SEVEN GOOD YEARS OF POSTAL SERVICE PRODUCTIVITY

Executive Summary

The Postal Service has increased its productivity for seven years in a row. That is a record string of productivity gains for the government-owned enterprise.

While productivity growth averaged a meager 0.2% yearly in the quarter century from 1975 to 1999, it quickened to an average annual pace of 1.5% in the years 2000-2006. The total cumulative productivity increase over the period 2000-2006 was more than two-and-a-half times greater than the productivity gain in the prior quarter century.

The productivity measure the Postal Service emphasizes is total factor productivity (TFP), which compares output to all production inputs (labor, capital, and materials).

If not for the productivity surge, the Service would require about 9% more production resources to meet its current workload. Instead of paying 41 cents for a first-class stamp, mail users would need to pay 44 or 45 cents. The overall economy would be slightly weaker, and the damage would be greater for the mailing industry and its customers.

Given the danger that Postal Service productivity will revert to its old pattern, the Service’s leaders are wise in making it a priority to seek additional ways to raise productivity and lower costs.

The Postal Service’s workers and current management deserve praise for a stellar performance compared to what is often seen at state-run enterprises and what the Service achieved in the past.

But how does productivity growth at the Postal Service compare to the average in the private business sector? The Postal Service did much worse over the period 1975-1999. However, its productivity gains were approximately average compared to the private business sector during the years 2000-2005.

Thus, a golden period of productivity growth at the government enterprise is entirely respectable – but not exceptional – when compared to private-sector performance. This is a reminder of the great efficiency that private businesses operating within the free market system routinely attain. If we are concerned about efficiency, which we should be, great caution should be exercised when considering the establishment of new government enterprises. They should only be authorized if they would serve a compelling public-policy need that cannot be met by the private sector.
SEVEN GOOD YEARS OF POSTAL SERVICE PRODUCTIVITY

People at the U.S. Postal Service are justifiably proud of the productivity improvements they have achieved in the last several years under Postmaster General John Potter. The organization’s 2006 Annual Report enthuses, "The Postal Service moved further into record territory as we closed 2006 with an unprecedented seventh straight year of increased productivity and a third consecutive year of positive retained earnings."¹

For a business, higher productivity is desirable because it allows the business to deliver increased output to customers without needing to use more scarce production inputs. Other things equal, higher productivity helps control costs, and it holds down price increases. For the economy as a whole, increased productivity raises output, incomes, real wages, and employment. It means greater opportunities and higher living standards.

Postal Service productivity goes from low gear to high.

The measure of productivity that the Postal Service emphasizes is total factor productivity (TFP), which compares output to the production inputs of labor, capital, and materials. Total factor productivity also adjusts for forces that change the amount of work the Service needs to do to process each unit of mail, such as alterations in the mail mix and in the amount of preliminary processing done by mailers.²

Chart 1 shows the cumulative level of the Postal Service’s total factor productivity from 1975 to 2006. Chart 2 displays year-to-year productivity changes over the same period. The recent, sustained increase in Postal Service productivity is evident in both charts.

The official productivity numbers for fiscal year 2007, which ended on September 30, will not be compiled and released for several months. According to preliminary results, though, productivity increased again in fiscal year 2007. If correct, the Postal Service will extend its string of productivity gains to eight consecutive years.

One of the keys to improved productivity has been better use of employees. The total number of postal workers (career and noncareer) peaked at 906,000 in 1999. By 2006, the Service had reduced its workforce by 12% to under 800,000.³ The reduction was accomplished through attrition rather than layoffs, which minimized the disruption for workers and helped preserve morale. The ability to downsize by that much while maintaining decent service is clear evidence that the trimming was carried out intelligently and that the organization’s ranks had previously been bloated, with many employees used inefficiently.
The Service’s productivity gains in the last several years are especially impressive because they are so much stronger than the government-owned enterprise had previously achieved, and they have been sustained for longer. Based on data going back to the 1960s, the Service’s longest previous streak of improved productivity had been five years (1969 to 1973), and the longest string in the 1980s and 1990s was three years. On many occasions, the Postal Service’s total factor productivity actually dropped, with the result that there was only a tiny cumulative productivity gain from 1978 to 1999. As Chart 2 shows, the usual pattern following a year or two of good productivity growth was a sharp decline in productivity, several years of anemic increases, or both.

The Postal Service’s small productivity increases in the 1970s, 1980s, and 1990s were particularly disappointing because the agency should have registered spectacular productivity gains in those years since it began with an organization in which little work was automated, and it invested heavily to modernize. The erratic and very modest productivity rise over those decades suggests that many of the investments were not well planned or carried out.

