the IOCS. The Report reasoned that these two adjustments might be approximately equal in magnitude. On the graph, this leaves the unit cost line approximately where it is now, which is approximately equal to the factor price line (bottom line).

²⁰ The Report discussed the upward effect on costs of the redesign of the IOCS, but, strangely, it did not discuss the downward effect of the new city carrier street time analysis adopted in Docket No. R2005-1. As discussed *supra*, this appears to have reduced the costs for flats by about 1.9 cents per piece. Recognizing this change would make the cost index higher and the gap larger.

mechanization were improved.²¹ Many observers believe that letter automation has run its course and that it is time for improvements in flats to be seen.

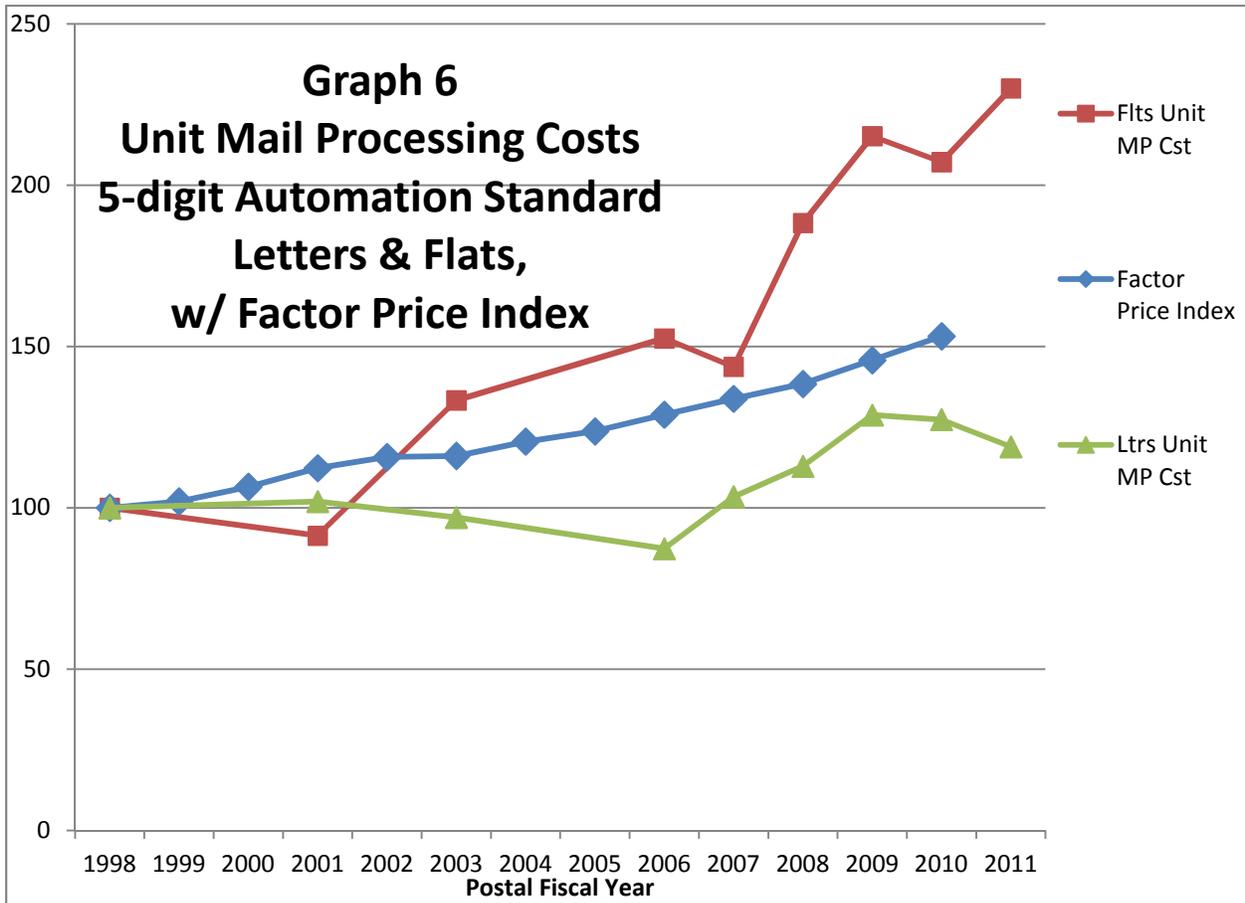
E. The Aggregate Costing Results Presented above Are Supported by a Review of Costs at a Disaggregate Level.

The results reviewed thus far are based on actual rates (recognizing all rate elements in the billing determinants) and on the principal costing systems (which are quite detailed). And they are based on indexes of the classical kind, as commonly applied, used in this case to estimate the rate increases and to correct for changes in the mix of the mail, here within categories designated as products. The indexes quantify changes, not absolute levels. The CPI makes the concepts of changes familiar. For example, no one knows the absolute level of prices in the economy, but the CPI quantifies how much that absolute level has changed, as in increasing 3.2 percent over the course of a year.

None of the first five graphs rely on special-purpose costing models or stylized mail flows of any kind. However, special-purpose costing models have been developed, consistent with the principal costing systems, and have been used in ratemaking. Of particular interest are the costs developed for the 5-digit automation categories in the Standard class. These categories have retained their definitions for some years and account for about 54 percent of all non-ECR Standard volume. Another reason they are of interest is that, by definition, no changes in mail mix have occurred within them.

