California is in economic recovery, but under conditions where official employment estimates remain about 3% below the 1990 peak, and where some important employment sectors continue to lose jobs. Recovery is being experienced not simply as an upward swing in the business cycle, but also as a period of adjustment to a transformed economic base. Growth sectors of the 1980s, such as defense industries and construction, are playing a negative or far smaller role in the 1990s, while job growth is occurring primarily in nonmanufacturing sectors. Corporate downsizing and the migration of firms out of state have further fed concerns that the state’s recovery will not be strong, and that high wage jobs will be replaced by lower wage, less stable opportunities.

One arena where these transformations are being played out is the area of foreign trade. Foreign trade activity has been steadily expanding nationwide, providing new and growing export markets but also new sources of competition. California, with its Pacific Coast location, its diverse population base, and existing business links to Pacific Rim countries, will be a major participant in expanding foreign trade, benefitting from expanding foreign markets but also re-shaping production to match growing competition from abroad.

The Role of Foreign Trade Nationwide

Foreign trade has become increasingly important in the U.S. economy over the past two decades, as shown in Table 1 and Figure 1, but the balance between exports and imports has fluctuated sharply over time. In 1970, exports accounted for less than 6% of GDP, and imports were at a similar level. From 1970 to 1980, both imports and exports rose more quickly than GDP. In 1980, exports were over 10% of GDP, and the trade deficit, at $14.7 billion, was only 0.5% of GDP. Since 1980, imports have risen gradually, to a level equivalent to 12% of GDP in 1994. Exports grew more slowly than GDP from 1980 to 1985, dropping to 7.5% of GDP by 1985 and the trade deficit ballooned to $115.5 billion (2.8% of GDP). However, rapid growth of exports in the second half of the eighties brought exports to almost 11% of GDP, and reduced the trade deficit to $29.6 billion, or 0.5% of GDP. Since 1992, export growth has slowed once again, while import growth continues to outpace GDP. A preliminary estimate of the 1994 trade deficit is $108 billion, according to the Commerce Department. Despite the rise, the trade deficit would still be in the range of 1.5% of GDP, well below the

(Continued on page 2)
peak of the mid 1980s. According to IMF forecasts, the trade deficit is expected to peak in 1995.

Services are playing an increasingly important role in U.S. foreign trade, especially in the area of exports. Services exports have grown steadily, from $53.2 billion in 1980 to $200 billion in 1993 (before adjusting for inflation). In 1980, services accounted for 19% of exports and 15% of imports. In 1993, services accounted for 30% of exports and 18% of imports. While the U.S. continues to have a trade deficit in merchandise, it has had a trade surplus in services since 1974. A trade surplus of $58.1 billion in services offsets a deficit of $166.2 billion in merchandise trade for 1994.

The fluctuations in foreign trade levels and in the trade deficit relate to a complex mix of factors, including foreign exchange rates, U.S. public policy, investment and productivity of U.S. goods producers, and structural changes in the U.S. economy. The expansion of U.S. exports in the late 1980s occurred in a period when the nominal effective exchange rate of the dollar (the purchasing power of the dollar, indexed using a weighted average of exchange rates of major Japanese and European trading partners) was dropping sharply, as shown in Figure 2. In the early part of the 1990s, the index remained fairly stable, but it may show more fluctuation in 1995. The 12-month futures contracts from late 1994, show an 8-10% increase for the dollar against the mark and yen in 1995, yet the dollar hit a record low against the yen in March 1995. The devaluation of the peso and the Canadian dollar will also have a significant effect on U.S. exports.

Public policies reducing business and personal taxes in the early 1980s contributed to an increase in imports for consumption, without a corresponding investment that would have contributed to increased exports. In contrast, the second half of the 1980s and the early 1990s were periods of industry restructuring in the U.S., when increased productivity made firms more competitive in foreign markets. The very strong growth of services in exports is in part a reflection of the lower value of the dollar—over one-third of services exports are travel and tourism related. However, growth also reflects the U.S. competitive advantage in services such as consulting, finance and high-tech related activities.

Opportunities exist for strong export growth in the second half of the 1990s. In 1994-1995, economic recovery or continued expansion is expected in many of the major markets for U.S. goods, which should lead to more rapid growth for U.S. exports, despite the strengthening of the dollar. In contrast to 1993, when nearly one-third of the top 20 markets were in recession, only two countries are expected to be in this situation in 1994-1995 (Mexico and Venezuela). The timely and effective introduction of new technologies and processes, reinvestment in capital and equipment, and retraining of personnel have led to a sharp boost in productivity with only a modest increase in unit labor costs in the U.S. The last decade has also witnessed the coalescence of new technological clusters in the U.S., with strong prospects of growth. Together with managerial and organizational restructuring, this has improved the competitiveness of U.S. firms. The ongoing liberalization in Eastern Europe and emerging markets in Asia are also likely to result in long term opportunities for U.S. businesses, espe-

