State Board of Equalization

Economic Perspective

Summary of Recent Economic Developments *November 2000*

❖ *U.S. Economic Developments*

Slowing Economic Growth?

Real gross domestic product (GDP) increased 5.6 percent in the second quarter of 2000, according to the U.S. Department of Commerce's final estimate released in late September. First-half growth averaged 5.2 percent. These figures are both well above the long term (ten-year) average of 3.0 percent per year. However, there is some evidence that growth will slow in the second half of 2000. Real final sales of domestic product — real GDP excluding inventories — increased 3.9 percent in the second quarter, down sharply from 6.7 percent growth in the first quarter. Real final sales have not grown this slowly since the third quarter of 1998. Monthly data on employment, the average work week, and leading economic indicators all indicate that third quarter growth will be much slower than the second quarter.

Many forecasters expect slower growth to continue for some time. In late September, the UCLA Anderson Forecasting Project released its quarterly economic forecast. For 2000 as a whole, they forecast real GDP to rise 5.1 percent. UCLA forecasts real GDP to increase 3.1 percent in 2001. These real GDP growth rate forecasts are both close to the average forecasts from a panel of 30 economists surveyed by the National Association for Business Economists (NABE). The most recent NABE consensus survey shows forecasts of 5.2 percent real GDP growth for 2000 and 3.3 percent for 2001.

[Information derived from; U.S. Department of Commerce, STAT-USA website: www.stat-usa.gov; *The UCLA Anderson Forecast*, September 2000; *NABE Outlook*, September 2000.]

❖ *California Economic Developments*

Strong Employment Growth so Far in 2000

One of the most comprehensive measures of economic well being available for states on a timely basis is nonagricultural employment. California employment growth was extremely strong so far in 2000. Nonagricultural employment for the nine-month period of January through September 2000 increased 3.7 percent over January through September of 1999. Construction, business services, and engineering and management services have been among the employment growth leaders so far in 2000. The 3.7 percent increase for the first nine months of 2000 is faster than the 3.1 percent employment growth reported for all of 1999, and well above average for recent years. For the five-year period 1995 through 1999, nonagricultural employment increased an average of 2.9 percent per year. UCLA forecasts annual California nonagricultural employment to increase 3.8 percent for 2000, continuing the above-average growth trend of the first nine months for the rest of the year. For 2001, UCLA predicts annual growth of non-agricultural employment to slow to 2.6 percent.

Unemployment Rate Changed Little

The California unemployment rate averaged 5.0 percent for the first nine months of 2000, down just slightly from the 5.2 percent average for all of 1999. The reason the rate changed little, despite the growth in jobs, is that growth in the labor force has nearly matched growth in jobs in 2000. This trend of little change in the rate stands in contrast to that of recent years, when the unemployment rate dropped sharply. The unemployment rate fell from 6.3 percent in 1997 to 5.9 percent in 1998 and 5.2 percent in 1999. For the first nine months of 2000, the California unemployment rate averaged 1.0 percent above the U.S. unemployment rate of 4.0 percent.

Double-Digit Taxable Sales Growth Continues in First Half of 2000

The Board of Equalization's preliminary estimate shows that taxable sales increased 11.9 percent in the second quarter of 2000 compared to the second quarter of 1999. This is the third consecutive quarter that taxable sales has grown at double-digit rates compared to prior-year quarters. In the first quarter of 2000, taxable sales increased 13.4 percent compared to the first quarter of 1999. Quarterly taxable sales growth has been at least 9.0 percent for five consecutive quarters. To put these numbers in perspective, annual taxable sales rose 6.2 percent in 1997, 5.2 percent in 1998, and 10.0 percent in 1999.

[Information derived from; California Employment Development Department (EDD), "Interim Industry Employment," *Labor Market Conditions in California,* September 8, 2000; EDD Labor Market Information website: www.calmis.ca.gov; California Department of Finance, *Economic Indicators,* website: www.dof.ca.gov; *The UCLA Anderson Forecast*, September 2000; Board of Equalization, News Release #50, September 13, 2000, website: www.boe.ca.gov.]

Does the Internet Take the Compact Disk Market Closer to Perfect Competition?

Many economists would agree with a May 1998 statement made by Dr. Robert Kuttner in *Businessweek* that, "The Internet is a nearly *perfect market* [italics added] because information is instantaneous and buyers can compare the offerings of sellers worldwide."[1] This quotation raises at least two questions. First, what is a "perfect market," as defined in standard economic theory? Second, is there empirical evidence to support this view about the Internet? These questions are examined here using compact disks (CDs) as an example of an item commonly purchased over the Internet.

Economics texts commonly discuss four conditions, which are interrelated, that characterize perfect competition. It is extremely rare that a market for a good or service meets all of these conditions or assumptions. However, the CD market may be characterized by most of these conditions to a larger degree than markets for most other goods. The following discussion describes the four assumptions of a perfectly competitive economic system.