²¹ As a means of increasing the cost coverage for Periodicals, the Report suggests a decrease in the proportion processed manually. But it presents no evidence or argument that this proportion has increased over time. Therefore, there is no reason to believe that an increase in manual processing helps account for the increase in the reported costs.

Graph 6 shows the unit *mail processing* costs for 5-digit automation letters and flats, indexed to 1998. Mail processing costs, for the most part, are considered to be fully variable with volume. Also shown is the factor price index.

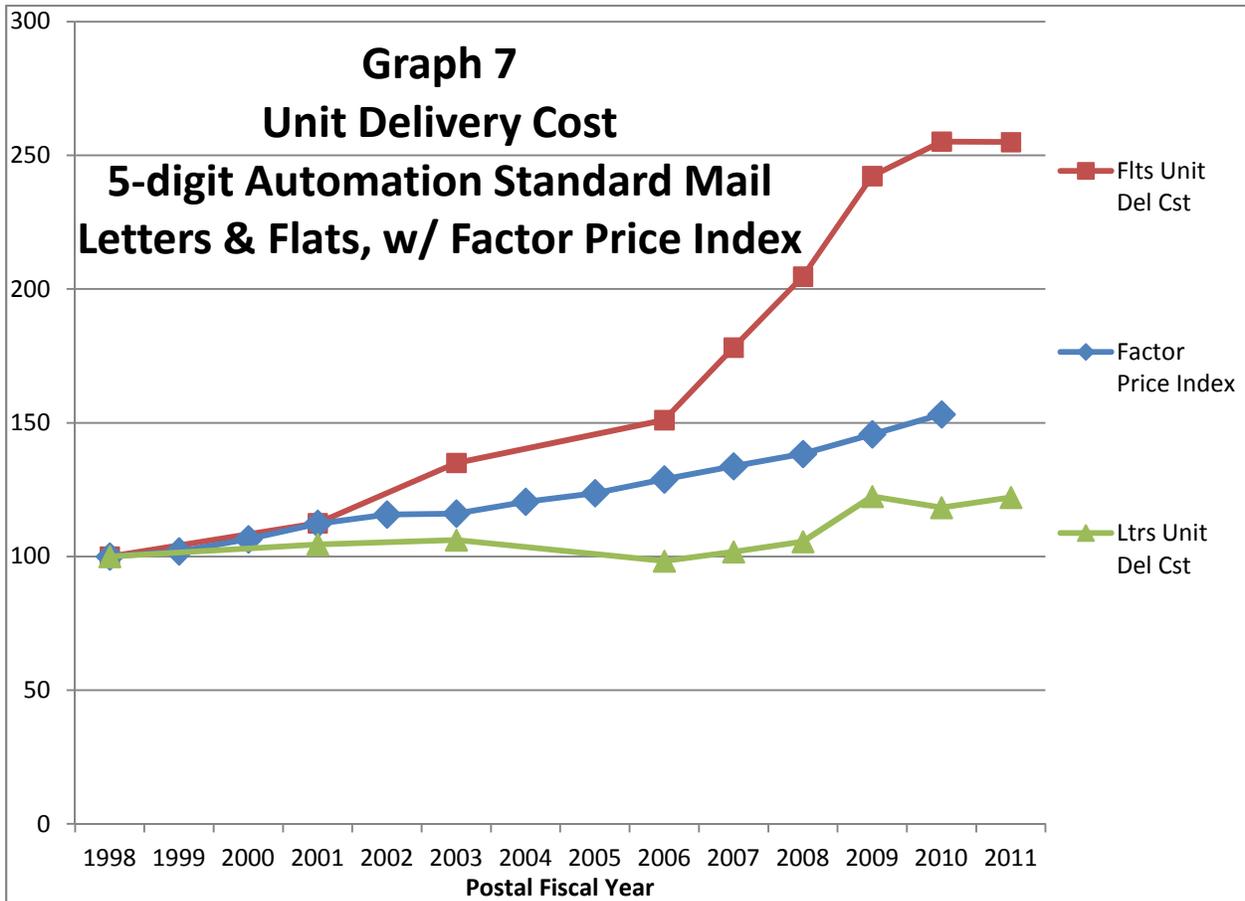


Although the pattern over time is somewhat uneven, the unit mail processing cost of 5-digit automation letters has increased only 18.9 percent. This is significantly below the increase in factor prices, which looks to be about 61 percent.

Flats, however, present a different picture. The unit mail processing cost of 5-digit automation flats has increased 130.0 percent. This is far above the increase in factor prices. Also, the increases have occurred rather progressively, over almost the entire period. Making adjustments for the changes in costing procedure, which are reviewed above, would not change this picture significantly.

Graph 7 shows the unit *delivery* costs for 5-digit automation letters and flats.

