The Economy in Perspective

Paradigm Lost? ... What should we make of the unexpectedly good macroeconomic performance of the U.S. economy in the last several years? Does the combination of under-3% inflation and under-5% unemployment mean that structural changes have permanently transformed the economy's business cycle characteristics? Have we entered a Golden Age that eternalizes not only low inflation and unemployment but also higher rates of saving, capital investment, and productivity? Is it time to replace an old paradigm with a brave new one?

Economists typically divide macroeconomic activity into two "predictable" components—trend and cycle. Trends represent the economy's performance in the absence of cyclical disturbances, and cycles describe the economy's movement around trends in response to transient forces. The economy's real growth trend is determined by the growth rates of labor and capital and by their productivity. Its underlying inflation rate is determined by the excess of money supply over money demand.

The traditional framework for describing cyclical dynamics requires an estimate of the economy's maximum, noninflationary, real output level and growth trend. Once the level and trend growth of "potential" output are established, it is straightforward to estimate gaps between potential and actual output. Knowing the historical relationships between labor utilization rates and output, we can express these gaps in terms of differences between the actual unemployment rate and the NAIRU, a theoretical "nonaccelerating inflation rate of unemployment" that corresponds to potential output. Advocates of this approach expect that when the economy's resources are stretched beyond the NAIRU threshold, the prevailing inflation rate will accelerate as goods and services markets are strained by excess demand.

Analysts who predict inflation exclusively on the basis of current and projected resource utilization gaps think that available money supply and demand estimates are not sufficiently reliable for their purposes. They consider wages especially vulnerable to excess demand pressures because they believe labor supply is relatively fixed in the short run. But the location of NAIRU depends crucially on estimates of "potential output," which in turn are heavily reliant on productivity assumptions.

Basic economic growth theory suggests that a society raises its living standard (output per capita) over time either by increasing the amount of capital per worker or by making technology changes that enable people to use capital stocks more effectively. Generally, the living standard increases slowly over time along with the steady diffusion of education and of the capital equipment that accompanies technological advance. Once in a great while, however, technological innovation and diffusion become highly condensed in time, causing productivity growth to accelerate.

As an economy shifts from one productivity level to another, investment outstrips labor force growth. Domestic consumption need not contract during the investment boom, however, if society can import savings from abroad. When additions to the capital stock expand productive capacity, the output gap may not widen, because actual output is also growing. Moreover, if employees at many skill levels can use the new technology, overall labor demand will increase as the economic expansion continues. Finally, money demand may strengthen along with the expanded volume of economic activity, rendering current money growth rates noninflationary (or even disinflationary!).

Traditional economic growth theory can, in other words, account for the simultaneous appearance of an investment-led expansion, healthy domestic consumption, trade deficits (and corresponding capital inflows), greater-than-expected labor force participation and utilization, and declining inflation in the face of stable money supply growth. It could also account for a pickup in real wages, as a corollary to capital deepening. Thus, no new paradigm is needed.

All of this makes perfect sense except for one essential fact: Official data for the U.S. economy do not support the proposition that productivity growth is accelerating. These data could be misleading, especially if a greater proportion of current-dollar output consists of goods and services that embody enhanced features and quality. If so, we are underestimating real output growth and overestimating inflation. But if the reported data are essentially correct, temporary factors may be suppressing an otherwise yeasty inflation process. So we see that the difference of opinion about productivity growth is not so much a clash of old versus new paradigms as a commentary on the quality of current economic statistics. And on that subject, at least, all economists can agree.
At its August 19 meeting, the Federal Open Market Committee (FOMC) decided to maintain the existing degree of pressure on the federal funds rate, expecting it to remain around 5.5%. This action came as no surprise to the financial markets. The funds rate has been altered only once in the past 19 months—an increase of 25 basis points that occurred at the FOMC’s March 25, 1997 meeting. The Committee will reconvene on September 30.