**Total factor productivity and labor productivity.**

A frequently used productivity gauge is labor productivity, which measures output per unit of labor. In the case of the Postal Service, a simple but misleading way to compute labor productivity is to compare mail volume and the number of postal workers. For instance, it sounded very impressive when the Postmaster General said in recent Congressional testimony, "In its last full year of operation [1970], the [old] Post Office Department’s 741,000 employees handled 85 billion pieces of mail delivered to 95 million families and businesses. Last year, roughly the same number of [the new Postal Service’s] employees [actually 796,000] handled 213 billion pieces of mail for a delivery base of 146 million addresses." However, as Charles Guy, the former Director of the Postal Service’s Office of Economics, Strategic Planning, has often pointed out, and the Service’s leadership understands, mail volume is a poor indicator of workload.

The Postal Service’s workload has grown much more slowly than the number of pieces of mail. The primary reason is worksharing. Worksharing refers to an arrangement in which mailers help with preliminary mail processing in return for lower postage rates. Understandably, it is easier to deliver mail that has been presorted and dropped off near the final destination than mail that arrives in a jumble at a Postal facility halfway across the country from the address on the envelope. Worksharing has increased dramatically over time. Virtually all standard mail, which has overtaken first-class mail as the largest mail class, is workshared, and more than half of first-class is now also workshared.

To determine labor productivity accurately, one needs to use two data sets that are prepared as
intermediate steps in computing total factor productivity. One of the data sets measures the Postal Service’s workload by carefully adjusting for worksharing, volume shifts among mail classes, address growth, and other forces that affect the amount of work performed.\(^9\) The other data set carefully measures labor inputs.\(^10\) These two data sets reveal that, from 1970 to 2006, the Postal Service’s workload rose 59% and its labor inputs rose 10%, for a cumulative increase in labor productivity over the period of 45% (roughly 1% annually on average). This is progress but not the roughly 150% improvement suggested by the numbers in the Postmaster General’s testimony.

Labor productivity is important. As the Postal Service’s leadership recognizes, however, looking solely at labor productivity would provide an incomplete picture and overstate the agency’s true progress.

For example, the Postal Service has poured billions of dollars into automation over the years, substituting capital inputs for labor inputs. With that additional capital, it would be shocking if labor productivity had not climbed steeply. But has the return on the Service’s capital investments exceeded what the investments cost, and has the Service become more efficient in its overall use of resources?

To answer questions like that, the Postal Service developed its gauge of total factor productivity. In contrast to labor productivity, which considers only labor inputs, total factor productivity takes all inputs into account, including capital. Hence, total factor productivity affords a more complete analysis regarding the efficiency with which the Postal Service converts inputs into output than does labor productivity.\(^11\)

**The Postal Service needs to run very fast to keep up with the private sector.**

Government enterprises often develop reputations for poor service, rude or indifferent employees, and huge deficits. Relative to those benchmarks, the Postal Service’s performance, which has been aided by its productivity gains, is outstanding. In surveys, people consistently rate the Postal Service among the top federal government agencies.\(^12\)

For a broader perspective on productivity, though, one should also compare the Postal Service’s productivity gains with those attained in the private sector. Private-sector businesses constantly strive to improve productivity because they are accountable to their owners, who expect profits, and their customers, who will go elsewhere if not satisfied. Higher productivity allows firms to earn more profits while simultaneously better meeting their customers’ needs.\(^13\)

Measured against private-sector standards, the Postal Service’s productivity gains in recent years have been approximately average. Although the Service’s recent gains are a vast improvement over its earlier performance, they are not record setting relative to what is normally seen in the private sector. That is, a golden period of productivity growth at the government enterprise is entirely respectable – but not exceptional – when compared to private-sector performance.

Chart 3 compares the cumulative level of productivity at the Postal Service with that in the private business sector from 1975 to 2006. Chart 4 looks at the average annual rates of change for the Postal Service and the private business sector for the years 1975-2006, and also shows results for the subperiods 1975-1999 and 2000-2006. The numbers for the private sector come from the U.S. Bureau of Labor Statistics (BLS). BLS collects and publishes data on what it calls multifactor productivity (MFP), which is similar in concept to the Service’s total factor productivity.\(^14\)

Looking at Chart 4, one can see that, over the entire period, the private business sector, on average, increased its productivity at an annual rate of 1.0%. Productivity growth was slightly lower in the subperiod 1975-1999 (0.8% annually), but accelerated to a much faster clip (1.6% annually) in the years 2000-2006.\(^15\) For the Postal Service, annual productivity growth averaged 0.5% over the entire period. It barely increased in the subperiod 1975-1999 (0.2% annually), but climbed briskly (1.5%
annually) in the years 2000-2006. As a result of this turnaround, the Service’s total productivity gain during the years 2000-2006 was over two-and-a-half times greater than in the prior quarter century.