Together, mail processing and delivery costs account for approximately 90 percent of the costs attributed to these categories.²²



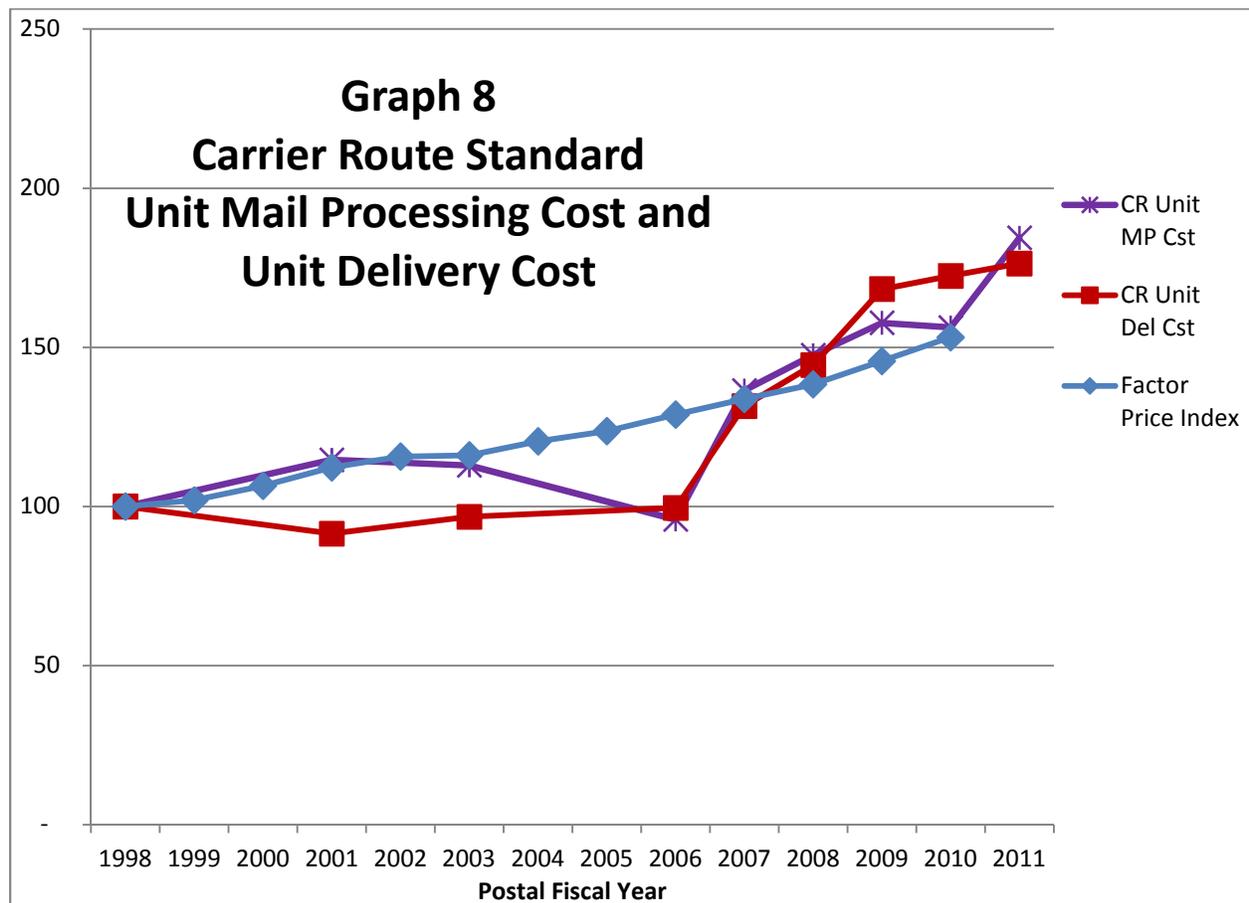
The unit delivery cost of 5-digit automation letters has remained relatively constant, arriving at 2011 up 22.1 percent, well below the factor price index. The uptick in 2009 may be associated with the volume decline. One factor holding these costs down is the increase in DPSing. The proportion of letters DPSed in 2011 was 91.7 percent (USPS-FY-11-19, UDCmodel11.xls, tab 11.SummaryBY). A proportion shown in Docket No. R97-1 was 64.8 percent (Exhibit USPS-29A at 1).

²² USPS-LR-L-135, file LR-L-135.xls, tab Unit Costs, Docket No. R2006-1, shows the proportion to be 91.67 percent for letters and 89.56 percent for flats.

For flats, the picture is different again. The unit delivery costs for 5-digit automation flats increased 155.0 percent. This cost should relate to the additional cost of a typical carrier delivering an additional flat. It is difficult to see why an increase of this magnitude might have occurred. We doubt that flats are becoming more difficult to handle and we know of no fundamental change in how carriers handle flats. The validity of the delivery costs are clearly called into question.

The results for the 5-digit automation categories are supportive of, though somewhat higher than, the more aggregative results shown in the first five graphs

Graph 8 shows the levels of the unit mail processing cost and the unit delivery cost for the Carrier Route product, also indexed to 1998. These costs are available for the full period, unlike the aggregate results in Graph 3.



The unit mail processing cost is up 84.5 percent and the unit delivery cost is up 76.4 percent. These are somewhat above the factor price index, which looks like it will be up about 63 percent by 2011. The points for 2006 stand out as a little low. These are projections made in R2005-1, and are thus systematic reflections of base-year 2004. The actual figures may be somewhat higher. The levels of these points do not affect comparisons among other points.

In this view, which is longer and more robust than the view in Graph 3, cost increases for Carrier Route stand out as rather pronounced. One could argue that the unit mail processing cost for Carrier Route is not terribly interesting. Since Carrier Route does not get much mail processing, it accounts for about 23 percent of the costs attributed. But unit carrier costs are for a well-defined and central activity, and account for about 67 percent of the costs.