1. Homogeneous Product

In a perfectly competitive market, the product of any one seller is identical to the product of any other seller. The key aspect is that the buyer will not care from which seller he or she purchases the product. Farm commodities, such as wheat, that meet a standard size and quality, are prime examples of homogeneous products. A specific CD title also meets this condition. The CD itself, aside from service, is an

1. "The Net: A Market Too Perfect For Profits," Robert Kuttner, *Businessweek*, May 11, 1998.

homogeneous product. However, this good, like many others, also implicitly includes some services, such as associated return policies and ways quality problems are handled. Many consumers treat CDs as an homogenous product, likely to have few quality problems requiring returns. However, this service characteristic is not met to the extent that some consumers may prefer to purchase a CD from a seller that demonstrates superior service and support, such as more readily accepting returns. If this were the case, such consumers would be willing to pay a higher-than-average price for the product from this particular dealer.

2. Small Size, Large Numbers.

Perfect competition requires every economic agent (buyers and sellers) to be so small relative to the market as a whole that they have no perceptible influence on prices. This condition requires large numbers of buyers and sellers. For CDs and most other consumer goods, there is little question that there are a large number of buyers. The condition of having a large number of sellers depends largely on free mobility of resources.

The "large numbers" characteristic is one that the Internet is likely to improve for a product such as CDs. Without the Internet, CD consumers are limited by the geography of driving distance and driving costs. Both time and costs of driving per mile effectively limit consumer choices. CDs are relatively inexpensive to ship, so sellers can cover a broad geographical area. The Internet expands both the number of potential buyers and the number of potential sellers.

3. Free Mobility of Resources

CD retailers can easily enter and exit the business if there is free mobility of resources, the third characteristic of perfect competition. In the real world, this condition is rarely completely met in this or any other industry. It takes knowledge of the business and investment in capital resources to enter just about any entrepreneurial activity. However, in relative terms, some businesses are more easily entered or exited than others. As long as large numbers of entrepreneurs consider the possibility and have the resources to go into or leave a particular business, an industry can come reasonably close to free mobility. One would think that the Internet would increase the number of potential sellers by providing an additional means of reaching a broad market relatively inexpensively compared to using conventional outlets.

4. "Perfect" Knowledge of Prices

The fourth characteristic of perfect competition is that both consumers and sellers have "perfect" knowledge of product prices. If a product is truly homogeneous, consumers know precisely the characteristics of the product they are buying. The only unknown factor would be the price. In reality, it is unlikely that consumers and sellers would know the prices that *all* sellers are asking for each particular CD. However, it is likely that CD consumers would have several options as to whom to purchase from, as well as a range of prices, using advertising, word-of-mouth discussions, and research. The Internet greatly expands potential consumer knowledge. Compared to traditional methods, such as scanning newspaper ads, it is relatively less expensive, in terms of time spent, for potential consumers to go to several different web sites and determine prices of a particular CD they are interested in purchasing. This is the characteristic of perfect competition that the *Businessweek* article cited earlier was addressing.

Evidence That Internet CD Market is Almost Perfectly Competitive

Given these four characteristics of perfect competition, how are degrees of it measured? One common yardstick is product prices. If consumers are paying less money for the same CD purchased over the Internet than they are by purchasing it via traditional means, one can conclude that the Internet has made the market closer to being perfectly competitive. At least one study researched this question and concluded that this was indeed the case. The April 2000 issue of *Management Science* reports the research methodology and results of this study of U.S. consumers. The researchers tracked 20 CD titles, ten that were on current best-seller lists, and ten that were selected randomly from titles generally available in conventional outlets. Over 4,300 price observations were made over a period of 15 months for two groups of sellers, eight conventional sellers and eight Internet sellers. The authors found that average CD prices were 16 percent lower for Internet sellers than for conventional sellers. A more realistic way to compare prices would be to include sales taxes (for both groups of sellers), shipping costs (for Internet sellers), and transportation (or driving mileage) costs (for conventional sellers). With respect to sales taxes, the authors made the conservative assumption that consumers chose stores without regard to sales tax considerations, i.e. they would pay the same sales tax for both Internet and conventional store purchases. When sales taxes, transportation costs, and shipping costs were taken into account, prices for CDs sold over the Internet were still 13 percent lower than prices for CDs sold in conventional outlets.

[Information derived from; "Frictionless Commerce? A Comparison of Internet and Conventional Retailers," Erik Brynjolfsson and Michael D. Smith, *Management Science,* Volume 46, Number 4, April 2000.]

Internet CD Market Still Not Perfectly Competitive

Despite the lower prices, the authors caution that the CD market is far from perfectly competitive. From their review of other studies and from their own work they found evidence that the Internet CD market does not completely meet all of the conditions of perfect competition. The authors concluded that "…while there is lower friction in many dimensions of Internet competition, branding, awareness, and trust remain important sources of heterogeneity among Internet retailers."[2]

2. "Frictionless Commerce? A Comparison of Internet and Conventional Retailers," Erik Brynjolfsson and Michael D. Smith, *Management Science,* Volume 46, Number 4, April 2000.

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