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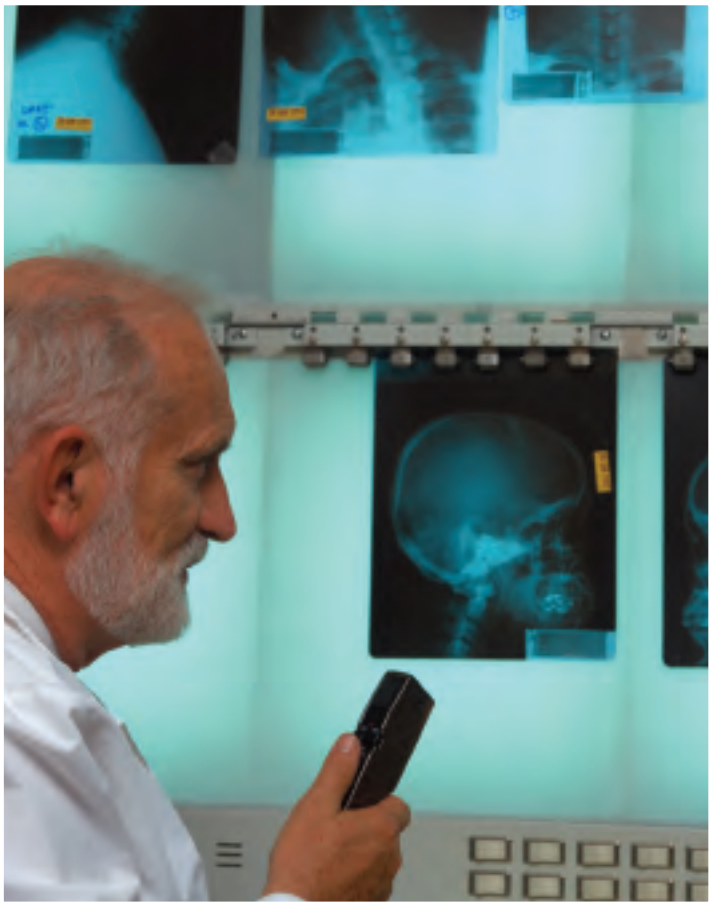
Southwest Economy



Who Doesn't Have Health Insurance and Why

An increase in the number of Americans without health insurance has become an important concern for policymakers. An analysis of the Census Bureau's Current Population Surveys reveals that the number of people in the United States without health insurance at some point during the year has grown from about 31 million in 1987 to nearly 45 million in 2003. The uninsured increased from 14 percent of the total nonelderly U.S. population in 1987 to 18 percent in 2003.

Texas has an even larger proportion of individuals lacking health insurance. The percentage of uninsured in Texas has been consistently about 10 points above the national average (*Chart 1*). In 2003, 27 percent of the Texas population was uninsured.

Health Insurance Issues

The large and growing number of uninsured raises issues for society on at least three levels. It starts with the burden on the uninsured and their families, but it also affects the larger society and influences the labor market.

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INSIDE:

Mexico's Export Woes Not All China-Induced

Productivity Gains Showing Up in Services

Since the end of World War II, American productivity has risen steadily, with manufacturing leading the way. The service sector has recorded slower productivity growth, restraining the economy's overall performance.

The productivity gap between manufacturing and services has been so persistent that it has acquired a nickname—"Baumol's disease." In the 1960s, New York University economist William Baumol noted that services were inherently labor-intensive, often delivered via one-on-one contact with customers. By their very nature, services resisted efforts to squeeze more output from each hour's work.

That may be changing. Services have been performing better in the current business cycle, nearly catching up with manufacturing. Not that U.S. factories' productivity gains are slacking off; they're as strong as ever. Services pro-

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Productivity Gains Showing Up in Services

(Continued from front page)

viders are simply doing a better job of finding ways to save time, reduce inputs and cut costs. For the most part, they're doing it by sharpening and deepening their use of Information Age technologies—scanners, computers, lasers, the Internet and wireless communications, among others. Another contributor has been efficiency gains from outsourcing, both within the United States and abroad.