Graphs 7 and 8 together show that unit delivery costs for Standard Flats increased about 92 percentage points more than the factor prices, while those for Carrier Route increased only 13 percentage points more. Both Standard Flats and Carrier Route are cased by the carrier and taken to the street. In its initial comments in the 2010 ACR, ACMA, based on a Postal Service study, quantified the small extent to which the unit casing costs for Carrier Route might be lower than those for Standard Flats, due to the line-of-travel requirement for the former. We see no reason why the street costs should be lower.²³

Also, we do not see that the technology of delivering the two product categories has changed. Given this, and recognizing that the Carrier Route costs might start out at

²³ When on the street, the carrier cannot really tell whether the flat is a Standard Flat or a Carrier Route flat. Also, the Bradley analysis of street time in R2005-1 did not have separate variables for Standard Flats and Carrier Route flats.

a slightly lower level, what could possibly account for Standard Flats being 92 percentage points above the factor price index and Carrier Route being only 13 percentage points above it? It seems that they should increase together and that the increases should not be far from the factor price increases. Something is terribly wrong.

F. How Can Such Cost Increases Be Explained?

Backed by considerable study, including severe criticism of the then-current costing system, and with support from economics as a field of study, one of the improvements that came with Postal Reorganization in 1970 was to begin recognizing *causation* in costing. Since then, investment in costing has been on that foundation. Drawing on a corollary, the idea is that mail should not be assigned costs that are not caused by it.

A common (and helpful) way to think about costs is in terms of the resources *absorbed* in producing the product. But one must be very careful not to throw in excessive resources and argue that they were needed. In other words, an efficient, well-managed production system must exist; otherwise, the costs are whimsical²⁴ and meaningless.

For example, consider a hotel with a large ballroom in which a dinner for 3,000 guests is being held. The customer has agreed to cover the costs of the resources absorbed by serving the tables. For 10 chairs per table, the hotelier knows that standard practice is to bring in one waiter for each two tables, which would require 150 waiters. If the hotelier brings in 225 instead, and argues that the services of 225 were

²⁴ The notion of costs being “whimsical” is not an abandonment of logic. Suppose a firm is paying for a large pool of resources and is producing three products. If more resources are available than are needed for producing the products, but the extra resources are to be linked to the products anyhow, what is the basis for linking them with one product instead of another? The notion fits nicely.

absorbed, should the customer be charged for 225 waiters? We believe the answer is “no.”

Aligned with some goal, such as estimating costs for categories of interest, analyses of costs generally result in costing procedures, that is, in the specification of a series of steps that define the costing process. Figuratively if not literally, inputs are fed into spreadsheets, equations reside in the cells, the calculate button is pushed, and costs come out. This crank is turned until the procedure is changed.

Initially, it may be difficult to know whether a cost is at the right level. But standing on the shoulders of time, it may be easy to say much about whether a cost is behaving properly. In fact, the potential causes of cost increases are understood rather well.

Leaving aside natural disasters, the weather, and criminal activity, changes in cost levels would be affected by changes in wage and benefit levels (including changes in work rules), changes in other factor prices (such as of fuel and electricity), changes in technology (meaning the equipment used and the procedures followed), changes in the way the technology is organized and managed, changes in the mix of the mail and its preparation, changes in service features and levels, and changes in the rate of utilization of capacity. In addition, a change like the requirement to begin prefunding health benefits for retirees could have effects, depending on associated costing decisions. Knowledge relating to such effects would be occurrence-specific. All these can be discussed.

Changes in factor prices, including wage levels, are things that move slowly and are known. They, along with the prefunding requirement on health care, are quantified

in the factor price index. Since labor accounts for approximately 80 percent of all costs, the labor agreements dominate that index. There is an extent to which the various labor agreements move together. The extent to which letters and flats are served by different categories of labor is considered minimal.

Changes in technology and the way it is managed, including procedures followed, are associated with man's trek to develop and improve. Most investment is visible. Included would be improved optical character readers and barcode readers. The proportions of letters being DPSed are known. It is probably too early to see the effects of the FSS on flats costs. These factors, to the extent significant, would be expected to be associated with cost decreases, not increases.

We have not analyzed the changes in service levels and do not have a measure of the effects that such changes might have. We suspect that most service changes are matters of managing the mailflow and do not have significant cost implications. Changes in the mix of the mail are recognized in the billing determinants and the cost index. Improvements in the preparation of the mail have been made. Indeed, mailers have been unhappy for some years with the added preparation burden placed on them, though they are interested in working with the Postal Service to reduce costs. In general, improvements in preparation should have tended to reduce costs, not increase them.

Changes in the rates of utilization of capacity are of potential importance, given the volume reductions in some recent years.²⁵ However, postal costing is guided by marginal principles. Costs that are fully variable with volume should not be affected

²⁵ The Report to the President and Congress on Periodicals (*id.*, at 70 and O-5) discussed the effect on costs of volume reductions "between FY 2007 and FY 2010" (at O-5).

significantly by volume reductions. If they are, the costing is wrong. In cost categories with high fixity, like carrier street time, the situation is not much different. It is difficult to see that the additional carrier cost of an additional flat should depend much on whether the carrier is already handling one number of flats or another.

Another matter that should be recognized is changes in costing procedure, sometimes referred to as the costing method. We know of no easy way to list and compound these various changes. The R2005-1 change in the costing of city carrier street time was mentioned above, and worsens instead of improves the picture for flats. The redesign of the IOCS was highlighted by the Joint Periodicals Report, and discussed above, but it had very little effect on Standard Flats. Since passage of the PAEA, costing changes have been identified and are listed in the Roadmap document in each Compliance Report. Our review of these, noted above, showed that many had little or no effect on flats, that some went one direction and some another, and that none were substantial.