The Postal Service increased its productivity at only half the speed of the private business sector over the years 1975-2006. The Service’s relative performance was much worse over the long subinterval 1975-1999, but roughly matches that in the private business sector so far in the current decade.

If the turnaround had not occurred and if the Postal Service’s productivity had continued to expand at the same slow rate as it did over the 1975-1999 period, the agency’s productivity would now be about 9% lower than it actually is. That implies the enterprise would need about 9% more production resources to handle its present workload. Instead of looking at a 41 cent first-class stamp, mail users would now be paying 44 or 45 cents.

Some might challenge the comparison of the Postal Service and the private business sector on the ground that the Postal Service furnishes a service, and some services are resistant to productivity increases. The classic example is a live performance by a symphony orchestra. One rejoinder is that the private business sector, against which the Postal Service is being compared, also contains many service industries, as well as goods-producing industries. A second response is that many of the Postal Service’s processing facilities resemble manufacturing plants, and should have a similar potential for productivity improvements. Even final mail delivery, which is labor intensive, offers opportunities for greater efficiency. For example, letter carriers typically spend several hours within the post office on every shift sorting the mail they will deliver. The Service
has reduced in-office preparation time by partially automating this final sortation, allowing carriers to spend more time actually delivering mail, and the Service hopes for additional advances on this front.18

**Can strong productivity growth continue?**

In past decades, increases in the Postal Service’s measured productivity were often accompanied by significant drops in service quality. When complaints began rolling in, the Service then reversed course and hired more workers and other production resources, with the result that measured productivity retreated or grew very slowly for the next several years.19

Earlier this decade, many observers wondered whether history would repeat itself, and the Service’s efforts to trim fat would instead cut into muscle and bone and need to be reversed. There have been a few disquieting signs. Customers in some communities have complained about delayed mail or mail arriving later in the day than normal. The Service has also inconvenienced some customers by reducing the number of collection boxes (a 12.5% cutback from 1999 to 200520 ) and by reducing the timeliness with which it collects mail from some of the remaining boxes. Despite these problems, surveys indicate that most mail users are still reasonably satisfied. This percentage has not changed much since the late 1990s.21 One would expect very different survey results if there had been a large and widespread deterioration in service quality.

Nevertheless, service-related complaints seem to have intensified in the last year or two. The Postal Service insists the problems are isolated, often stem from poor decisions at the local level, and will be corrected.22 Many of the complaints come from rapidly growing localities, and it is possible the underlying trouble in those cases is that the Service is too slow in adjusting to population changes. The most worrisome case is Chicago, which Postmaster General Potter says has the worst mail delivery service in the country. Mr. Potter has intervened personally there, and, in a de facto admission that the Chicago workforce was overextended, agreed to hire 200 extra letter carriers and 25 more technicians.23 It is unclear as this is written whether the difficulties are isolated and temporary, or whether the old pattern of erratic productivity growth is about to repeat itself.

Another concern is that although productivity growth was positive in 2006, it was only 0.2%, which is a marked slowdown from the pace of the prior six years.24

In any event, it will be more difficult in coming years to maintain the pace of improvements that has characterized the last several years. The Postal Service naturally picked the lowest hanging fruit first. The Service will now have to seek out less obvious or harder to achieve efficiency improvements. To their credit, Mr. Potter and his management team have frequently acknowledged this challenge and have stressed the importance of finding ways to continue lifting productivity.

The Postal Service’s efforts to continue improving productivity are also made more difficult because of a fundamental contradiction in how Congress treats the agency. In a sense, the Postal Service is neither fish nor fowl: it is a federal agency, but it is supposed to perform with the efficiency of a private company. On the one hand, members of Congress desire that the government-provided mail service be reliable, prompt, and economical, in other words, that it not operate like a stereotypical government bureaucracy. On the other hand, members of Congress are acutely aware of the fact that the Postal Service is a federal government entity. They often view the Service as a source of government largess, and are highly protective of postal jobs and facilities within their states and districts. Frequently, the two goals clash, and when they do, Congress often favors parochial interests. For example, not every proposal to consolidate or close postal processing facilities is a good idea, but many are. Nevertheless, members of Congress almost reflexively oppose consolidations or closings in their districts. Members should realize that when they force the Postal Service to do business in inefficient ways, they are hurting the Service’s ability to hold down prices while maintaining quality. James Miller, Chairman of the Postal Service’s Board
of Governors, forthrightly said in Congressional testimony, "Reflex opposition to such changes impedes progress, increases costs to Postal customers, and makes it difficult for us to offer superior services at reasonable prices."  

