

July 5, 2007

The Liscio Report

On the Economy

For John Liscio 1949-2000

Sittin' on the dock...

In June, 82% of the states in our survey met or slightly exceeded their projected withholding tax collections, level with May's 83%. And, once again, our contacts around the country have evidence that an unusually large percentage of their year-over-year growth is coming from up-

per-income earners' increased earnings. Although the mind-boggling individual payments are mostly coming into states with major financial and/or entertainment sectors, contacts in states without such sources have deter-

mined that an unusually high percentage of their gains is coming from the over \$100,000 crowd. But wages appear to be up across the board, and our contacts continue to hear complaints about shortages of skilled labor from their industry informants.

There was one big miss in the Midwest, but in general that region is doing a bit better these days. Some analysts have suggested stronger manufacturing conditions are the source of the improvement, but

our contacts are seeing modest employment gains in services, especially health and financial, but continued deterioration in manufacturing. (Sure enough, the ISM manufacturing employment component has lagged the headline number, falling for two consecutive months.) In fact, some

contacts suspect there may still be one-off severance checks in the auto industry clouding their numbers.

In the Midatlantic region growth has definitely cooled, but is holding steady at

this point. Our contacts in that region suggest that business services and research (including construction of new facilities) are thriving, which would mask lagging employment in other sectors.

One Northeastern contact attributes strong withholding to employment growth, while the others suggest it's mostly wages. Income disparity on the West Coast is causing a lot of headaches. Employment appears to be creeping along, but there are often wild fluctua-

- ***collections strong, but it's mainly from the upper brackets and wages***
- ***computer spending ticks up, but is it enough to keep productivity growing?***
- ***fraying infrastructure, rusting research edge***

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tions in monthly payments, apparently in the high-end.

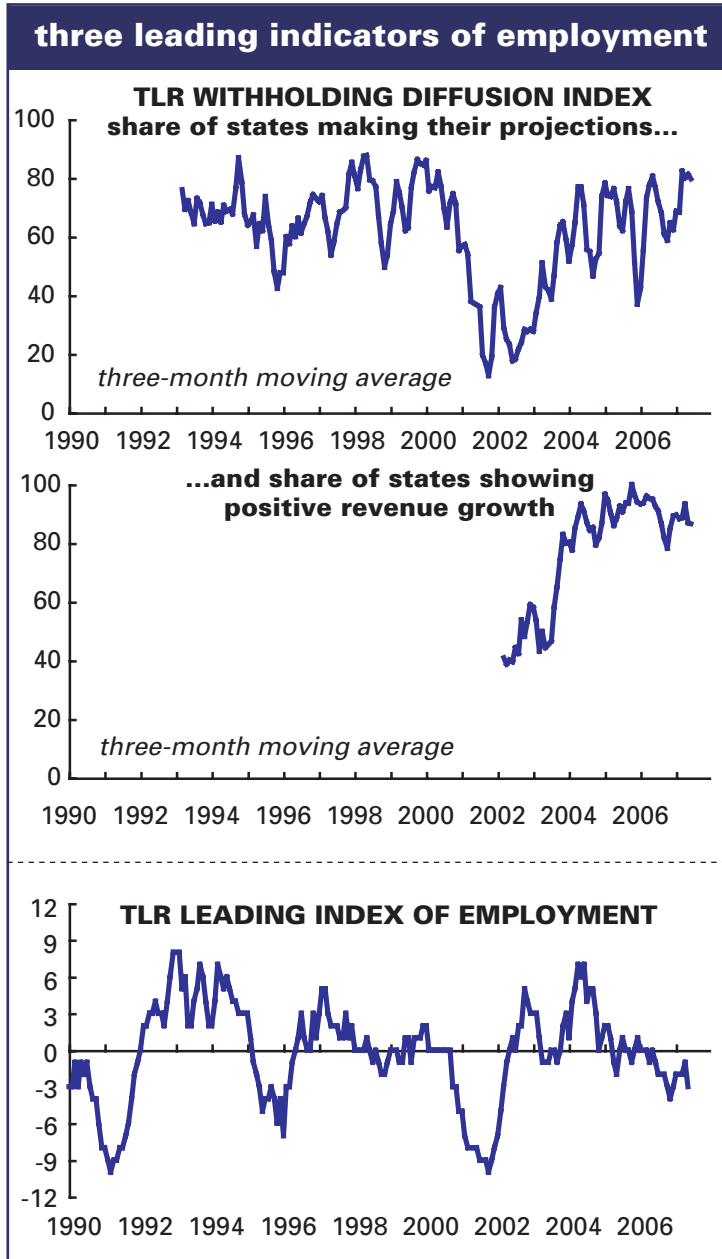
A state in the nearby Notorious Real Estate Market region reports “very disappointing” withholding collections (negative on the year). There’s no construction employment conundrum there: it’s definitely the major culprit.

computer spending

It was good to see an uptick in computer spending in the latest factory orders report. For the year ending in May, new computer orders were up 3.4%; that’s the best reading since the 18.0% gain in July 2006. But this is a very volatile series; that July gain, for example, was surrounded by losses of greater than 5%—and remember, these are year-to-year, not month-to-month measures.