This discussion of explanatory factors could be developed further.²⁶ But the changes documented above (an increase in the cost of Standard Letters of just 18.2 percent and of Standard Flats of a whopping 129.6 percent, over just 13 years, in the face of a factor price increase of about 60 percent), which occurred despite certain changes that should have reduced costs, seem beyond the bounds of possible explanation. Even if the costs were right in 1998, which becomes open to question

²⁶ An additional factor that could be considered is that of scale. Scale relates to the economies available for a system designed to have a certain capacity. Over time the capacity has seen some adjustment, but changes happen slowly. The jury is still out on whether the Postal Service is operating in a range of increasing or decreasing returns to scale. But given the low ratio of depreciation to total cost, the extensive use of labor, and the high variability of many cost categories, changes in scale economies may not be large, whether they are positive or negative.

obviously, they are far out of bounds now. An advocate of placing reliance on these costs should bear some burden of showing that they are likely reliable. No showing has been made, and the opposite appears to be the case.

The results suggest either that the Postal Service is going backwards technologically, and installing higher and higher cost processing and delivery systems for flats but not for letters, that excess costs are being assigned, or that something is awry in the costing systems. The first possibility is not likely and is certainly not something with which mailers should be burdened. The second and third are more likely, and they could be working together.

It is sometimes the case that volume declines lead to excess capacity. If the costs of this excess capacity creep into the costs of the products, as though it were caused by processing and delivering the products, decision-making is hampered and the cost-base of the products is artificially inflated. This can make the situation worse, and is, we believe, a reason a recent legislative proposal (H.R. 2309) requires the estimation and removal of excess-capacity costs.

As it stands, the mailer is being told: *We have bad news and terrible news. The bad news is that, inexplicably and contrary to what associated factors would suggest, and despite your efforts to improve the preparation of your mail and to work with the Postal Service to limit costs, the costs of your mail have been increasing by leaps and bounds. The terrible news is that, based on these costs, we find your rates to be out of compliance with the law. Rate increases are required. If you die, you die.* Two shoes are dropping, but the second is dependent on the first. The overall situation would seem untenable for mailers, the Commission, and the Postal Service.

Section 3652(a)(1) says that the Postal Service's report on compliance "shall analyze costs, revenues, rates, and quality of service, using such methodologies as the Commission shall by regulation prescribe, and in sufficient detail to demonstrate that all products during such year complied with all applicable requirements of this title."²⁷ The requirement for an analysis of the costs has no less contextual standing than the requirement for an analysis of the rates, but it clearly must come before any analysis of the rates.

The Commission has prescribed procedures on how to turn the crank that converts accounting costs into estimates of costs for categories of interest, but not on how to evaluate, or confirm the validity of, the estimates that result. And the Postal Service has not provided any such evaluation. However, section 3622(c)(2) requires that costs be attributed "through reliably identified causal relationships." The evidence reviewed above is compelling that the relationships are not reliable. It would seem, then, that the costs are out of compliance. If this is the case, the rates could not be found out of compliance, and the second shoe would not need to drop. We ask respectfully that the Commission look further into this matter.

II. A Case Cannot Be Made that Standard Flats Are Being Cross-Subsidized

"Standard Flats" is a category designated as a product, currently. It includes both Commercial Standard Flats and Nonprofit Standard Flats, but excludes Commercial Carrier Route (CR) Flats, Nonprofit CR Flats, Commercial High-Density (HD) Flats, and Nonprofit HD Flats, even though it is well-known that efficient practice in

²⁷ Congress may have meant to say: "in sufficient detail to demonstrate *whether* all products during such year complied"

the mailing industry, guided by eligibility requirements and the signals sent by the differences among the various rates, is to control postage bills by splitting mailings among them. For example, a commercial mailer of flats would, as allowed by the size of his mailing, qualify some pieces as Commercial HD Flats, others as Commercial CR Flats, and the remainder as Commercial Standard Flats (the latter having subcategories of its own). A Nonprofit mailer would do the same, using the Nonprofit categories.

Also designated as products are “Carrier Route” (composed of letters, flats, and parcels, though mostly flats, each both Commercial and Nonprofit) and “High-Density & Saturation Flats and Parcels” (composed of flats and parcels, some HD and some Saturation, each both Commercial and Nonprofit). It is clear that the categories designated as products are non-homogeneous agglomerations. However, revenues and costs are estimated for these agglomerations and presented annually in the Cost and Revenue Analysis (CRA) Report.

The breakdown is as follows:

CATEGORIES DESIGNATED AS PRODUCTS

COMPONENT CATEGORIES

Standard Flats

Commercial Standard Flats
Nonprofit Standard Flats

Carrier Route

Commercial CR Letters
Nonprofit CR Letters
Commercial CR Flats
Nonprofit CR Flats
Commercial CR Parcels
Nonprofit CR Parcels

High-Density & Saturation Flats and Parcels

Commercial HD Flats
Nonprofit HD Flats
Commercial HD Parcels
Nonprofit HD Parcels
Commercial Saturation Flats
Nonprofit Saturation Flats
Commercial Saturation Parcels
Nonprofit Saturation Parcels

The volume in some of the right-hand-side categories is small. Saturation mailers cover entire routes, generally, and use the Saturation categories. Rate levels for the Nonprofit categories must comply with special provisions in the law. In varying degrees, mailers of commercial non-saturation flats use the three shaded categories, though each is housed in a different left-hand-side “product.”