Conclusion.

If not for the productivity turnaround of the last several years, the Postal Service would need about 9% more production inputs to handle its present workload. Instead of looking at a 41 cent first-class stamp, mail users would now be contemplating a 44 or 45 cent first-class stamp. Rates would need to rise correspondingly for other mail classes.

Without the productivity advance, households and businesses would be paying more for each letter, sending less mail, complaining more about Postal Service inefficiency, and diverting more of the potential mail stream to electronic alternatives. Taxpayers would be at greater risk of having to bail out the government enterprise in the future. The nation’s output would be slightly lower. In short, improved productivity has allowed the Postal Service better to carry out its government-assigned mission by moderating rate increases and keeping mail more affordable.

It is notable that the Service realized this improvement by focusing on its core market of hard-copy, non-urgent letter delivery. In the past, and certainly under the two previous Postmasters General, the Service often regarded peripheral markets longingly and claimed it needed to branch out into other fields to offset problems it claimed it could not fix in its core market. In reality, the back-to-basics approach of the last several years makes much better business sense. It plays to the market in which the Service has its greatest expertise. It avoids distracting management and other employees from their primary job, which is also their government-assigned mission. And it recognizes that the Service’s non-core operations are too small in relative terms and face too much private-sector competition to be able to support the agency if the core business fails.

The productivity data also suggest a more general point about government enterprises. For the last several years, the Postal Service has set productivity records compared to its past performance. It is currently among the best run government enterprises. However, if the Service’s recent productivity growth were judged by private-sector standards, it would be average, that is to say, entirely respectable but not extraordinary. The message is that while government enterprises can sometimes deliver the efficiency of private-sector businesses, they more typically do not. Hence, if we are concerned about efficiency, which we should be, it is good public policy to limit the role of government businesses. They should only be authorized if they would serve a compelling public-policy need and fill a role not met by the private sector. Moreover, to maintain a strong economy, care should be taken to guard against mission creep by existing government enterprises.

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This is another of a continuing series of IRET papers examining the U.S. Postal Service. IRET began its work in this area in the mid 1990s. Norman Ture, the organization’s founder, believed that growth and prosperity are advanced by restricting government to a limited set of core functions. From this perspective he was concerned about the activities of government owned and sponsored businesses. The Postal Service stands out among government businesses because of its size — it employs about 30% of the federal government’s civilian workforce. For many years — but fortunately much less so under the current Postmaster General — it was also notable for aggressively trying to expand beyond its core mission.
Endnotes


2. An independent economic consulting firm, Laurits R. Christensen Associates, measures total factor productivity for the Postal Service. The fact that Christensen Associates reported disappointing TFP results for many years, prior to the robust gains of recent years, indicates that it is trying to be objective in measuring TFP. The firm’s work on TFP is highly regarded by experts in the area.


7. Mailers are typically offered varying worksharing options, with the worksharing discount depending on how much work the mailer does. The goal has been to set the discount equal to the costs the Postal Service avoids as a result of the worksharing. The idea behind worksharing is that mail service will be more economical and of higher quality if mailers are allowed to help with preliminary mail processing when they can do so more efficiently than the Postal Service. For an overview of worksharing’s possible benefits, see President’s Commission on the U.S. Postal Service, Embracing The Future; Making The Tough Choices to Preserve Universal Mail Service, Report of the President’s Commission on the United States Postal Service, July 31, 2003, esp. pp. 85-86 and 104, accessed at http://www.treas.gov/offices/domestic-finance/usps/pdf/report.pdf.

8. For recent data on the relative volumes of standard and first-class mail, and on the fraction of first-class mail that is workshared, see Postal Service, 2006 Annual Report, op. cit., p. 26.

9. U.S. Postal Service, "USPS Annual Tables, FY 2006 TFP," Table 43, op. cit. I am indebted to Charles Guy, who is now with the Lexington Institute, for bringing this series to my attention.

10. Ibid. A producer’s labor input is not quite the same as its total employment. The labor input is technically measured in terms of hours worked, which need not change over time in lockstep with total employment. In the case of the Postal Service, this refinement does not have much affect on the results.