### TABLE 1
United States Foreign Trade and Gross Domestic Product 1980-1993 ($Billions, Current)

<table>
<thead>
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<tbody>
<tr>
<td>Exports</td>
<td>279.2</td>
<td>302.1</td>
<td>8.2</td>
<td>640.5</td>
<td>112.0</td>
<td>661.7</td>
<td>3.3</td>
<td>137.0</td>
<td>696.4*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Goods</td>
<td>226.0</td>
<td>222.4</td>
<td>-1.6</td>
<td>448.7</td>
<td>101.8</td>
<td>461.5</td>
<td>2.9</td>
<td>104.2</td>
<td>502.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>53.2</td>
<td>79.7</td>
<td>49.8</td>
<td>191.7</td>
<td>140.5</td>
<td>200.2</td>
<td>4.4</td>
<td>276.3</td>
<td>193.6*</td>
<td></td>
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<td></td>
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<tr>
<td>Imports</td>
<td>293.9</td>
<td>417.6</td>
<td>42.1</td>
<td>670.1</td>
<td>60.5</td>
<td>724.9</td>
<td>8.2</td>
<td>146.6</td>
<td>804.5*</td>
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<tr>
<td>Goods</td>
<td>248.6</td>
<td>343.3</td>
<td>38.1</td>
<td>544.5</td>
<td>58.6</td>
<td>592.1</td>
<td>8.7</td>
<td>138.2</td>
<td>669.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>45.3</td>
<td>74.3</td>
<td>64.0</td>
<td>125.6</td>
<td>69.0</td>
<td>132.8</td>
<td>5.7</td>
<td>193.2</td>
<td>135.5*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Deficit</td>
<td>14.7</td>
<td>115.5</td>
<td>685.7</td>
<td>29.6</td>
<td>-74.4</td>
<td>63.2</td>
<td>113.5</td>
<td>329.9</td>
<td>108.1*</td>
<td></td>
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</tr>
<tr>
<td>Total Trade</td>
<td>573.1</td>
<td>719.7</td>
<td>25.6</td>
<td>1,310.6</td>
<td>82.1</td>
<td>1,386.6</td>
<td>5.8</td>
<td>141.9</td>
<td>1,500.9*</td>
<td></td>
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<tr>
<td>Gross Domestic Product</td>
<td>2,708.0</td>
<td>4,038.7</td>
<td>49.1</td>
<td>6,038.5</td>
<td>49.5</td>
<td>6,379.4</td>
<td>5.6</td>
<td>135.6</td>
<td>6,791.0</td>
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<tr>
<td>Trade Deficit/GDP(%)</td>
<td>0.5</td>
<td>2.8</td>
<td>0.49</td>
<td>0.9</td>
<td>1.59</td>
<td></td>
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</tbody>
</table>

*The 1994 figures are preliminary. Figures for services exports and imports are not comparable to 1980-93 figures, due to non-inclusion of military-related services. Their inclusion would increase the services surplus by $8-10 billion and decrease the trade deficit by the same amount.

Source: U.S. Dept. of Commerce.
cally in the sectors of power, telecommunications, and infrastructure, as these countries modernize their facilities. As the recent history of foreign trade growth has shown, increased export opportunities for the U.S. are also accompanied by increases in imports from other countries. Growth in global markets will place continuing pressure on U.S. firms to remain competitive. On a nationwide basis, import growth is likely to offset most, if not all, of the export gains.

**Impact of NAFTA and GATT on U.S. Foreign Trade**

The North American Free Trade Agreement (NAFTA) brings together 360 million consumers creating a $7 trillion market, the world’s largest and richest trading bloc. The phasing out of tariffs and elimination of non-tariff barriers on over 10,000 categories of goods in the long run may result in a considerable increase in U.S. exports to Mexico and Canada. However, it is important to note that the impacts of NAFTA are sensitive to exchange rate shifts. Devaluation of the Canadian dollar and Mexican peso greatly reduce the near term potential for export increases, despite NAFTA.

The first year of NAFTA, prior to peso devaluation, led to more gains than losses for U.S. firms. Although examples of firm flight or job loss can be found, a broader look at trends suggest that these instances were outweighed by export expansion. For example, Coopers & Lybrand’s “Trendsetter Barometer” interviewed CEOs of 410 of the fastest growing U.S. companies over the last five years. For these growth companies, NAFTA resulted primarily in increased export opportunities in Canada and Mexico, rather than relocating jobs to these countries. The survey found that, of the 21% of America’s growth companies that have become more active in Canada and Mexico since Congressional approval of the agreement last year, nearly all (i.e., 20%) are exporting goods and services; 13% have increased their exports to Mexico, and three-fourths of the latter group is involved only in exports and do not import from Mexico. Since NAFTA was passed, as shown in Figure 3, only 5% of the surveyed firms have set up production in Mexico or Canada (mostly in Mexico) and just 4% are importing more (mostly from Canada). Moreover, 84% of the growth companies that have expanded their activities in these markets reported plans to add more employees. Devaluation and recession in Mexico may well have shifted these plans in the near term.