In order to judge whether the rates for Commercial Standard Flats (a component category on the right) comply with title 39, the Commission has looked at the cost coverage for Standard Flats (an aggregate category on the left). A mismatch is apparent. That is, the levels of the revenues and costs of Nonprofit Standard Flats are included but have no relation to the question.

The level of this cost coverage, for Standard Flats, as reported, has been below 100 percent for several years. A question arising has been whether a coverage for such a category (a category designated as a product but hardly relating to what goes on in the markets) can be both below 100 percent and in compliance with applicable law. The Commission has found that this coverage complies with all sections of chapter 36 but does not comply with section 101(d) of chapter 1. We do not deal here with whether a Compliance Review can rely on sections outside chapter 36.

In establishing rates to “apportion the costs of all postal operations to all users of the mail,” though the overall deficits show that not all costs are being apportioned, section 101(d) requires a “fair and equitable basis.” A Commission finding in its FY 2010 Determination, on this section, was that the basis was “unfair and inequitable” (ACD at 16) and that an “intra-class cross subsidy” (ACD at 1) exists.

In its brief to the U.S. Court of Appeals for the D,C, Circuit, USCA Case #11-1117, Nov. 23, 2011, at 39, the Commission clarified its concern:

The Postal Service also fails to come to grips with the basis of the Commission’s decision: the Commission did not object to [the] rates for Standard [] Flats on the ground that [the] rates failed to maximize Postal Service revenues. Rather, the Commission objected to the ongoing subsidy of Standard [] Flats users at the expense of other mail users, including those businesses primarily relying on Standard [] Letters and Carrier Route Mail. The Commission’s annual compliance determination seeks to remedy this fundamental unfairness, prohibited by Congress in section 101(d).

It is clear that the Commission’s determination hinges on a cross-subsidy existing and being viewed as unfair. The matter of whether a cross-subsidy can be said to exist, then, is of pivotal importance. That is, if one does not exist, then its existence cannot be viewed as unfair.

In the literature on subsidies, which is extensive, the prescription that cross-subsidies should be avoided is based entirely on a perception of fairness. And though there may be wide agreement on this perception, it is not based on any notion of economic efficiency²⁸ or on a conclusion drawn from the body of knowledge known as economic theory. That is, there is no logical link between the notion of cross-subsidy and the general areas of welfare theory, consumer theory, the theory of value, and the theory of the firm.

Concern over cross-subsidies comes from two directions. The first is whether it is fair for a firm to drive out competitors by pricing products unduly low. This question *does not* apply here. The second is whether such pricing is fair to other products. This question *is* at issue here.

The test to determine whether a product is priced unduly low relative to other products is reasonably simple, at least in concept: *Maintaining breakeven or an existing profit level, would the prices of one or more other products be lower if the firm made a decision not to offer the product in question? Conversely: Did the decision to begin offering the product in question hurt anyone?* As a first step, pursuing this question has led to an interest in the *incremental cost* of the product, which is the cost that would be saved, under full adjustment, by withdrawing the product entirely, *ceteris paribus*—i.e., by not offering the product to customers any longer. It is thus a cost savings for the largest possible decrement in the volume of the product.

²⁸ As John C. Panzar observed: “Regulatory policies to prevent cross-subsidization have always been somewhat at odds with efficiency objectives.” “Interactions between Regulatory and Antitrust Policies in a Liberalized Postal Sector,” draft for 2008 IDEI—La Poste Conference, http://www.idei.fr/doc/conf/pos/papers_2008/panzar.pdf. This conflict makes it all the more important to get the cross-subsidy test right.

Central, then, is the question of the Postal Service making a decision not to offer the product at all, which would, if the revenue is less than the incremental cost, tend to make the Postal Service better off financially. But if one were concerned about whether the rates for Commercial Standard Flats are high enough, exactly which product would not be offered? In other words, to do the incremental cost test, which product would be withdrawn entirely? The financial effects of this withdrawal would be relevant.

Taking off from the cost coverage for Standard Flats, as reported, one might be tempted to withdraw the Standard Flats product. But this makes no sense at all, because, deciding not to offer Nonprofit Standard Flats (a component category included in Standard Flats), even if legal, would provide no information about the rates for Commercial Standard Flats. Further, it would make no sense to withdraw just the Commercial Standard Flats category either. Doing the latter would be neither sound nor meaningful. Why would the Postal Service say: *We are not going to offer a Standard flats product to commercial mailers, except that if they have 10 or more pieces for each of one or more of our routes, or if they collate various mailings until they have 10 or more pieces for each of one or more of our routes, we will offer a flats service for those pieces only, to those routes only. And, by the way, in a process similar to redistricting, we change our routes around regularly, sometimes making them longer to boot, so please keep track of our routes.* And as a practical matter, doing this would: (a) drive a wedge into mailer practices, (b) severely reduce the value of Carrier Route to mailers,²⁹ and (c) put the smallest of the flats mailers out of business.

²⁹ Most flats mailers use Carrier Route and Standard Flats together, the latter often being a carrier of residual pieces. Without Standard Flats, the value of Carrier Route is reduced. This was seen following Docket No. R2006-1 when Standard Flats rates were increased much more than Carrier Route rates. The volume of both declined substantially.