Implied yields on federal funds futures—which provide an unbiased estimate of the market’s expectations about the future course of monetary policy—swung widely throughout the month of August. Yields steepened significantly early in the month, perhaps reflecting upward revisions in the growth outlook. Despite continued low inflation, many analysts relate strong output growth to an accelerating price level and believe that the former necessarily prompts the FOMC to raise the funds rate. By the end of August, however, implied yields had begun to flatten, and expectations for a future rate increase were pushed back to early next year.

Interest rates began rising sharply early in 1997 as market commentary revealed a sentiment for further policy tightening after the March increase. Implied yields on federal funds futures also started to rise. Sentiment reversed during April, and interest rates peaked. Since then, the one-year and 10-year Treasury constant maturities have fallen 43 and 59 basis points, respectively. Home mortgage rates have dropped 66 basis points.

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Monetary Policy (cont.)

M2 continues to grow at the upper bound of its provisional range, expanding at a 4.8% annual rate through July. Preliminary numbers for the first half of August suggest that the aggregate may exceed the upper bound of its range by the end of the month. M3 has been growing outside its provisional range since the fourth quarter of 1996, and continues to do so. Through July, the aggregate has advanced at a 7.6% annual rate.

Federal Reserve Chairman Alan Greenspan noted in his July Humphrey-Hawkins testimony that the once-stable relationship between changes in M2 velocity and opportunity cost may have reasserted itself. He warned, however, that there was not enough evidence to justify placing more weight on this measure in monetary policy deliberations.

M1 continues to decline, mainly because depository institutions are “sweeping” transaction account balances into money market deposit accounts to economize on their reserves. The decline in the quantity of deposits held in transaction accounts has led M1 to fall at a 2.5% annual rate through July. When adjusted for sweep-account balances, however, the aggregate continues to expand. The monetary base (which equals currency plus reserves) advanced at a 4.8% annual rate through July, reflecting substantial growth in currency holdings.

Money demand is partially determined by interest rates. When plotted against the 10-year Treasury rate, the ratio of the stock of base money (currency plus reserves) to nominal

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Monetary Policy (cont.)

GDP shows a downward curve. Previous estimates of base demand, however, have shown that it tends to be fairly impervious to interest rate changes, contradicting the relative responsiveness suggested by the chart above. A closer look reveals that from 1981 to approximately 1989, base demand was interest-inelastic. As inflation, and hence nominal interest rates, fell from their peak in 1980, base demand as a share of nominal GDP increased only slightly. Yet, from around 1990 to 1993, the demand for currency and reserves grew substantially as interest rates continued to fall.

History suggests that important changes affecting the demand for currency occurred during this period. The collapse of the Soviet Union in 1991 and the fall of the Berlin Wall in 1989 ended 44 years of Cold War hostilities and opened the floodgates for U.S. currency to flow overseas. The demand for U.S. dollars accelerated as the ruble and eastern European currencies eroded in value, causing foreigners to shift to the relatively stable dollar. Concurrent with this increased demand was a decline in U.S. nominal interest rates, making it appear that the monetary base was more interest-elastic than previously thought.

The higher foreign demand for our currency may have helped suppress the U.S. inflation rate since 1990. For a given increase in the supply of base money, a growing demand for currency implies a lower inflation rate. These potential inflation surprises appear to be over, however. Since about 1994, base demand has been fairly flat, suggesting that the flow of U.S. currency abroad has slowed. Approximately two-thirds of all U.S. currency is now held overseas.
The current expansion has been characterized by an extraordinary advance in business investment, financed through both strong cash flow and substantial borrowing. Economic profits (book profits after inventory valuation and capital consumption adjustments) of nonfinancial domestic firms have increased to more than 13% of their output, the highest share in over 20 years.

Robust profit growth, however, has not been sufficient to finance both the investment boom and the retirement of equity through stock repurchases and mergers. The financing gap for this sector—the excess of investment over internally generated funds—has widened over the past year. Nonfinancial corporations have thus increased their debt and, given the plentiful supply of credit, have done so at relatively favorable terms.

Interest rates on both investment-grade and higher-yielding bonds have stayed low in the face of solid investor demand. Stock and bond mutual-fund growth has been buoyed by strong savings flows.

