

MORNING BRIEFING

February 22, 2022

Pieces of the Economic Puzzle

Check out the accompanying chart collection.

Executive Summary: Are consumers more depressed about inflation or more optimistic about employment? Our Consumer Optimism Index, which captures both trends, stands well below prepandemic levels, suggesting the former. In fact, January's strong retail sales may reflect inflationdriven behavior, i.e., the inclination to buy in advance of price rises. ... We also examine what's happening behind the data for industrial production, inventories, transportation, construction, capital spending, and trade. ... And: What's the Fed's take on the inflation problem? Officials have abandoned the term "transitory" but apparently not the hope. We have only one word for that: "delusional."

YRI Weekly Webcast. Join Dr. Ed's live Q&A webinar on Tuesday at 11 a.m. EST. You will receive an email with the link to the webinar one hour before showtime. Replays are available <u>here</u>. Dr. Ed's presentation lasts about 15 minutes with another 15 minutes for Q&A.

Predicting the Markets: Video Podcast. Join Dr. Ed's "Predicting Inflation" webcast today (Tuesday, February 22) at 2:00 p.m. EST. Please register for it <u>here</u> and earn a one-hour CE credit.

Consumer Spending: Born To Shop. As Debbie and I observed last week, rising inflation is depressing the Consumer Sentiment Index (CSI), while solid employment gains are boosting the Consumer Confidence Index (CCI). Over the years, we've observed that the CSI is more sensitive to inflation, while the CCI is more sensitive to employment. That's why we like to average the two to derive our Consumer Optimism Index (COI) (*Fig. 1* and *Fig. 2*).

The COI rebounded smartly last year through June, but then it dipped as bad news on inflation had a negative impact on all consumers, while the good news on jobs impacted mostly the newly employed. January's COI reading of 90.5 was still well below the 116.8 registered during February 2020, just before the pandemic.

We've previously observed that American consumers are born to shop. They do so when they are happy, and many do so even more when they are depressed, for the dopamine that shopping releases in their brains. It makes them feel good. When faced with rapidly rising prices, consumers seem to reason that they'd better buy before prices go even higher. How else to explain the 4.4% m/m increase in January's retail sales (excluding food services and drinking places)? Consider the following:

 (1) Adjusting for inflation. Some of the increase in retail sales simply reflected higher prices. Dividing this retail sales measure by the CPI for goods shows that real retail sales rose
3.6% m/m during January, which is still a significant increase (*Fig. 3*). Then again, on a y/y basis, nominal retail sales were up 11.4% and real retail sales were down 0.9% (*Fig. 4*).

(2) *Homebound.* The Omicron variant caused the number of people with positive test results to spike to a record high during the 10 days through January 14. That might have caused consumers to stay home more, depressing their purchases of services and leaving more money to spend on goods. Notably, nominal retail sales of food services and drinking places stalled over the past three months through January (*Fig. 5*). But there was plenty of demand to fix up and renovate our homes: Among January's biggest increases were nominal housing-related retail sales (*Fig. 6*).

Of course, there's also lots of pent-up demand to buy motor vehicles and to splurge on services.

Industrial Production: Areas of Strength & Weakness. The main reason why consumers have lots of pent-up demand for autos is that parts shortages have kept manufacturers from producing enough autos to meet demand. Domestic assemblies edged down to 9.4 million units (saar) during January, well below the post-lockdown peak of 11.8 million units during July 2020 (*Fig. 7*).

Nevertheless, industrial production of consumer goods ticked up in January, thanks to computers, video, and audio equipment and to appliances, furniture, and carpeting (*Fig. 8* and *Fig. 9*). Industrial production of business equipment was flat in January, mostly because output of transit equipment has been flat lately (*Fig. 10*). On the other hand, output of information processing and industrial equipment remain on uptrends.

Inventories: Retailers Need To Restock. On an inflation-adjusted basis, the latest available data through November show that retailers have the most depleted inventories, down 9.0% since January 2020, while the inventories of manufacturers are down 4.4% and for wholesalers are up 2.7% over the same period (*Fig. 11*). Not surprisingly, the inventories of auto dealers are among the most depleted in the retailing sector (*Fig. 12*). Restocking inventories is likely to be a source of economic growth this year.