As we’ve been arguing, the acceleration in productivity in the 1990s is widely seen as the result of an acceleration of investment in computers and other high-tech equip-

ment, so we may well need another such acceleration if we don’t want the recent productivity slowdown to stick around too long.



We noted the weakness in computer spending in our last report, which prompted a long-time and careful reader to point out that the factory orders series counts domestic orders only, and a lot of computer products are now imported. That’s very true, so it prompted us to take a look at the BEA’s computer sales figures, which are published as supplements to the national income accounts. This series includes imported computers, and excludes exports, so it’s a better measure of the potential impact on the domestic U.S. economy.

That series is graphed on p. 3. While it ticked up in the first quarter, it’s still at the low end of its historical range (the series begins in 1990), barely above levels recorded during the economic slump of the early 1990s. Graphed along with computer spending is the trend growth in productivity. (For

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the full history from which that trendline has been extracted, see p. 5.) The trajectory of the productivity line bears a strong resemblance to that of the computer spending line, shifted 2–3 years to the right.

A wild card for productivity is the slow growth of the labor force and its overall aging. We'll take an extended look at this issue next month, but let's make a few

quick points for now. The growth of the labor force since 2000 has been the slowest of any decade since the end of World War II. Economic theory suggests

that rapid labor force growth lessens the need for investment (since workers can be substituted for machines), and vice versa. So with labor force growth as slow as it is, and projected to slow further, the need for higher investment is especially urgent.

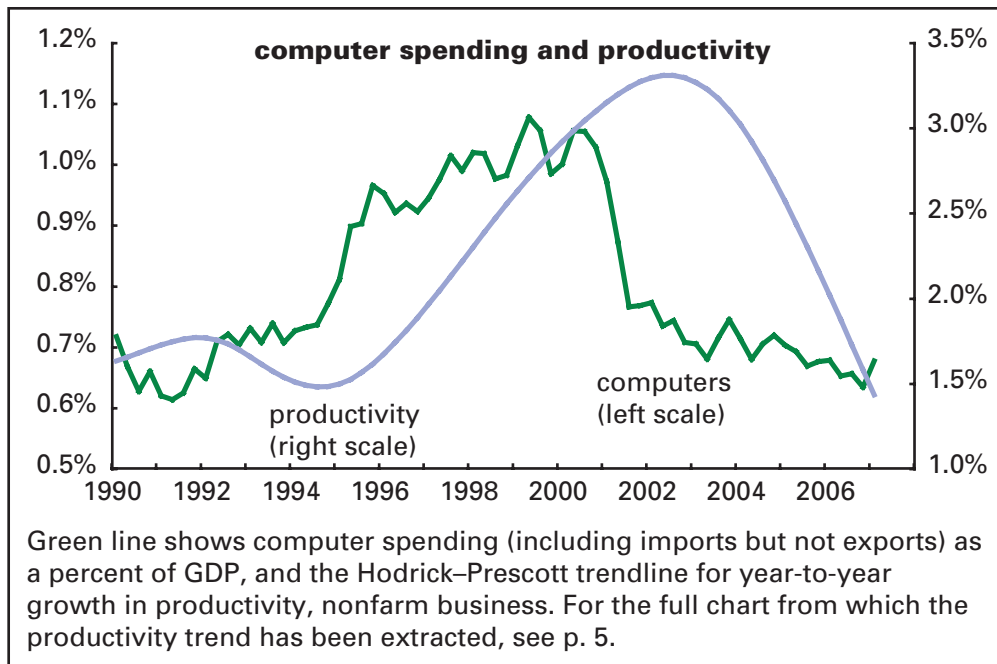
But not only is the labor force growing more slowly than ever—growth is now dominated by older workers. Only workers aged 55 and over have a higher employment/population ratio now than at the labor force peak in 2000; all other age groups are down. And while labor force growth in the 1950s was only slight-

ly faster than it has been recently—an annual rate of 1.1% then, vs. 1.0% now—the growth in the so-called prime-age labor force, workers aged 25–54, was 1.3% a year then compared with 0.4% now.