The Federal Reserve's most recent survey of business lending revealed that the spreads between loan and market rates have held steady for all sizes of loans, with spreads for large loans near the lower end of the range seen in the past decade. And after years of restructuring, banks are in a good position to lend. Their profits have been strong, and their rates of return on equity and assets are high.
The yield curve has steepened since the end of July, with long rates increasing about 20 basis points (b.p.) and the 3-month short rate inching up only four b.p. The closely watched spreads—the 3-year, 3-month and the 10-year, 3-month—have widened to 85 b.p. and 110 b.p., respectively, straddling their average values of 80 and 120. This suggests that the economy will grow at an average rate over the next four quarters.

The yield curve for zero-coupon Treasury securities is noticeably flatter than the yield curve for coupon securities; however, since 3-month T-bills do not have coupons, this mainly reflects a market segmentation caused by liquidity differences.

Nominal interest rates depend on both expected inflation and real (inflation-adjusted) interest rates; uncertainty also has an effect. Before maturity, a bond’s yield can be adjusted for expected inflation, providing an estimate of the real interest rate. Such a breakdown for the 30-day T-bill shows that compared to past years, 1997 has been fairly uneventful. The short-term real interest rate stands at 2.20%, well above the negative levels of 1993 but below the 4% posted in 1991. Short-term expected inflation has increased for the first time in six months, edging up from an annualized 2.38% to 2.41%. A close look at the bottom chart reveals the importance of accounting for uncertainty: Simply subtracting expected inflation from the nominal interest rate overstates the real rate by a quarter of a percentage point.
Coffee prices—both spot and futures—have fluctuated widely in the past year. The spot price for mild Colombian arabica doubled between May 1996 and May 1997, and other prices rose by more than 50%. Most analysts attributed this volatility to production uncertainty, even though total production was expected to increase. (World demand was also expected to rise.)

Although coffee production has diversified internationally, weather conditions around the world remain an important factor in futures prices. Fear of inclement conditions in Brazil and Colombia—the world’s top two producers—has apparently subsided, as the nearby futures price (the next maturing contract, usually a maximum of three months away) dropped 23% between April and June. These contracts still stand far above 1996 prices, however. The longest actively traded contracts (currently due in July 1998) show much less variation. This has led to rather extreme backwardation, where short-term futures prices exceed long-term ones.

Interestingly, the surge in prices has not been reflected in either open interest (the total number of open contracts) or volume (the number of contracts traded over a given period). In the case of coffee, open interest usually exceeds volume, since a contract must exist to be traded. However, volume can surpass open interest if contracts are traded more than once. The strongly seasonal pattern seen in many markets reflects the increase in volume and open interest as a contract nears maturity and becomes the “nearby” contract.
Inflation remained unexpectedly restrained in July, as the Consumer Price Index (CPI) rose an annualized 2.3% and the Producer Price Index (PPI) for finished goods actually fell 0.9%. Nonetheless, data on the individual components of these indexes suggest that the overall rate of price increase is somewhat greater than the average figures indicate.

While the PPI for all goods has fallen about 1% over the past 12 months, the majority of price increases at the producer level have been running about 1½ percentage points higher. The median PPI is up approximately ¾% over the 12 months ended in July. Similarly, the CPI has advanced at an average rate of 2.2% during the past year—just below the lower end of the Federal Open Market Committee’s (FOMC) latest central tendency projection—but the median CPI has moved up to 2.7%, well above its expected range.

Still, inflation has been subdued this year. Viewed from its broadest perspective—the GDP chain-type price index, which includes retail and wholesale goods and services—the price level rose an average of 2.1% over the past 12 months, the smallest uptick in more than 30 years.

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Inflation and Prices (cont.)

Few expect this year's exceptional inflation performance to continue over the year ahead. On the other hand, there appears to be little sentiment that prices will accelerate substantially. Reports from purchasing managers continue to show that, on net, industrial prices are holding steady. Household survey data indicate that consumers expect retail prices to rise only 2.8% in the next 12 months—not much different from their projections over the past 3½ years. And economists, who have been the most pessimistic inflation forecasters since mid-decade, have recently revised their 1998 projections downward. Last January, almost half of those participating in the Blue Chip survey saw the CPI rising 3% or more next year. In August, only about one-third held that view.

