Discussion Points for Assignment #2 – Question #1

1. Are increases in the rate of growth of productivity in the United States real?

   Productivity growth is strongly pro-cyclical since changes in employment lag changes in output by three to six months. One should have expected a sharp slowdown in productivity growth in the 4th quarter of 2000 since no one was expecting a sharp decline in output growth. The observed slowdown is less than one might have expected.

   Three percent productivity growth is above what was observed in the last two decades but was the norm prior to that. What one has to explain is not the acceleration of productivity in the late 1990s but the slowdown for the previous two decades. The disruptive technologies argument has to be part of the answer. Initially, productivity goes down when one moves to radically new technologies.

   During the slowdown, it was always true that one could point to large micro gains in productivity that flowed from the new technologies. Scanners allow the use of fewer clerks in retailing. On-line financial trading allows trades with few people. The problem was that these micro gains did not show up in macro data.

   If productivity growth did not go up, there had to be some other offsetting negative factor. Here services play a major role. On average, as measured, they have a lower level of productivity and a lower rate of growth of productivity. As a result, as services become a larger and larger fraction of the total economy, the economy’s rate of productivity growth will automatically slow down.

   Within the service sector, there are enormous measurement problems when it comes to output. Everything about a hospital operating room, for example, has changed (the MRI replaced the X-ray, the laser replaced the knife, massive open heart surgery is replaced by non-invasive microsurgery) but we do not measure any improvements in output.

   Investment is also cyclical. Even in a new economy, it would be expected to go down during a slowdown but it would also go back up during the recovery. As a result, there is no reason to assume any long-term slowdown due to the current falls in investment.

   Those who argued that the new economy would not have business cycles were simply off-base. Inventory cycles have gotten worse and capitalism comes with cycles. The multiplier-accelerator model holds. One of the reasons is that everyone invests on the assumption that their market share will go up and on
average, this cannot be true. Eventually, this excess capital investment has to be worked off.

There is another measurement issue. If the Census finds 6-7 million more people that it expects, there is an open question as to whether their hours of work have been measured in the productivity statistics. If they haven’t, the acceleration in productivity growth may simply be a mirage. It results from the work of uncounted workers.

In fact, payroll employment, the statistics that we use to measure hours of work, has gone up about 6 million more than Census employment in the last decade. So those hours of work probably have been counted even though the people have not.