ECONOMIC OUTLOOK

by Richard Katz

Promoting productivity, part 2

Dual economy more dualistic

People sometimes ask which sectors will lead Japan's revival, expecting the answer to be some high-tech area. Prime Minister Shinzo Abe extols the alleged glories of nanotechnology.

In reality, the opposite is true: Japanese revival depends on transforming its backward sectors. That has to be the case because the backward sectors are where most of the workers are located. Construction, distribution and services together employ 60% of the entire labor force, three-and-a-half times as many workers as manufacturing (see bottom chart). Yet, in 2005, they offered only half the output per worker that manufacturing offers. Meanwhile, even within manufacturing, large swaths, from food processing to glass and cement, lag far behind world standards.

The need to reform lagging sectors is also the lesson from America's post-1995 productivity leap. Two-thirds of the improvement came not from the "new economy" sectors, but from "old economy" sectors such as retail, banking, and "smokestack industry" as they exploited information technology and better organization.

So far, as we discussed in last month's *TOE*, Japan has yet to enjoy the productivity revolution it so desperately needs. This installment helps explains why.

The Dual Economy

All modern economies suffer to some extent from the "dual economy" syndrome, the gap between efficient and inefficient sectors. But in Japan, the gap is a chasm.

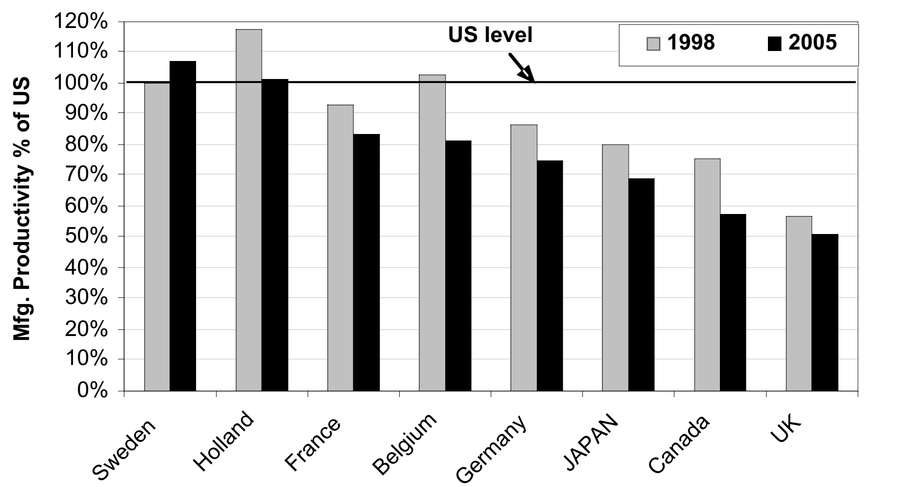
If Japan were really enjoying a productivity revolution, we would see lots of improvement in these lagging sectors as they moved up to world benchmarks. Instead, we see the opposite: the "dual economy" has grown even more dualistic. The greatest restructuring has occurred in sectors like autos and machinery, which are exposed to world competition and which have been improving all along. Japan has seen the most improvement where the need is least urgent and the least improvement where it needs it most.

Contrary to widespread impression, Japan's factory productivity is not high by global standards. While Japan is a superstar in autos and some other industries, large parts of its manufacturing base—mostly those sectors with little exposure to international trade—are horribly inefficient. Consequently, Japan's manufacturing productivity is 30% below US levels and below much of Europe (see top figure).