Data from asset markets, which can provide a warning signal of a growing inflationary sentiment among investors, show no clear indication of speculative behavior. Although the stock market has climbed sharply in the last few years, other assets, such as home prices, have merely kept pace with inflation. In fact, gold prices, which are sometimes considered a harbinger of a growing inflationary psychology, have actually been declining.
Economic Activity

Economic Activity

Although the major indicators of U.S. economic activity continue to point upward, analysts are keeping a wary eye on inventories. Last month, the Commerce Department released a revised estimate of second-quarter real GDP growth showing that the economy expanded at an annualized rate of 3.6%—1.4% higher than previously reported. The revision was attributed to higher-than-expected growth in both exports and June inventories.

Overall, the second quarter's favorable performance was led by increases in inventory investment, exports, producers' durable equipment, and services spending. Economists participating in August's Blue Chip survey expect the first half's above-average growth to be offset by a slowdown during the remainder of 1997. Their consensus forecast places GDP at 3.4% for the year.

The consumer sector rebounded in July after heading down in the second quarter. Fueled by increased outlays on durables, real personal consumption spending rose a healthy 0.6% for the month. Retail store sales also climbed 0.6%, following a 0.7% gain in June. The Conference Board reported that consumers remain upbeat about the state of the economy, with confi-

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Economic Activity (cont.)

Inventories

Percent change from previous month

1.5
1.0
0.5
0.0
-0.5
-1.0


Industrial Production

Index, 1987 = 1.00

1.25
1.20
1.15
1.10
1.05
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50


Wholesale Inventories

Percent change from previous month

1.5
1.0
0.5
0.0
-0.5
-1.0


Note: All data are seasonally adjusted.

Sources: U.S. Department of Commerce, Bureau of the Census; and Board of Governors of the Federal Reserve System.

dence levels holding close to June's 28-year high.
The Commerce Department's upward revision of second-quarter output was widely anticipated because of June's unusually high inventory numbers, but interpreting this rise is somewhat difficult. Inventories surged a nonannualized 0.7% in June, their steepest advance in more than two years. However, it is still unclear how much of this reflects an intentional stockpiling versus an unanticipated drop-off in demand (which implies future production cuts).

For now, industrial production continues to pick up, rising 0.2% in July and 0.3% in June. Sales are also increasing. The overall inventory-to-sales ratio stood unchanged at 1.37 in July, with no obvious imbalance at either the manufacturing, wholesale, or retail level.

Taking into account these current sales and production numbers, June's inventory surge does not appear to be a cause for alarm. The vast majority of the stockpiling came in the wholesale sector (up 1.9%, the largest rise in five years)—specifically, in the automotive area. Some analysts believe that a marked increase in auto imports, spurred by the strong dollar, may be responsible. Indeed, auto imports in the second quarter were up 8.4% from a year ago and followed a first-quarter advance of 14.7%.
Despite a slight slowdown, the nation’s labor markets remained strong in August. The smaller-than-expected gain in nonfarm payroll employment (49,000) resulted primarily from the Teamsters’ strike against UPS, which caused a 153,000 decline in transportation industry jobs. Excluding transportation, private payroll employment picked up by 130,000.

Losses in the air transportation industry fueled jobs expansion in trucking and other areas, notably the U.S. Postal Service. Federal government employment saw its first gain (2,000) in eight months. The goods-producing sector also fared well, adding 55,000 new jobs—47,000 of them in manufacturing. Changes in the service-producing industries were mixed. Health services and engineering and management services both turned in strong performances (up 21,000 and 17,000, respectively), but help supply services (a subset of personnel supply services) was down by 16,000, and eating and drinking establishments lost 10,000 jobs.

Meanwhile, the unemployment rate inch ed up to 4.9% as the employment-to-population ratio stalled at 63.8%. Of those included in the jobless ranks, 915,000 were classified as “voluntary” (striking workers are not included in this category). This represents 13.7% of all unemployed workers and is the highest share since December 1990.