It might be possible to jump this hurdle by considering the savings from a decision not to offer the following product-like group: Commercial Standard Flats *plus* Commercial Carrier Route Flats *plus* Commercial High-Density Flats. But there is another problem that is just as important, if not more so. The incremental cost test, which focuses narrowly on the withdrawal of a single category of interest,³⁰ is the beginning and the end of cross-subsidy testing only for categories that bear little or no relation to the other categories that the firm produces. If the products of the firm are substitutes and complements to one another, then the financial effects of the withdrawal must include the effects on the revenues and costs of the other products, which requires what is, in the literature, called the burden test.³¹

In a first step, the burden test would focus on the financial effect (involving both the revenue loss and the cost reduction) of withdrawing the trio of Commercial Standard Flats, Commercial Carrier Route Flats, and Commercial High-Density Flats (the latter to the extent, at least, that it does not involve geographically targeted mailers, which is a growing extent). Then, in a second step, estimates would be made of the net financial effect of all further volume responses to this withdrawal. We submit that if the trio

³⁰ In full regalia, incremental cost tests should test each product individually, then each pair, then each triad, and so on until all product combinations are covered. The testing of groups has not been an issue before the Commission.

³¹ For a discussion of cross-subsidies, including the burden test, see: (a) Rebuttal Testimony of Janusz A. K. Ordover (a partner with William J. Baumol in Consultants in Industry Economics (CIE), Princeton, NJ), USPS-RT-9, Docket No. R84-1, especially pp. 25-27 (saying “A more complex version of the incremental cost test for cross-subsidy, referred to in the literature as a burden test, takes into account the possibility that the provision of a particular service may divert revenue from other services jointly provided by the enterprise. Thus, the burden test focuses on net incremental revenues and costs.” (at 26, fn. 1, emphasis in original)). Certainly the “possibility” of secondary effects in the Postal Service is real and pronounced. (b) Rebuttal Testimony of Robert D. Willig (also a partner in CIE), USPS-RT-5, Docket No. R83-1, especially p. 20. And (c) Gerald R. Faulhaber, Cross-Subsidization in Public Enterprise Pricing, in *Pricing in Regulated Industries: Theory and Application II*, edited by John R. Wenders, 1979.

(effectively non-saturation Standard flats, which includes virtually all catalogs) were withdrawn, volume losses would occur for other products, resulting in significant contribution loss.

Attributable costs, being designed as they are to relate to small-volume increments of volume, are not generally relevant to the incremental-cost portion of the subsidy test. But if they are used as a proxy, in the first step, the cost coverage of the duo of Commercial Standard Flats and Commercial Carrier Route combined is 106.5 percent (calculated from revenue and cost figures in USPS-FY11-27 and the CRA in USPS-FY11-01). If relevant portions of the High-Density & Saturation product were included, this coverage would undoubtedly increase further. Then the second step would add to the losses of the withdrawal. The conclusion is that the flats at issue are profitable to the Postal Service and are a key component in the array of products offered. Thus no finding of cross-subsidy can be supported. The other products should be pleased that the Postal Service carries non-saturation commercial flats as a product-like category in the Standard class, fractured into components of separate “products” though it may be.³²

III. Conclusion

On our review, all of the observations on costs made by ACMA in the exigent case, in last year’s Compliance Review and omnibus rate adjustment, and in the recent filing for an omnibus rate adjustment remain valid and are included here by reference.

³² Upon a decision to offer a flats product to potential commercial, non-saturation mailers in the Standard class, the Postal Service must face the assignment of designing rate elements within it. That other mailers are happy that this product exists does not prevent them from wishing that their own rates were lower.

We have not found that updating them to 2011 changes the conclusions in a material way.

In these comments, we have introduced a cost index and provided a review of the overall costs for Standard Letters, Standard Flats, Carrier Route, and Outside County Periodicals. We also showed that the findings in our review are consistent with results on the 5-digit automation categories in Standard, the largest categories in terms of volume. Then we provided specific observations on the notion of cross-subsidy. The conclusions are:

- a. The cost increases for Standard Flats and Periodicals have been substantially in excess of what can be explained by factor price increases or in any other way. For this reason, and for supporting reasons discussed herein, reliance cannot be placed on these costs. They do not provide an adequate basis for evaluating rates or assessing compliance. At most, the costs themselves are out of compliance. We ask that the Commission look further into these matters.
- b. Consistent with the literature, with the logic of cross-subsidies, and with sensible business practice, Standard Flats is not an appropriate category for a cross-subsidy test. A focus on the trio of Commercial Standard Flats, Carrier Route Flats, and High-Density Flats would be more appropriate. An incremental cost test on this trio, using reported costs, though we argue them to be seriously defective, would not show a cross-subsidy. Even more so, the burden test would not.

Respectfully submitted,

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**To Prove that:
An Index of a Laspeyres Rate Index
Divided by the Cost Coverage
Is a Cost Index**

If suitable data were available, creating a cost index would be much like creating a rate index. A Laspeyres *rate index* (for a product) is the ratio of a numerator (the sum-product of period-2 rate elements and corresponding period-1 volume elements) and a denominator (the sum-product of period-1 rate elements and corresponding period-1 volume elements). A value of 1.06 for this ratio would mean that the rates for the product increased 6 percent, on average. Similarly, a *cost index* would be the ratio of a numerator (the sum-product of period-2 unit-cost elements and corresponding period-1 volume elements) and a denominator (the sum-product of period-1 unit-cost elements and corresponding period-1 volume elements). The unit cost elements in the sum-products would be the unit costs for a complete series of cost centers, and the volume elements would be the volumes passing respectively through those cost centers. For example, the cost centers could include, but would not be limited to, one for pallet handling, one for transporting, one for sorting bundles, one for sorting 3-digit pieces, one for sorting 5-digit pieces, and one for delivering. However, the data required to develop such an index are not readily available.