Will the aging of the workforce be a stimulus to or drag on productivity? On this there seems to be no consensus in the economic literature. Some studies report that productivity rises with age, others that it

falls, and still others that there's little effect at all. Experience can boost productivity, but muscle aches can retard it.

Speaking of investment, May

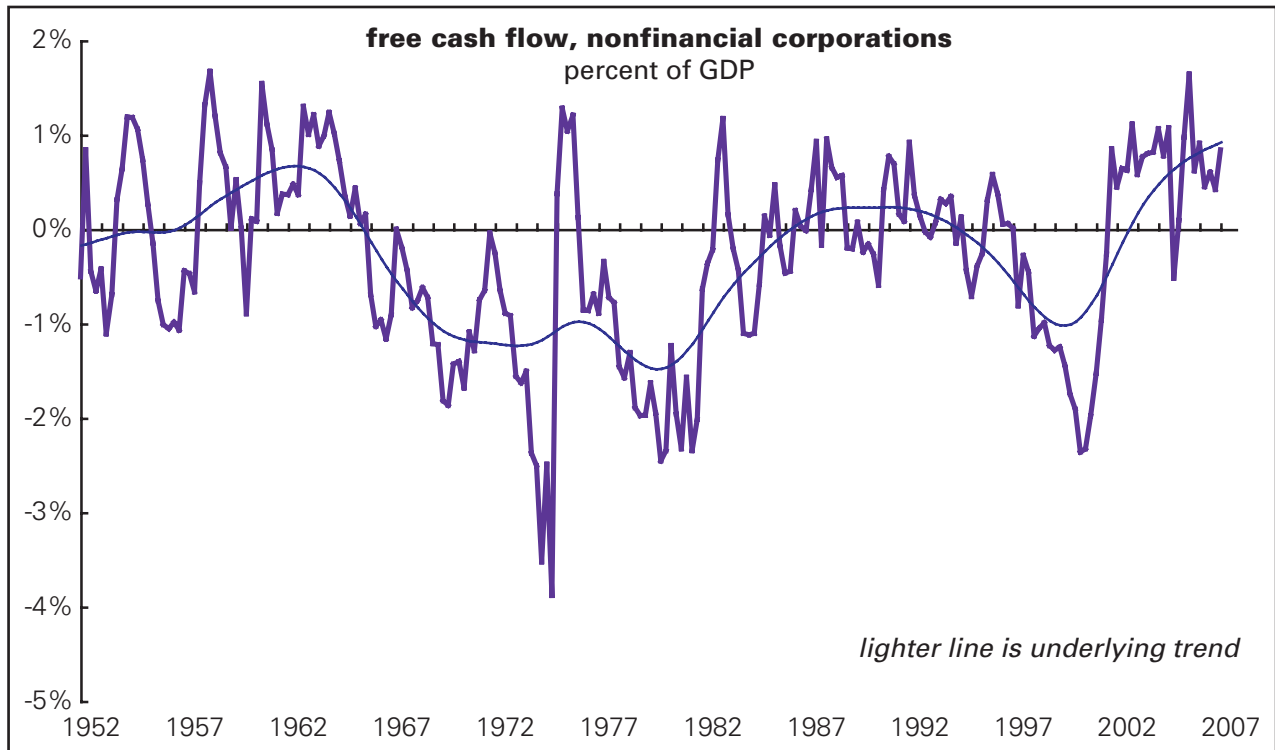


capital spending figures from the factory orders series weren't as bad as expected, but at -2.1% from the prior month, they're still on the weak side. That weakness certainly can't be blamed on the state of corporate finances. As the chart on p. 4 shows (drawing on data from the Fed's flow of funds series), firms remain flush with cash. Free cash flow, defined as profits plus depreciation allowances less capital spending, has been very high throughout this cycle. This has been very good for the financial markets. Not only have firms not had to turn outside for funds, they've been able to pay dividends, buy

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back stock, and take each other over with great abandon. But you do have to wonder what the long-term economic effects of these habits will be.

spending they recommend in the report, but their statistics are persuasive. In a brief interview, ASCE's Larry Roth pointed out that since the 2005 report card not only have there been no significant



infrastructure

Low investment levels are not only an issue for the private sector. Were our infrastructure applying to college, it might consider early decision at the safety school, keep fingers crossed, or, better yet, find a palm to grease. The most recent report card from the American Society of Civil Engineers gives us a GPA of D, with an incomplete in security. And effort shows no marked improvement: since the 2001 report card several Ds lost pluses, and some gained minuses. Our aviation grade rose a bit, but because a fall in demand helped clear runways.