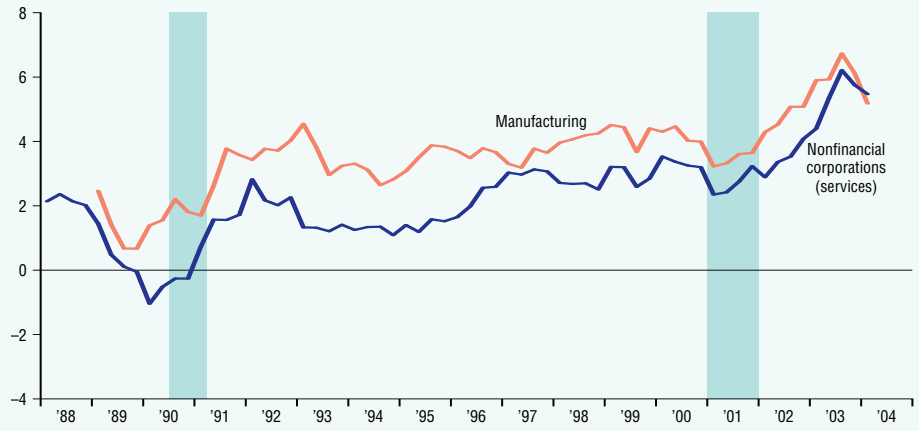
What's happening to both manufacturing and services productivity bears watching, especially in the United States and other countries that increasingly rely on services for employment and growth.

Higher living standards come largely from gains in output per hour. Over the past two generations, for example, workers' total real compensation—that is, wages and benefits, adjusted for inflation—closely tracked productivity (*Chart 1*). The implication of sluggish services productivity was ominous: Growth in post-industrial nations would slow as well-paying, highly productive manufacturing jobs gave way to relatively less productive, low-wage service jobs.

Signs of stronger productivity growth in services break through that gloomy outlook. If sustained, they should help ease concerns about the U.S. economy's ability to keep delivering higher living standards over the long run.

Chart 2

Manufacturing Led Productivity Gains Until Recently



*Annualized rate over the prior two years.
NOTE: Shading indicates recessions.
SOURCE: Bureau of Labor Statistics.

Signals from Productivity Data

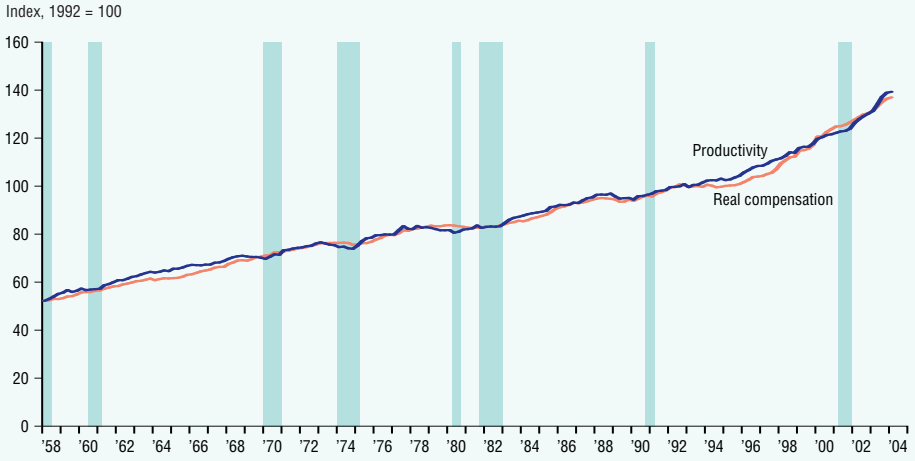
Unfortunately, the government's widely reported quarterly productivity statistics provide direct measures for manufacturing but not for services. One solution to this data problem lies in deriving an implicit gauge of services productivity by comparing the quarterly data for manufacturing with that for a broad slice of the economy. We've chosen nonfinancial corporations. The sector includes manufacturing, mining, construction and other goods-producing industries, as well as the services providers that have been productivity laggards. It excludes the financial industry, which studies indicate surged in productivity in the past two decades.[1]

The presence of manufacturing in the larger, services-heavy category provides an indirect look at relative productivity performance. If the industrial sector has been a strong spot for productivity, manufacturing should show higher gains than a sector with a large services component. If services are catching up with manufacturing, the gap between the two sectors should close.