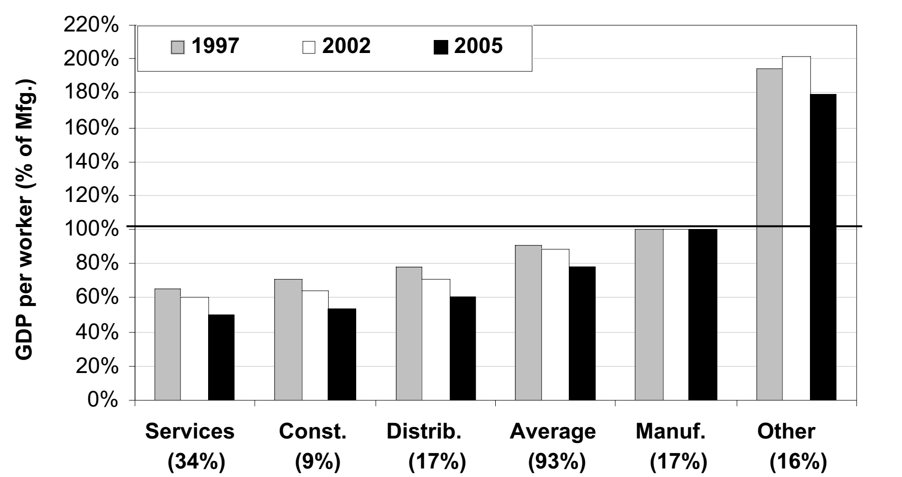
Meanwhile, not only do construction, distribution (wholesale and retail) and services suffer from low-productivity *levels*, but the *growth rate* of their productivity is also low. Normally, when an economy recovers, productivity growth accelerates. However, in the current recovery through 2005 (latest data available), only manufacturing and construction showed an acceleration. Other sectors slowed. In fact, services, which now employs a third of all workers, actually showed a productivity drop in 2002-2005.

As a result, the relative position of the lagging sectors has gotten even worse. In 1997, output per worker in services stood at 65% of the level in manufacturing; it fell to

Japan's manufacturing productivity 30% below US level



60% of jobs are in sectors with half of mfg. productivity



Source: Cabinet Office and OECD

Note: Top panel: OECD and US Bureau of Labor Statistics; bottom panel: Cabinet Office

Note: In the bottom panel, the numbers in parentheses show that sectors share of all jobs in the economy; average is only 93% because it refers only to private sector jobs

50% by 2005. In distribution, productivity relative to manufacturing fell from 78% to 61%; in construction, it fell from 71% to 54% (see top figure).

We can see the same pattern within manufacturing as we examine the bottom figure. The horizontal axis shows the productivity of various Japanese manufacturing sectors relative to their US counterparts in 1987. The measure is TFP, or Total Factor Productivity, i.e. the combined productivity of labor and capital. In machinery, Japan's productivity exceeded the US, whereas in food processing (what happens once the food leaves the farm), productivity was only 40% of US levels. The vertical axis shows the growth in output per hour. The strong are becoming even stronger while the laggards lag even more. In food processing and textiles, productivity actually fell.

In the May *TOE*, we discussed the mixed omens of corporate restructuring. What these productivity figures suggest is that the firms doing the most restructuring are primarily in the same sectors that have always done best.

Job shift

If all this weren't discouraging enough, the labor force is shifting fairly rapidly from the efficient sectors to the least efficient. While jobs have dropped in most sectors since 1997, 8% of the labor force has shifted out of other sectors into services. The share of jobs in the service sector grew from 26% to 34%. By contrast, factory jobs fell from 20% of all jobs to 17%. The same pattern prevailed during the post-2002 recovery through 2005.

Unfortunately, as of 2005 output per worker in that sector was 36% below the economy-wide average and 50% below that of manufacturing. Hence, each time a worker shifts from manufacturing into services, that worker lowers his annual output by half.

Some of this job shift is unavoidable. In mature economies, manufacturing jobs shrink while service jobs grow. In the US, for example, manufacturing jobs halved from 22% of all jobs in 1975 to only 11% in 2005; meanwhile retail jobs during the same period stayed constant at 11-12% of the labor force.

If services, distribution and construction had merely had low levels of productivity, but were rapidly improving, i.e. showing rapid growth in productivity, the situation would not be so bad. The adverse effects of the job shift would be a one-time affair. Going forward, it would be okay. Unfortunately, as we've detailed above, that is not the case. The sectors with the low levels of productivity are also the ones with poor growth in productivity.

During 1997-2002, output per worker in services grew only 0.28% a year; in 2002-05, service sector productivity actually fell 0.34% a year. In distribution, with 17% of Japan's jobs, annual productivity growth was a negligible 0.06% in 1997-2002, a figure that rose to 0.93% in 2002-05.