Naturally, the ASCE would benefit from

increases in federal spending, there have been reductions in certain sectors. "It really doesn't take a rocket scientist to figure out that if you're not spending the requisite amount of money, the infrastructure is going to crumble, and can't possibly meet the needs of the growing population." A few highlights:

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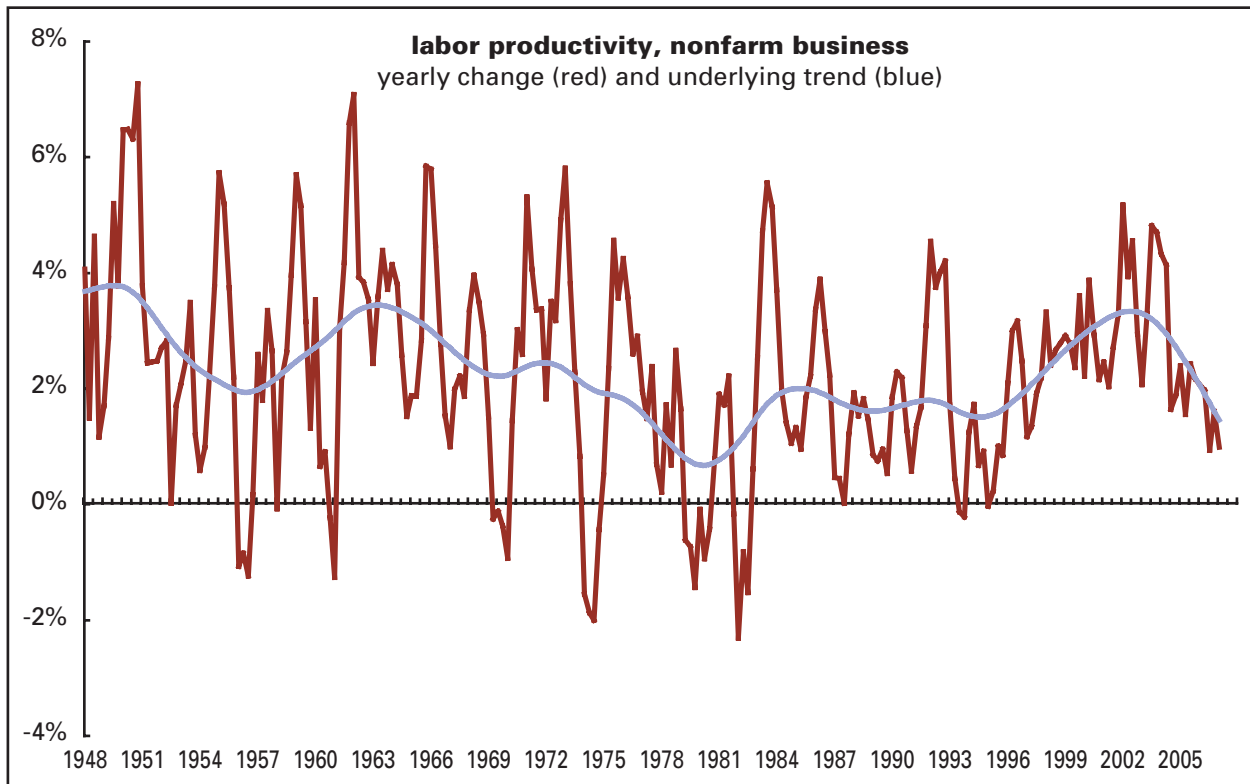
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- 27% of our bridges are structurally deficient or functionally inadequate. The lack of a federal transport system compounds the problem. ASCE reckons \$9 billion is needed over the next 20 years to ameliorate bridge deficiencies.

- Over the last decade the percentage of

jected to rise to 80% by 2020. Replacement of the locks is estimated at \$125 billion.

- We're spending \$54 billion a year (\$254 per motorist) on repairs related to poor road conditions, and 3.5 billion hours stuck in traffic, a \$63 billion bite for the economy. Total annual spending falls \$34



unsafe dams has risen 33%. Price-tag to repair all critical non-federal dams—those that are a direct threat to human life should they fail—is \$10.1 billion over the next 12 years.

- Annual 1% drop in maintenance of the national power grid + a transmission system not designed for current demand = elevating risk of blackouts.

- One barge can move the cargo of 60 semis at one-tenth the cost. But half our 257 locks and 12,000 miles of waterways are functionally obsolete, and that's pro-

jected to rise to 80% by 2020. Replacement of the locks is estimated at \$125 billion.