This is precisely what the data show. Manufacturing ran ahead of nonfinancial corporations in growth in output per hour for the past 15 years, suggesting that factories have indeed been the leading source of U.S. productivity gains (*Chart 2*).[2] The most recent productivity readings show the gap between manufacturing and nonfinancial corporations

Chart 1

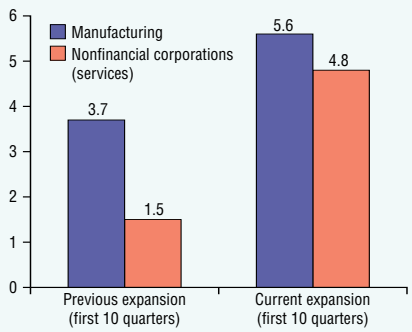
Real Compensation Matches Productivity over the Long Run



NOTE: Shading indicates recessions.
SOURCE: Bureau of Labor Statistics.

Chart 3

Productivity and Recoveries



SOURCE: Bureau of Labor Statistics.

Recent productivity gains in services have not been confined to a few industries.

closing substantially in the current business cycle, one characterized by strong productivity growth (*Chart 3*). Productivity in nonfinancial services rose at an annualized 4.8 percent in the 10 quarters after the 2001 recession hit bottom that fall, not far below manufacturing's 5.6 percent. In business cycles dating back to 1970, the factory sector's advantage was usually wider, with the largest gap occurring in the previous upturn of the early 1990s. Manufacturing gained 3.7 percent in the first 10 quarters of that recovery, more than doubling the 1.5 percent pace for nonfinancial corporations.

From Airports to Architecture

Recent productivity gains in services have not been confined to a few industries.[3] Table 1 provides a sampling of the productivity-enhancing tools service industries are using. Airlines, for example, have installed thousands of airport kiosks that allow passengers to handle routine check-ins, speeding up the process and reducing the need for ticket-counter agents.[4] Retailers are finding self-service checkout stations are as much as 40 percent cheaper than clerks. In financial services, more than 100 million customers now use online banking. As the Internet expands to move more data faster, such jobs as computer programming and data processing are being done for less money abroad than in the United States.

Professionals are adopting the technologies, too. Increasingly powerful computers allow architects to design new buildings in cyberspace. In Hollywood, digital video gear generates spectacular movie sequences at lower costs. Airlines use virtual reality in simulators that train pilots more efficiently. The emerging field of telemedicine allows doctors, dentists and nurses to deliver their services from miles away.

The latest productivity tools in services attest to technologies' important role in facilitating the processing, storing and sending of information. These innovations explain why the surge in service-sector productivity has shown up in the current recovery and not before. The technologies allow companies to better manage information, a staple of the service sector. By contrast, Industrial Age technologies often offered power, precision and speed in the physical realm, making them more suitable for manufacturing than services.

By their nature, Information Age technologies offer network economies—that is, they make services more efficient by connecting people, improving communications and providing information that facilitates day-to-day management. Networks give big companies an edge because the technologies are expensive and only pay off with size. A Federal Reserve study found that nonfinancial multinational corporations in the service sector saw annual productivity gains of 4.5 percent from 1995 to 2000, up from 0.6 percent the previous five years.[5]

U.S. companies have only begun to exploit productivity-enhancing technologies, suggesting the surge in services productivity will continue. Retail sales at self-checkout stations, for example, will rise from $70 billion this year to $330 billion in 2007, according to IHL Consulting Group. Retailers and warehouses will become more efficient with the spread of radio-frequency identification tags, silicon chips embedded in packaging that can store information on products' origin, location, expiration date and cost. Wal-Mart Stores Inc., the nation's largest retailer, will require RFID tags on merchandise from all its suppliers by the end of 2006.