Without a productivity revolution in these lagging sectors, this job shift will build in a chronic problem of slow productivity growth.

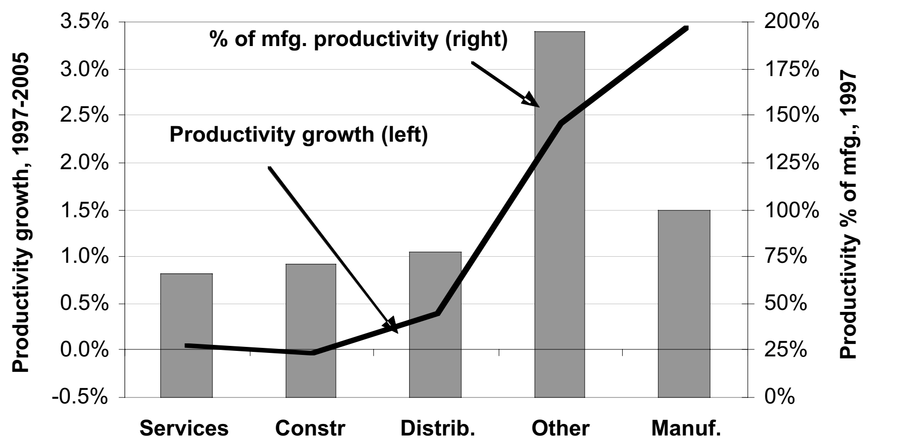
The US improved services efficiency

Low productivity growth in services and other now-backward sectors is not destiny. Consider America's post-1995 productivity revolution. Overall growth in GDP per worker doubled in 1995-2005 compared to the decade earlier. Part of this was a big leap in manufacturing productivity, from 3.4% a year to 5.2%. But that alone would not have sufficed, since factory jobs were only a small slice of the economy (a mere 11% of all jobs in 2005).

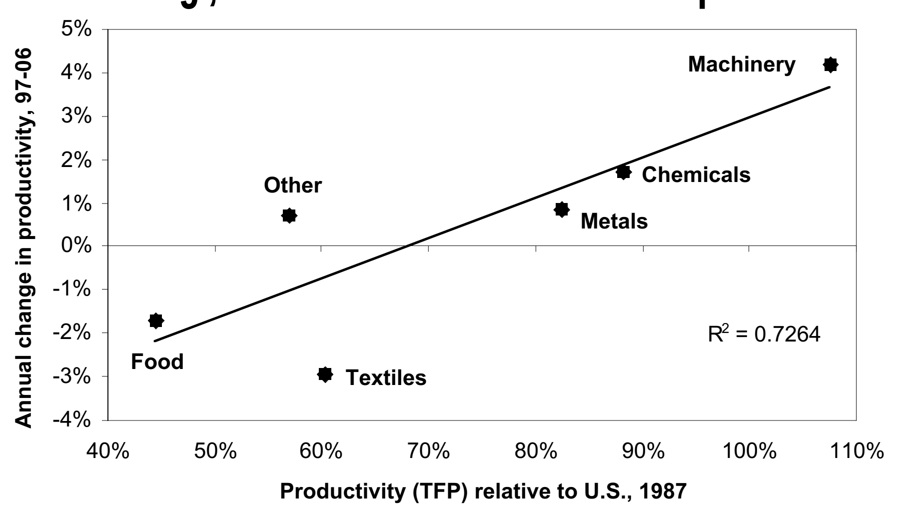
What made the difference for the US was big leaps in parts of the service sector. Take retail trade, a horribly lagging sector in Japan that has been plagued with bad debts, bankruptcies, and repeated attempts at reorganization. In the US, productivity growth more than doubled from 1.8% in 1985-95 to a stunning 4.2% in 1995-2005. This was due to adoption of newer IT technologies, old off-the-shelf technology like optical scanners, and corporate reorganization.

Japan's long-term revival depends on whether or not it can engender similar progress in its retail sector, as well as so many other lagging sectors.

Worst sectors show least improvement



Within mfg., worst sectors show least improvement



Source: Cabinet Office and OECD