Transportation: Keep on Trucking. The latest data on the trucking industry belie the widespread notion that drivers are leaving the industry because of tough working conditions. The data confirm our view that the demand shock caused by excessively stimulative fiscal and monetary policies last year overwhelmed global supply chains. The resulting supply shock triggered the rapid increase in goods prices over the past year. All these developments clearly impacted the trucking industry. Consider the following:

(1) *Resilient tonnage.* The ATA truck tonnage index peaked at a record high of 119.7 during 2019. It fell sharply during the lockdown recession in early 2020 to 107.3 during April (*Fig.* <u>13</u>). Since the end of the lockdown, the index has been hovering roughly between 110 and 115. It was 114.9 during December of last year, which is the latest available reading. Our takeaway is that it has been holding up very well notwithstanding the pandemic.

(2) *Record-high employment.* While the ATA trucking index remains slightly below its prepandemic high, payroll employment in the trucking industry rose to a record high of 1.55 million during January (*Fig. 14*). It has been exceeding its pre-pandemic high since the end of 2021.

(3) *Soaring prices, but not wages.* The PPI for truck transportation of freight soared 18.3% y/y during January. However, wages as measured by the industry's average hourly earnings rose only 3.4% y/y during December (*Fig. 15*).

(4) *Recovering capital spending.* Sales of medium- and heavy-weight trucks peaked at a record high of 570,000 units (saar) during April 2019 (*Fig. 16*). They plunged to 308,000 units during May 2020. But they were back up to 525,000 units during January of this year.

(5) *Booming warehousing.* Lots of the freight that trucks are hauling is going into and coming out of warehouses. Payroll employment in warehousing rose to a record high of 1.73 million during January, up 427,900 over the past two years (*Fig. 17*).

Construction: Inflationary Boom. Construction-put-in-place is up 9.0% y/y through December to a record high of \$1.64 trillion (saar). Leading the way has been residential construction spending on new single-family homes, new multi-family homes, and home improvements (*Fig. 18*). The problem is that the final demand PPI for construction is up 16.1% y/y through January (*Fig. 19*).

Capital Spending: Driven by Labor Shortages. As we've previously noted, chronic labor shortages are forcing businesses to increase their spending on capital equipment and

technologies to boost the manual and mental productivity of the available labor force. Nondefense capital goods orders excluding aircraft has been rising in record territory since November 2020 and continued to do so through December 2021 with a 10.6% y/y gain (*Fig.* <u>20</u>).

Most impressive has been the almost vertical ascent in new orders for industrial, metalworking, and material handling machinery since early 2021, and up 34.7% y/y through December. While some of that increase may be due to rising prices, we believe that it also reflects capital spending to boost productivity and to bring supply chains back to the US.

Trade: More Incoming Shipping Containers. The demand shock caused by excessively stimulative fiscal and monetary policies in the US can certainly explain the 9.6% y/y jump in US inflation-adjusted imports through December to a record \$3,179 billion (saar) (*Fig. 21*). All those cargo ships waiting to unload their shipping containers at the West Coast ports are a reflection of the demand shock that overwhelmed supply chains on a global basis.

By the way, real US exports also rose to a record high of \$1,845 billion during December. However, outbound containers fell to the lowest since September 2006. The demand shock widened the US real trade deficit to a record \$1.33 trillion during December.

The Fed: Deer in Inflation's Headlights. The word "inflation" appears 73 times in the *Minutes* of the latest FOMC meeting, held from January 25-26. The Minutes suggest that most participants believe that "[s]upply and demand imbalances related to the pandemic and the reopening of the economy had continued to contribute to elevated levels of inflation." In other words, they blame inflation on the pandemic and refuse to even consider the possibility that excessively stimulative fiscal and monetary policies triggered the demand shock that caused the supply shock.

That explains why most Fed officials continue to favor a very gradual withdrawal of monetary accommodation rather than an abrupt tightening of monetary policy. While they no longer characterize inflation as "transitory," they remain optimistic that inflation will abate in coming months: "Progress on vaccinations and an easing of supply constraints were expected to support continued gains in economic activity and employment as well as a reduction in inflation." It all depends mostly on "the course of the virus." Here's more on the committee's discussion about inflation:

(1) *Cost-push inflation and a wage-price spiral.* The Minutes acknowledged that there are mounting signs of cost-push inflation and a wage-price spiral: "Nevertheless, several

participants reported that their contacts expected the ongoing labor shortages and other supply constraints to persist well after the acute effects of the Omicron wave had waned. Participants' contacts also reported continued widespread input cost pressures, which, amid generally robust demand, they reported having largely been able to pass on to their customers."