Wholesale trade was an early adopter of the new management and delivery tools, and its productivity gains actually outpaced the manufacturing benchmark in 1987–97. Retailers lagged manufactur-

Table 1

Services Productivity in Action

Tools	How or where used	Industry sectors
ATM	383,000 U.S. locations	Banking, retail trade
Point-of-sale terminal	Gas stations	Retail trade
E-mail	Send information	All sectors
Cell phone	Communication	All sectors
Self-checkout	Grocery stores	Retail trade
Ticket kiosk	Airports	Transportation
Toll tag reader	Highways	Transportation
Ordering terminal	Fast food restaurants	Retail trade
RFID tag	Inventory, shipping	Transportation, trade
Voice recognition technology	Telephone communication	Communications, finance, travel
Shape recognition technology	Iris, face recognition	Banking, travel, gaming
Menu-driven software	Information management	Financial services
Online bill paying	Bookkeeping	Finance
Gene sequencer	Laboratories	Health care
Digital camera	Photography, movies	Communications
GPS device	Taxis	Transportation
Bar code scanner	Scan groceries	Retail, transportation
Laser	LASIK, CD players	Health care, entertainment
Virtual reality	Endoscopy, pilot training	Health care, transportation
Flat-panel display	Malls, cabs, airports	Advertising
Design and drafting software	Design cars, offices	Architectural and engineering services
Search engine	Internet searches	All sectors
DRAM chips, storage devices	Digital music players, jump drives	Professional and business services
Computer-generated imaging	Movies	Entertainment
Internet	Everywhere	Retail trade, finance, etc.
Online trading	Investment houses	Finance
Online reservations	Hotels, airlines, rental cars	Transportation
Online ticketing	Movie theaters	Entertainment

A closer look at retailing confirms the link between technology and productivity.

ers and wholesalers in increasing output per hour well into the decade, but they started to catch up as investments in new technologies began to pay off. From 1997 to 2003, a time of stronger productivity growth, retailers have more or less kept pace with manufacturing and wholesaling (*Chart 4*).

A closer look at retailing confirms the link between technology and productivity. The biggest gains in output per hour have been registered by nonstore retailers, a category that includes the online merchants that have proliferated with the expansion of the Internet (*Chart 5*). E-commerce now accounts for $70 billion in U.S. sales, led by Amazon.com at $5.3 billion. Other top Internet marketers include computer maker Dell Inc. and Office Depot Inc. These companies are becoming masters at using the web to personalize customers' shopping experiences, advertising related merchandise and tracking orders by e-mail. Productivity has also grown smartly among general merchandisers, a category that includes old-line department stores, as well as Wal-Mart and its discount store rivals. The productivity laggards in retail trade have been food

Chart 4

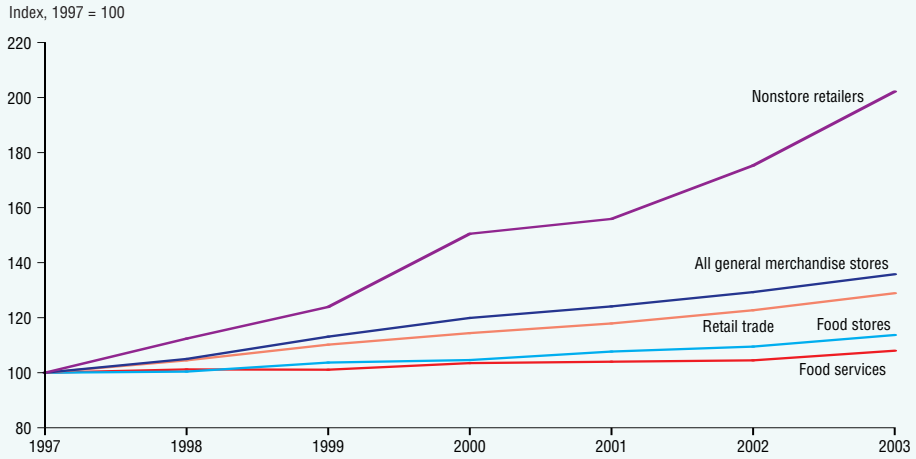
Retail Trade Catching Up with Manufacturing in Productivity Growth

Average annual growth rate (percent)

SOURCE: Bureau of Labor Statistics.

Chart 5

Nonstore Retailers and General Merchandisers Lead Growth in Retail Trade Productivity



NOTE: Nonstore retailers include electronic shopping and mail-order houses, vending machine operators and direct-sales establishments, which include fuel dealers.

SOURCE: Bureau of Labor Statistics.

stores and food services, which haven't been as aggressive in adopting information technologies.