The cost index question can be approached intuitively. Rate increases cover cost increases and then begin to increase cost coverage.³³ When rates for a product

³³ More completely, assume rates and costs are higher in period 2 than in period 1. One of three outcomes occurs: 1) the new rates cover a portion of the cost increase and the cost coverage declines; 2) the new rates cover exactly the cost increase and the cost coverage is

are developed, volume elements are recognized, as are the costs behind them. When a rate index is developed, the same volume elements are recognized. Finally, the reported cost coverage has a numerator of rates times volume elements and a denominator of unit costs times volume elements. It would seem, then, that an index of the rate index divided by the cost coverage would be a cost index. It is this that this note is to prove.

Using subscripts 1 and 2 to indicate time periods, let $RI_1 = 100$ be the rate index for period 1. The coverage in period 1, in decimal form, is:

$$Cov_1 = \sum V_{i,1} \times R_{i,1} / \sum V_{j,1} \times C_{j,1}$$

where the R_i ($i = 1, 2, 3, \dots, n$) are n rate elements and the C_j ($j = 1, 2, 3, \dots, m$) are unit costs for m cost centers. The V_i are volumes paying n rate elements and the V_j are volumes going through m cost centers. Similarly, the cost coverage in period 2 is:

$$Cov_2 = \sum V_{i,2} \times R_{i,2} / \sum V_{j,2} \times C_{j,2}$$

The rate index divided by the cost coverage in period 1 is:

$$\begin{aligned} & 100 / [\sum V_{i,1} \times R_{i,1} / \sum V_{j,1} \times C_{j,1}] \\ & = 100 \times \sum V_{j,1} \times C_{j,1} / \sum V_{i,1} \times R_{i,1} \end{aligned}$$

The rate index in period 2 is:

$$RI_2 = 100 \times \sum V_{i,1} \times R_{i,2} / \sum V_{i,1} \times R_{i,1}$$

unchanged; or 3) the new rates cover more than the cost increase and the cost coverage increases. For thinking purposes, the text uses the latter.

The rate index divided by the cost coverage in period 2 becomes:

$$\frac{100 \times \sum V_{i,1} \times R_{i,2} / \sum V_{i,1} \times R_{i,1}}{\sum V_{i,2} \times R_{i,2} / \sum V_{j,2} \times C_{j,2}} = \frac{100 \times \sum V_{i,1} \times R_{i,2} \times \sum V_{j,2} \times C_{j,2}}{\sum V_{i,2} \times R_{i,2} \times \sum V_{i,1} \times R_{i,1}}$$

The rate-index÷coverage in period 2 divided by the rate-index÷coverage in period 1, which is the index being examined, becomes:

$$\frac{100 \times \sum V_{i,1} \times R_{i,2} \times \sum V_{j,2} \times C_{j,2} \times \sum V_{i,1} \times R_{i,1}}{\sum V_{i,2} \times R_{i,2} \times \sum V_{i,1} \times R_{i,1} \times 100 \times \sum V_{j,1} \times C_{j,1}}$$

Cancelling the 100s and rearranging:

$$\frac{\sum V_{i,1} \times R_{i,2}}{\sum V_{i,2} \times R_{i,2}} \times \frac{\sum V_{i,1} \times R_{i,1}}{\sum V_{i,1} \times R_{i,1}} \times \frac{\sum V_{j,2} \times C_{j,2}}{\sum V_{j,1} \times C_{j,1}}$$

This is a product of 3 terms. The second term cancels. The third term is the total cost of the product in period 2 divided by the total cost of the product in period 1. The first term is the interesting one. It is the inverse of a volume index for period 2 relative to period 1, using the rates in period 2 as weights, in effect the inverse of a Paasche volume index.

A volume index quantifies the increase in volume. It solves the mix problem. For example, it deals with the problem that one piece of 5-digit presort is not the same amount of volume as one piece of non-presort, or that one piece of 2,000-mile mail is not the same amount of volume as one piece of 25-mile mail.³⁴ In the formula above, the volume elements in each period are weighted by period-2 rates, giving a measure of the change in workload. If the volume index is up 10 percent, one could say that the workload is up 10 percent. Volume indexes using weights other than rates could be considered, such as ones using marginal costs, but an index using rates is a good indicator.

One of the justifications for a price cap system using base-period volume weights is that the agency is given an incentive to move toward rates that reflect costs in an economically efficient way. This should make using period-2 rates as weights for the volume index better than using period-1 rates. One could note that rates often reflect demand as well as costs, but this is not as common within products as it is between products.

The index being examined, constructed as a rate index divided by the cost coverage, then, is the total cost ratio TC_2/TC_1 divided by a price-weighted index of volume, which is a cost index. Q.E.D.

Suppose total cost increases 15 percent, volume (the number of pieces) increases 10 percent, and volume (the price-weighted index) increases 5 percent. The above formula would be $1.15/1.05 = 1.095$. That is, the inherent cost of producing the

³⁴ Note that creating a volume index using rates as weights is helpful only to the extent that rate elements exist for the mail characteristics of interest. In First-Class Mail, for example, rate elements relating to distance do not exist, so an index could not deal with a shift toward shorter-distance mail.

product increased 9.5 percent. The cost index suggested in this note yields 9.5 percent without requiring knowledge of details relating to the cost centers or the volume index.

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