(2) *Persistent inflation*. Some participants suggested that inflationary pressures might persist even if the pandemic continues to abate: "However, some participants commented that elevated inflation had broadened beyond sectors most directly affected by those [pandemic-related] factors, bolstered in part by strong consumer demand. In addition, various participants cited other developments that had the potential to place additional upward pressure on inflation, including real wage growth in excess of productivity growth and increases in prices for housing services."

(3) *'Transitory,' the unspoken word.* On November 30 last year, Fed Chair Jerome Powell told Senate lawmakers, "I think it's probably a good time to retire that word ['transitory'] and try to explain more clearly what we mean." Indeed, the word doesn't appear in the latest Minutes; yet the notion of transitory inflation still governs committee members' thinking, as suggested by the following statement: "Participants generally expected inflation to moderate over the course of the year as supply and demand imbalances ease and monetary policy accommodation is removed."

(4) *Anchors away.* "Delusional" is the only word Melissa and I have to describe the following statement in the Minutes: "Some participants remarked that longer-term measures of inflation expectations appeared to remain well anchored, which would support a return of inflation over time to levels consistent with the Committee's goals."

Movie. "Belfast" (+ +) (*link*) is based on the childhood experiences of Kenneth Branagh, who both wrote and directed the film. He grew up in Belfast during the 1960s, when the town was bitterly and often violently divided between Catholics and Protestants. Nevertheless, the plot focuses on the ability of children to be children despite the conflict around them and no matter how it distresses their parents and other older family members. The cast is superb, but the plot may be overly sentimental, mostly ignoring the dangerous social and religious divisions of the time.

Calendars

US: Tues: Consumer Confidence 109.8; M-PMI & NM-PMI Flash Estimates 56.0/53.0; Richmond Fed Manufacturing Index; S&P HPI Composite 20-City Index 1.1%m/m/18.2%y/y. **Wed:** MBA Mortgage Applications; Weekly Crude Oil Inventories. (Bloomberg estimates)

Global: Tues: Germany Ifo Business Climate Index, Current Assessment, and Business Expectations 96.5/96.6/96.5; Italy CPI; UK CBI Industrial Trends Orders 25; McCaul; Ramsden. **Wed:** Eurozone Headline & Core CPI 0.3%m/m/5.1%y/y & -0.8%m/m/2.3%y/y; Germany Gfk Consumer Climate -6.2; France Business Survey 112; UK Inflation Report Hearings; Tenreyro; Elderson. (Bloomberg estimates)

Strategy Indicators

Global Stock Markets Performance (link): The US MSCI index fell 1.7% last week to 9.9% below its record high on December 27. The index ranked 27th of the 49 global stock markets we follow in a week when 11 of the 49 countries rose in US dollar terms and the AC World ex-US index dropped 1.6%. None of the countries traded at a record high in dollar terms during the week. EM Latin America was the best-performing region last week, albeit with a decline of 0.3%, followed by EM Asia (-0.7%), BRIC (-1.2), and EMEA (-1.3). EM Eastern Europe was the biggest underperformer, with a decline of 5.1%, followed by EMU (-2.4) and EAFE (-1.9). Argentina was the best-performing country last week, rising 3.6%, followed by Thailand (2.6), the Philippines (2.3), and Malaysia (1.4). Among the 23 countries that underperformed the AC World ex-US MSCI last week. Austria fared the worst, with a decline of 6.8%, followed by Hungary (-6.4), Sweden (-5.6), and Russia (-5.5). The US MSCI ranks 42/49 so far in 2022, with its 9.3% decline guite a bit steeper than the 2.9% drop for the AC World ex-US. EM Latin America is the best-performing region, with a gain of 11.6%, ahead of EMEA (1.4), BRIC (-0.8), and EM Asia (-1.7). The laggards: EM Eastern Europe (-9.6), EMU (-5.6), and EAFE (-4.3). The best country performers so far in 2022: Peru (21.1), Brazil (17.9), Chile (16.3), South Africa (12.8), and Greece (12.1). The worst-performing countries: Sweden (-14.6), the Netherlands (-14.0), Denmark (-13.3), Russia (-12.2), New Zealand (-9.7), and Israel (-9.7).