Breaking down the general merchandise category further illustrates how technology has become the dividing line in services productivity (*Chart 6*). Department stores have achieved little growth in output per hour since 1997. These are yesterday's retailers, doing business much as they had in the past. The highfliers are the discount chains, led, of course, by Wal-Mart. These companies are using information technology to streamline inventory, delivery and ordering—in effect, making supply-chain management and other wholesale trade practices into business assets.

Service Improvements Add Up

For decades, economists worried that the productivity gap between manufacturing and services might undermine growth in American living standards. Fortunately, the threat has faded as greater efficiency in a host of services industries has added up to big overall gains. Services productivity is improving because technology has lessened the grip of Baumol's disease. The best services companies are learning to use information technology more effectively to increase output per hour.

Services are now roughly keeping pace with manufacturing in productivity growth. Across-the-board increases in productivity—with manufacturing and services both strong—should pay off in faster growth, greater convenience and higher incomes for Americans. Surging services productivity, moreover, should help quell fears that the United States will fail to keep up with other countries as it loses manufacturing jobs. Greater productivity in manufacturing and services will help us stay ahead of the curve.

—W. Michael Cox
John V. Duca
Richard Alm

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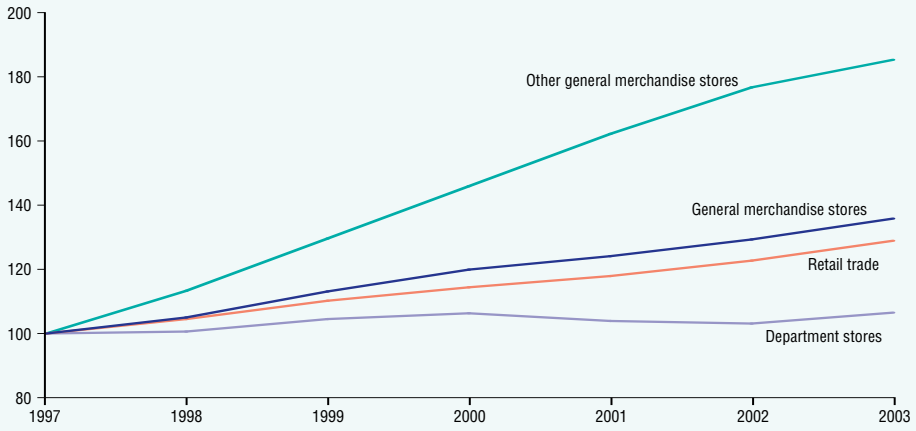
Chart 6

Discount Chains Drive Productivity Surge Among General Merchandisers



NOTE: Other general merchandise stores is a category under the North American Industry Classification System (NAICS 4529). It includes discount chains, warehouse clubs and superstores. It excludes department stores, which fall in the general merchandise stores category (NAICS 452).

SOURCE: Bureau of Labor Statistics.

Notes

[1] According to the Bureau of Labor Statistics, the data on financial corporations cover 52 percent of GDP. A broader measure, for nonfarm businesses, covers 76 percent of the economy, including financial services, but it includes mom-and-pop enterprises, for which data on hours worked and output are far less reliable than they are for the corporate sector.

[2] Consistent data extend back only to 1988, the first year for which NAICS-coded productivity statistics are available. Before the switch to NAICS, the Bureau of Labor Statistics used the Standard Industrial Classification system. These earlier data show manufacturing running ahead of nonfinancial corporations since the mid-1960s. The gap grew more pronounced under the NAICS data.

[3] "Productivity Measurement Issues in Services Industries: 'Baumol's Disease' Has Been Cured," by Jack E. Triplett and Barry P. Bosworth, Federal Reserve Bank of New York *Economic Policy Review*, September 2003, pp. 23–33. The study found that productivity accelerated after 1995 in 15 of 22 service industries.

[4] Forrester Research Inc. found that self-service check-ins cost airlines 16 cents a passenger, compared with $3.68 for agents.

[5] "The Contribution of MNCs to U.S. Productivity Growth, 1977–2000," by Carol Corrado, Paul Lengermann and Larry Slifman, Federal Reserve Board of Governors, manuscript, February 2004.