Overall, the total number of jobless workers continues to drop even as the labor force expands. The reduction has been sharpest among those who have been out of work for 15 weeks or more.
A number of commentators have described the recent Teamsters’ strike against UPS as a watershed moment in U.S. labor history. One of the strike’s unusual features was the union’s contention that part-time work is an unfair management practice. Indeed, the most noted concession won by the Teamsters was UPS’s agreement to convert 10,000 part-time workers to full-time status.

Did the strike represent the ambitions of millions of part-time employees throughout the economy, or was it the result of worker concerns at an atypical employer? Along several dimensions, the answer appears to be that employment at UPS is not representative of the labor market as a whole.

In the overall economy, part-time employees make up a fairly constant share of the U.S. workforce—between 18% and 20%. Subtle changes to the Labor Department’s employment survey, instituted in 1994, resulted in a one-time jump in reported part-time work. Since then, however, the number of Americans working part time has remained steady at a little over 23 million, while the full-time workforce has added 8 million jobs. Among workers described as part time, the vast majority are considered “voluntary” (they have other commitments that prevent them from working full time, or they report that they are not interested in full-time employment).

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The UPS Strike (cont.)

UPS stands out as an atypical employer in several ways. First, the fraction of the company's workforce that is employed part time is much higher than for the economy as a whole—57% versus 18%. Second, pay at UPS is higher for both full- and part-time workers. While part-timers at UPS earn almost the same average hourly wage as full-time workers in the overall economy, they earn only 55% as much as their full-time colleagues at UPS. (Nationwide, part-time workers typically earn about 68% of full-time hourly wages.) Third, most part-time workers in the U.S. are female, yet at UPS, more than half of the part-time workforce is male. Although this is not significant on its own, it does suggest different motivations for accepting part-time work at UPS, because men are much less likely than women to cite child care as a reason for working less than 40 hours per week.

A final, critical way in which UPS differs from the rest of the U.S. workforce is its highly unionized staff. The wages paid at UPS, and therefore the mix of workers hired, have been determined by years of contract negotiations between labor and management. Although union organizers have expressed much optimism in light of the settlement, the share of the private-sector workforce that is unionized is just over 10%, and that number is falling.
Unseasonable summer weather has been of great concern to Ohio farmers. Rainfall has varied widely from month to month, and temperatures have generally been below normal. It appears, however, that the state’s two most important crops—corn and soybeans—have been spared by a bit of genetic tinkering.

The critical growing period for corn is the silking, or pollination, stage, which occurred this year when rainfall was below normal. Nonetheless, as of August 24, the USDA rated 67% of the state’s corn crop as good to excellent and another 26% as fair. (“Fair” means that yield loss is possible, but the extent is unknown.)

Soybeans reach their critical growing period at the end of August, when they set in pods. Ideal growing conditions would be temperatures in the mid-80s and average soil moisture. As of late August, 68% of the state’s soybean crop was categorized as good to excellent, while only 7% was judged as poor to very poor.

The reason these crops are thriving despite adverse weather is that the seeds were genetically bred to be resistant to stressful conditions, including droughts, heat waves, fungi, and diseases. Their recovery capabilities are also better than ever. With the harvest season fast approaching, the USDA is predicting that this year’s yields will exceed 1996 levels by seven bushels per acre for soybeans and by 17% for corn.
Until recent weeks, mortgage interest rates had been on a steady downward trend, with 30-year rates falling to 7.37% at the end of July (their lowest level since March 1996). Combined with the relatively small spread between fixed and adjustable rate mortgages, these consumer-friendly rates have kept the share of new mortgages with adjustable rates at relatively low levels (25% in June).

The recent drop in fixed mortgage rates has also led to an uptick in mortgage refinancing activity, with many borrowers who missed out on previous rate drops attempting to lock in what they believe are favorable mortgage terms. August’s 6.78 refinancing index was the highest posting since the refinancing “boonlet” of late 1995.