S&P 1500/500/400/600 Performance (*link*): All three of these indexes fell last week. SmallCap was the smallest decliner with a drop of 0.3%, ahead of MidCap (-0.6%) and

LargeCap (-1.6). LargeCap is now 9.3% below its record high on January 3. MidCap ended the week 9.6% below its record high on November 16, and SmallCap slipped to 11.5% below its November 8 record high. Twelve of the 33 sectors rose last week, down from 21 rising a week earlier. MidCap Materials was the best performer for the week, with a gain of 2.9%, followed by SmallCap Industrials (2.4%), SmallCap Materials (1.1), LargeCap Consumer Staples (1.1), and SmallCap Real Estate (0.8). MidCap Energy and MidCap Health Care were the biggest underperformers last week, with declines of 4.4%, followed by SmallCap Health Care (-4.0), SmallCap Energy (-3.9), and LargeCap Energy (-3.7). In terms of 2022's ytd performance, all three indexes are down. MidCap and SmallCap are both down 7.4%, less than the 8.8% decline for LargeCap. Just five of the 33 sectors are positive so far in 2022. Energy dominates the top performers: LargeCap Energy (21.8), SmallCap Energy (13.8), MidCap Energy (8.8), MidCap Financials (0.7), and LargeCap Financials (0.2). The biggest ytd laggards: SmallCap Health Care (-14.7), MidCap Health Care (-14.5), LargeCap Communication Services (-14.5), LargeCap Real Estate (-13.9), and LargeCap Tech (-12.6).

S&P 500 Sectors and Industries Performance (*link*): Just one of the 11 S&P 500 sectors rose last week, and five outperformed the composite index's 1.6% decline. That compares to a 1.8% decline for the S&P 500 a week earlier, when two sectors rose and six outperformed the index. Consumer Staples was the top performer, with a gain of 1.1%, ahead of Materials (-0.3%), Consumer Discretionary (-0.4), Industrials (-1.2), and Utilities (-1.4). The worst performers: Energy (-3.7), Communication Services (-2.5), Financials (-2.3), Health Care (-2.2), Real Estate (-1.8), and Tech (-1.7). The S&P 500 is down 8.8% so far in 2022, with two sectors in positive territory and six ahead of the index. The best performers in 2022 to date: Energy (21.8), Financials (0.2), Consumer Staples (-1.4), Industrials (-7.2), Materials (-7.6), and Utilities (-7.8). The ytd laggards: Communication Services (-14.5), Real Estate (-13.9), Tech (-12.6), Consumer Discretionary (-12.0), and Health Care (-9.7).

S&P 500 Technical Indicators (*link*): The S&P 500 fell 1.6% last week and weakened relative to its 50-day moving average (50-dma) and 200-day moving average (200-dma). The index closed below its 50-dma for a seventh week and was below its 200-dma for the fourth time in five weeks. It previously had been above its 200-dma for 81 straight weeks. The S&P 500's 50-dma moved lower last week for a sixth week, as the index dropped to 5.2% below its falling 50-dma from 4.2% below a week earlier. It remains above its 21-month low of 6.8% below in late January, however. The latest reading compares to a 27-week high of 4.9% above in early November and its prior 11-month low of 2.0% below in early October. (More historical context: Before dropping below its 50-dma seven weeks ago, the index had been mostly trading above its 50-dma since late April 2020; in June 2020, it

was 11.7% above, which was the highest since its record high of 14.0% in May 2009. That compares to 27.7% below on March 23, 2020—its lowest reading since it was 29.7% below on Black Monday, October 19, 1987.) The price index also slipped further below its 200-dma last week, weakening to a 21-month low of 2.7% below its rising 200-dma from 1.0% below a week earlier. That's down sharply from 10.8% above in early November. (For more perspective: The index traded as high as 17.0% above its 200-dma in December 2020, which was the highest since November 2009, and as low as 26.6% below registered on March 23—the lowest reading since March 2009. At its worst levels of the Great Financial Crisis, the S&P 500 index was 25.5% below its 50-dma on October 10, 2008 and 39.6% below its 200-dma on November 11, 2008.)