- We'd add port congestion to this list. In a series on this problem, the *Financial Times* reports that much of the U.S. freight transport infrastructure is running close to capacity, investment is falling, yet over the next 15 years container traffic is expected to double. Port authorities lengthened hours at Southern California ports after a shortage of dock space forced cargo ships to languish at anchor for days

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in 2004, but, despite this modest improvement, Brook Benz, port expert at consulting group Accenture, stresses that U.S. ports as four to five times less productive than those of Hong Kong and other leading Asian countries. New container ports are under construction in Mexico and British Columbia, but cargo will still have to battle through congestion on road and railways.

Emergent phenomena

Moving from "rocks and gravel" to the cutting edge...

Condensed-matter and materials physics (CMMP), the largest physics subfield, comprises both pure and applied research into complex phenomena born of simple things. Although decades often pass between the humble advances in our understanding of the simple things (rocks, ice, snow, water) and the dazzling inventions that rock our world, it is widely accepted within the scientific community that long-ranging CMMP research leads the technological revolution. It's easy to get lost in the mysteries of this science—stuff like the physics of life, far-from-equilibrium phenomena, and discoveries lurking in nanoworld—but we'll...clunk...focus on worrisome trends in federal and private funding instead.

Throughout the 20th century, the United States held the undisputed lead in CMMP. Early in the century parent companies invested in their long-term futures by encouraging high-risk long-range research in their industrial labs. (GE's was founded in 1900; Bell in 1925; and IBM's TJ Watson in 1945). The results were stunning: X-ray tubes, transistors, lasers, the integrated circuit, and the discovery of cosmic micro-

wave background radiation matching just what a team of astrophysicists at a nearby University had calculated would linger from the Big Bang were all products of these privately funded labs.

Currently, the focus on marketable software, systems and services in the research labs established by Microsoft, Google and IBM has led to the downsizing or outright elimination of many once-great industrial laboratories. A quick reaction might be to dismiss these as lovable lummoxes out of pace with the new reality, but in their most recent report on the outlook for CMMP, the National Academies of Science delivers their opinion that the failure to provide new forums for broad-based research puts U.S. technological leadership in jeopardy, and that the fall from "best-in-class" to "technology followers" could have "devastating" consequences for both the U.S. economy and national pride. (Or, as the NAS deftly words it, "In spite of the differences between corporate and academic culture, the overall impact of these scientists on academia has been positive, and the source of such researchers is now drying up.")

Although private institutions currently provide two-thirds of overall R&D funding the rush to market pushes them to focus on incremental improvements to already existing products; they often concentrate on the D while neglecting the R, and funding of longer-range research has dropped to just 10% of the industrial investment budget. (The NAS cites the research models in many of the new venture-capital funded start-ups as a big contributor to this mindset.) The federal government remains the largest supporter of CMMP research itself: current funding levels are \$600 million a year, roughly flat

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over the last decade in inflation-adjusted dollars, but falling steadily if one factors in the 5% annual increase in supporting graduate researchers. The chance of CMMP grant applications receiving National Science Foundation funding has dropped from 38% to 22% in the last five years; new investigators face a bleaker 12% chance, down from 28%. And our CMMP PhD awards have fallen 25% over the same period.

At the same time other countries are rapidly increasing funding. In the last decade the number of articles published by U.S. authors in two leading journals has just held steady, causing the percentage of articles published by U.S. authors to fall from 31% to 24%. Everyone benefits from technological advances made throughout the world, and we're not trying to turn back the clock, quite the opposite. It is, though, indeed devastating to think that in the coming decade we could be forced to look to others for answers to the big intellectual challenges CMMP poses, as the NAS report warns. Call us prideful Americans (or prime-age fogies) but, since many of our readers have a lot of clout, we offer this as a Fourth of July plea for greater consideration of this long-standing source of national pride. Overseas subscribers, please don't gloat!

Friday's numbers

Someone asked us the other day if we would have believed several years ago that we'd be forecasting monthly payroll growth around 100,000 with our survey in the 80s. Of course we wouldn't have believed that; in the late 1990s these levels matched payroll growth in the high 200,000s. But our state contacts keep their ears to the ground, and except in a few

regions and sectors, see no evidence of an acceleration in job growth. Neither is there much anecdotal evidence, such as the Conference Board's venerable job numbers or the still-new Hudson Employment Index. So we'll be looking for jobs gains of 120,000 on Friday morning, an increase of 0.3% in hourly earnings, and no change in the workweek. A job gain of that magnitude should keep the unemployment rate steady, and it's facing heavy headwinds from rounding oddities.

— Philippa Dunne & Doug Henwood