Mortgage originations through the last quarter of 1996 (the latest available data) appear to have rebounded from their third-quarter decline, with commercial banks and mortgage companies picking up the bulk of the new business. The relatively weaker performance of the nation’s savings and loans can be explained by two factors. First, savings banks typically originate more adjustable rate loans, holding them in their portfolios rather than selling them on the secondary market. Thus, we would expect the declining fraction of originations with adjustable rates to adversely affect these institutions’ market share. Second, mortgage banks are often the lender of choice for refinancings, which were fairly brisk at the end of 1996.
Consumer Bankruptcies

The recent rise in consumer bankruptcies continued in the second quarter, with more than 367,000 new filings nationwide. This represents nearly a 10% increase over the first-quarter level and almost a 30% rise compared to 1996:1Q. Ohio bankruptcies have mirrored national trends, with 13,815 filings in the second quarter, a 12% advance from the first three months of the year.

Despite these record-setting statistics, many analysts are becoming less concerned about households' near-term financial outlook. Both MasterCard International and Visa U.S.A. are predicting that bankruptcy filings will grow at a slower pace in 1997 than they did last year. Furthermore, recent evidence suggests that consumer delinquency rates may have peaked. In particular, credit card delinquencies dropped to 3.51% of all accounts outstanding in March, down from a high of 3.72% in November and December 1996.

Mortgage delinquencies also appear to be moderating. In the first quarter of 1997, 2.88% of all conventional mortgage loans outstanding were in arrears, down slightly from the 2.90% recorded in 1996:1Q. The geographic distribution of mortgage delinquencies seems to be continuing its recent pattern, with the highest delinquency rates occurring in the South and East, and the lowest rates occurring in the Midwest, Great Plains, and Mountain states.

a. "Bank credit card" data. U.S. data are seasonally adjusted; state data are not.
b. "Summary of accounts (closed-end only)" data. U.S. data are seasonally adjusted; state data are not.

Since the end of the Bretton Woods fixed-exchange-rate regime, dollar exchange rates have moved in response to market forces. Isolating and explaining these forces is a task that still baffles economists.

An exchange rate is the relative price of one nation's currency in terms of another nation's currency. Accordingly, if the Federal Reserve creates excessive money (that is, more money than the public wants to hold) at a faster rate than does the Bundesbank or the Bank of Japan, the dollar will depreciate relative to the mark or yen. Theory notwithstanding, exchange rates do not move in close alignment with fundamental determinants of excessive money growth, except over long periods. This failure may reflect the crucial role of expectations in determining exchange rates. Foreign exchange traders face strong incentives to acquire all possible information about current and anticipated economic developments that might influence their quotes. To the extent that traders formulate their expectations without systematic errors, revisions will be random and will impart a zigzag pattern to exchange rate movements.

The tandem movements of nominal and real exchange rates are an additional puzzle. This correlation implies either that prices are sticky in the short run or that real economic shocks are more pervasive than previously thought.

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a. Ratio of foreign M2 to output divided by U.S. M2 to output.

Fixed Exchange Rates: The Thai Baht

Thailand, like many newly developing countries, closely links its currency to the U.S. dollar. By tying their currencies to that of a low-inflation industrialized country with a reputation for price stability—such as the U.S., Japan, or Germany—developing countries limit their ability to undertake discretionary monetary policies. The exchange rate then provides a visible check against inflation. In addition, fixed or stable exchange rates reduce the transaction costs associated with exchange rate volatility. This is particularly important to countries that rely heavily on international trade for economic growth, including Thailand.

These benefits entail some costs, however. If managed, an exchange rate cannot act as a buffer to economic shocks. In addition, the developing country may lose its competitive edge. Thailand conducts approximately 24% of its international trade with Japan. As the dollar appreciated relative to the yen between early 1995 and early 1997, the baht followed.

To prevent its currency from depreciating in the face of capital flight, Thailand must sell its foreign exchange reserves for bahts. But foreign exchange reserves are limited. If the market believes that reserves are insufficient to meet the problem at hand, the fixed exchange rate provides speculators with a one-way bet on future exchange-rate movements.