S&P 500 Sectors Technical Indicators (*link*): Just two of the 11 S&P 500 sectors traded above their 50-dmas last week, unchanged from a week earlier, as Financials moved below and Consumer Staples moved back above to join Energy and Financials as the only sectors above their 50-dmas. Three sectors now have a rising 50-dma, down from four a week earlier, as Health Care left the club still inhabited by Consumer Staples, Energy, and Financials. Looking at the more stable longer-term 200-dmas, just three of the 11 sectors were above that measure, down from four a week earlier and matching the lowest count since June 2020. Utilities dropped below in the latest week, leaving these three sectors still above their 200-dmas: Consumer Staples, Energy, and Financials. For perspective, back in April 2020, just one sector (Health Care) was trading above its 200-dma. Eight sectors have a rising 200-dma, unchanged from a week earlier. Communication Services, Industrials, and Materials are the only members of the declining 200-dma club.

US Economic Indicators

Leading Indicators (*link*): "The U.S. LEI posted a small decline in January, as the Omicron wave, rising prices, and supply chain disruptions took their toll," said Ataman Ozyildirim, senior director of economic research at the Conference Board. Leading indicators edged down 0.3% in January after ending 2021 at a new record high. January's shortfall was only its second decline since April 2020 and the first since February 2021. Six of the 10 components of the LEI rose in January, while four fell. Jobless claims (-0.31ppt) was the biggest negative contributor, followed by consumer expectations (-0.14), the S&P 500 (-0.09), and the average workweek (-0.06)—with the latter a drag on the LEI for the third time in four months. The biggest positive contribution came from the interest rate spread (+0.21), followed by the ISM new orders diffusion index (+0.05) and the leading credit index (+0.03);

real consumer goods orders, real core capital goods orders, and building permits contributed from 0.01ppt to 0.02ppt. According to the report, "Despite this month's decline and a deceleration in the LEI's six-month growth rate, widespread strengths among the leading indicators still point to continued, albeit slower, economic growth into the spring. However, labor shortages, inflation, and the potential of new COVID-19 variants pose risks to growth in the near term." The Conference Board expects GDP for the current quarter to slow from Q4-2021's robust 6.9% (saar), projecting growth to expand 3.5% y/y in 2022—well above the pre-pandemic growth rate, which averaged around 2%.

Coincident Indicators (*link*): The Coincident Economic Index (CEI) climbed to yet another record high in January, climbing for the fourth successive month, by 0.5% m/m and 1.4% over the period, after showing no growth during August and September. Here's a look at how the four components performed in January: 1) Industrial production (+0.27ppt) was the biggest contributor to the CEI, jumping 1.4% in January-boosted by a record weatherrelated surge in utilities output (9.9%) during the month—while manufacturing output (0.2) continued to be restrained by a shortage of computer chips. 2) Payroll employment (0.10) in January blew past forecasts—and there were huge upward revisions to prior months' data. Total payroll employment soared 467,0000—nearly quadruple the expected 125,000 gain while the December and November levels both were revised considerably higher for a net gain of 718,000! Total payroll employment has recovered 19.1 million jobs since bottoming last April, though is still 2.9 million below its pre-pandemic level. 3) Real personal income less transfer payments (+0.07) increased in January by 0.2% after stalling the last two months of 2021; it is up 9.9% since bottoming in April 2020 to a new record high. 4) Real manufacturing & trade sales (+0.04) advanced for the fourth time in five months, up 0.3% in January and 1.1% over the period. It's within 1.1% of March 2021's record high.

Regional M-PMIs (<u>link</u>): Two Fed districts (New York and Philadelphia) have reported on manufacturing activity for February and show the manufacturing sector slowed for the third month. The composite index (to 9.6 from 11.3) slumped to a 14-month low in February and was roughly one-third November's pace. New York's composite index (to 3.1 from -0.7) shows the region was at a near standstill in February, after contracting slightly in January, while growth in the Philadelphia (16.0 from 23.2) region lost steam, though remained at a respectable level. The new orders (7.8 from 6.5) measure remained weak, considerably below its recent high of 38.1 in November. Growth in the New York (1.4 from -5.0) region remained very weak this month, while new orders growth in the Philadelphia (14.2 from 17.9) area slowed a bit this month—though was considerably below November's 47.4. Jobs (27.7 from 21.1) growth remained at a relatively healthy rate in February, with growth picking up in both the Philadelphia (32.2 from 26.1) and New York (23.1 from 16.1)