11. Charles Guy was instrumental in persuading the agency to adopt the more comprehensive productivity measure. He was concerned that overreliance on labor productivity had lulled the Service’s management in the 1980s into overestimating the agency’s progress and misunderstanding its cost structure. For a fuller discussion of total factor productivity, see Dianna C. Christensen, Laurits R. Christensen, Charles E. Guy and Donald J. O’Hara, "U.S. Postal Service Productivity: Measurement and Performance", in Michael A. Crew and Paul R. Kleindorfer, ed., Regulation and the Nature of Postal and Delivery Services (Boston, MA: Kluwer Academic Publishers, 1993), pp. 237-260. Also see Guy’s comment to the President’s Commission on the U.S. Postal Service: Charles E. Guy, "The Postal Service Business Model: Broken Or Poorly Managed?" op. cit.

12. As two examples, public responses were generally favorable in a survey done for the bipartisan President’s Commission on the U.S. Postal Service (President’s Commission on the U.S. Postal Service, op. cit., pp. 18-20), and Postmaster General Potter mentioned in recent Congressional testimony that the Service was rated as the most trusted federal government agency (John E. Potter, Testimony, op. cit.). See footnote 21 for more examples.
13. Nor can private-sector companies afford to rest on their laurels for long. In a competitive marketplace in which all firms try to boost their productivity, falling behind often means losing customers and money, and perhaps going out of business.


15. For those familiar with labor productivity data, these figures may seem low, but they are not. It is normal that multifactor productivity, which compares output to all inputs, grows more slowly than labor productivity, which compares output only to labor inputs.

16. Although not shown on the charts, the comparable numbers are higher for manufacturing and slightly lower for the nonfarm private business sector.


18. In a 2005 report, the Service claimed that by partially automating the sorting of letters, it had already reduced carriers’ in-office time by 15%. The Service said that its target is to automatically sort 95% of letters according to delivery sequence by 2010, and it described plans for automating the sequencing of flats (larger, relatively flat mail pieces like catalogs), so that carriers would no longer need to spend so much time in the office. (See U.S. Postal Service, "Strategic Transformation Plan: 2006 – 2010," September 2005, pp. 28-29, accessed at http://www.usps.com/strategicplanning/stp2006_2010/STP05R.pdf.)

19. Data on output and productivity should adjust for service quality, but that is difficult. Accordingly, what is recorded as a rise in productivity may sometimes be matching declines in inputs and quality-adjusted output, with little or no change in true productivity. That is, in some past cases where reported productivity briefly surged and then quickly retreated, a better adjustment for service quality would reveal that true productivity changed little.


21. For example, the Service reported that 93% of residential customers and 90% of business customers gave it an overall favorable rating in a survey of customer satisfaction conducted in 1998. (See U.S. Postal Service, Office of Strategic Planning, "Balanced Scorecard and Performance Management in the U. S. Postal Service," p. 15, September 11, 2003, accessed at http://unpan1.un.org/intradoc/groups/public/documents/ASPA/UNPAN011995.pdf.) The Service’s favorable rating has remained within a point or two of that since then, such as in a 2006 survey in which 92% of responding customers gave it a favorable score (Postal Service, Annual Report, 2006, op. cit., p. 5). In 2003, the President’s Commission on the U. S. Postal Service commissioned its own survey, and one of the questions asked by the polling firm (Peter D. Hart) was whether the quality and reliability of service had improved or deteriorated compared to five years earlier. The polling firm had asked a similar question in two earlier surveys. The share of respondents who believed quality and reliability were stable or improving was actually slightly higher in 2003 (82%) than in 1994 (77%). (See Peter D. Hart Research Associates, Inc., Study #7006, OMB No. 1505-0192, May 2003, pp. 1-2, study conducted for President’s Commission On The U.S. Postal Service, accessed at http://www.treas.gov/offices/domestic-finance/usps/docs/consumer-survey.pdf.)

22. Postmaster General Potter gave this response to several Senators who asked him during the Senate hearing cited in footnote 5 about service-related problems in their states.


26. Michael Schuyler, "Empire Building At The Postal Service," *IRET Policy Bulletin*, No. 87, May 19, 2003, available at http://iret.org/pub/BLTN-87.PDF. The major postal legislation that Congress passed in December 2006 (P.L. 109-435, the Postal Accountability and Enhancement Act) will make it harder for the Postal Service to stray from its purpose in the future. The law removes the Service’s authority to introduce new nonpostal products, and requires the regulator to determine, for each existing nonpostal product, whether it should be continued.

*Note: Nothing here is to be construed as necessarily reflecting the views of IRET or as an attempt to aid or hinder the passage of any bill before the Congress.*