regions—with Philly's back near its record high of 33.9 in December. Turning to prices, the prices-paid measure in the New York region eased for the second month, from 83.0 in November to 76.7 by January, while Philadelphia's gauge accelerated to 72.5 this month after slowing from 80.0 to 66.1 last month. New York's prices-paid measure eased slightly for a third month from 83.0 in November to 76.6 this month—just south of May's record-high 83.5—while Philadelphia's eased to 69.3 in February from last June's cyclical high of 80.7. New York's (54.1 from 37.1) prices-received index shot up to a new record high in February, while Philadelphia's was little changed at 49.8, down from November's 62.9—which was close to its record high of 63.8 in the mid-1970s.

Housing Starts & Building Permits (*link*): Unseasonably cold weather and supply-chain issues pushed housing starts lower in January, but single-family permits surged. Housing starts plunged 4.1% last month to 1.638mu (saar), following a three-month surge of 10.2%—with 9.7% of the gain occurring in November. Single-family starts sank 5.6% in January to 1.116mu (saar), while volatile multi-family starts dipped 0.8% to 522,000 units (saar) after a 9.4% spurt at the end of last year to a 22-month high of 526,000 units. Meanwhile, building permits climbed for the fourth successive month by 0.7% m/m and 19.7% over the period to 1.889mu (saar)—the highest level since spring 2006. Over the comparable periods, single-family building permits surged 6.8% and 15.8%, respectively, to a 12-month high of 1.205mu (saar). In the meantime, multi-family permits sank 8.3% to 694,000 units (saar) in January, after skyrocketing 38.9% during the three months through December to 757,000 units-which was the highest level since January 1990. NAHB's February Housing Market Index (HMI) shows builders' confidence deteriorated for the second consecutive month as "delivery delays are raising construction costs and pricing prospective buyers out of the market," according Jerry Konter, NAHB's chairman. (Construction costs are up 21% y/y.) While homebuilder optimism is weakening, it still remains at high levels. The HMI dipped for the second month to 82 in February, after climbing steadily from 75 last August to 84 by the end of 2021. It was at a record high of 90 during November 2020. Two of the three components of the HMI moved lower again this month-traffic of prospective buyers (to 65 from 69) and future sales (80 from 82)-while the measure for current sales (90 from 89) ticked up. They were at record highs of 77, 89, and 96, respectively, during November 2020.

Existing Home Sales (*link*): "Buyers were likely anticipating further rate increases and locking-in at the low rates, and investors added to overall demand with all cash offers," said Lawrence Yun, NAR's chief economist. "Consequently, housing prices continue to move solidly higher." The rebound in sales pushed inventory down to new record lows. Existing home sales rebounded 6.7% in January to a 12-month high of 6.50mu (saar), after

retreating 3.8% during December. Single-family sales bounced back 6.5%, from December's 3.9% decline, to 5.76mu (saar), while multi-family sales jumped 8.8% to 740,000 units (saar) after falling two of the prior three months by 2.9%. In all four regions, total sales rose in January versus December levels; however, measured against year-ago levels, sales fell in the Northeast and West and were flat in the South and Midwest: South (+9.3%m/m & 0.3%y/y), Northeast (+6.8 & -8.2), Midwest (+4.1 & 0.0), and West (+4.1 & -6.6). Total inventory was at a record low 840,000 units during January, down 16.5% y/y. The median existing home price accelerated for the third month to 15.4% y/y in January, after slowing steadily from its recent peak of 23.6% last May to 12.6% by October.

Contact us by email or call 480-664-1333.

Ed Yardeni, President & Chief Investment Strategist, 516-972-7683 Debbie Johnson, Chief Economist, 480-664-1333 Joe Abbott, Chief Quantitative Strategist, 732-497-5306 Melissa Tagg, Director of Research Projects & Operations, 516-782-9967 Mali Quintana, Senior Economist, 480-664-1333 Jackie Doherty, Contributing Editor, 917-328-6848 Valerie de la Rue, Director of Institutional Sales, 516-277-2432 Mary Fanslau, Manager of Client Services, 480-664-1333 Sandy Cohan, Senior Editor, 570-228-9102

Copyright (c) Yardeni Research, Inc. Please read complete copyright and hedge clause.