Some of the increased imports resulting from NAFTA and from currency changes may benefit U.S. producers, to the extent that they have a history of being used as inputs to production. The provisions of GATT, which affect tariffs worldwide, may result in even higher economic stimulus. NAFTA and GATT taken together imply that for many U.S. firms, Mexico may become a platform for penetrating hitherto tough markets in the rest of the world, particularly in the fastest growing market in the world—the Asia-
Foreign Trade ...

(Continued from page 3)

Pacific region. Two conditions contributing to entry include firstly, U.S. firms will have access to low cost labor and thus boost their competitiveness, at least in terms of costs (the NAFTA effect), and secondly, foreign markets will be more open and consumers will face lower prices due to lower tariffs and duties (the GATT effect).

California and Foreign Trade

Economic impact of foreign trade in California comes from several factors, including:

- Goods and services manufactured/originating in California for export.
- Foreign produced goods and services imported to California.
- Transit of exports and imports through California ports.
- Indirect production effects from imports and exports occurring in other U.S. markets.

Goods and services produced in California for foreign consumption generate jobs and income for the state in raw materials production, manufacturing and services. Goods shipped through California ports, either to U.S. consumers or to foreign consumers, generate jobs and income in distribution activities within the state. Each of these activities has multiplier effects on the economy, through the purchase of goods and services by the firms and their employees. Foreign trade can lead to output and job reduction, as well, in some sectors. Imports that displace existing producers in California lead to a decrease in jobs and income.

This analysis draws on trade data published by two agencies: the U.S. Customs Service, which compiles statistics on the volume of foreign trade (imports and exports combined) passing through the three California customs districts—Los Angeles, San Francisco, and San Diego; and the California World Trade Commission, which compiles data from the U.S. Department of Commerce on exports produced in California. Taken together, these data allow analysis of the amount and kinds of goods and services originating in California for export. Data on foreign imports to California are not available, so the discussion of the impacts of imports on the state’s economy relies on interpretation from import trends at the U.S. level.

Merchandise Trade Volume Through California’s Ports

California’s share of total U.S. foreign trade has increased by several measures including the volume of trade through California ports. Figure 4 shows that California’s port activity (including trade through harbors, airports, and vehicle border crossings) has been increasing relative to total U.S. foreign trade for more than a decade. California port districts handled 12% of total U.S. merchandise trade volume in 1980. By 1993 the share of the state’s customs districts had gone up to nearly 20% of total U.S. trade in merchandise goods. Between 1980 and 1993 the volume of trade handled by California customs districts grew at an annual average rate of around 11% (based on current dollars), whereas the volume of U.S. trade grew by approximately 7% per year. This diversion of movement of goods from the East coast ports to the West coast ones reflects a shift in trade patterns for the U.S. as a whole and is an indicator of the growing importance of trade with Pacific Rim countries.

This gain over the years has been sustained through recent recessions experienced by California and by five of the state’s top ten trading partners. Indeed, the trade volume handled by the Los Angeles Customs District reached a record $145.9 billion in 1994, nearly 13.5% higher than in 1993 despite the particularly severe regional recession. It should be noted that insofar as the goods handled by California ports also originate in the contiguous western states, growth of these volumes also may reflect the growing economic weight of the Western U.S. region as a whole.

Exports from California

California has shared in the strong growth of goods and services exports in the U.S. The percent of U.S. export goods produced in California has risen since 1987. Exports of goods produced in California doubled in the past six
markets of the Far East, particularly in the areas of finance, consulting and insurance. Unfortunately, annual state estimates of service exports are not published by the Department of Commerce. The Center for the Continuing Study of the California Economy in a 1987 study for the California World Trade Commission, estimated that California accounted for 20% of the nation’s service exports. If the 20% share remained constant since 1987, California would account for $40 billion of the nation’s $200 billion in 1993 service exports.

U.S. Imports and California’s Economy—A Counter-Balance to Export Gains

While trade agreements such as NAFTA and GATT and growth of Pacific Rim economies will lead to more exports, they will also increase imports into the United States. The growth of imports will affect the California economy both directly and indirectly, and in both positive and negative ways. On the positive side, from the consumer's point of view, the availability of imports increases the variety of goods or services available for purchase and may reduce the cost. From the firm’s point of view, to the extent that imports are used in the production process, an increase in availability and price decreases lower production costs and enable the firm to produce more. On the negative side, imports will have a dampening effect on the California economy if they become a substitute for goods and services produced in California.

No direct measures of imports and their impact on the California economy are available. Instead, to evaluate the effects of imports on the state’s economy, we examine broader trends at the national level in imports and put these in the context of the structure of California’s economy. California’s top ten goods employment sectors and selected services sectors are shown in Table 5. Not surprisingly, goods production is dominated by high tech sectors and by agricultural products. For services, sectors with high levels of employment and/or high shares of jobs relative to U.S. employment levels include business services, financial services, engineering and management, amusement and recreation, and motion pictures. To some extent, these non-manufacturing sectors are linked to high tech manufacturing, particularly in the area of telecommunications. Impacts of imports on employment in California are most likely to fall on sectors that a) have a heavy component of imports as part of total U.S. consumption, and b) have a large presence in California.

Several of California’s major employment sectors are affected by imports, either as competitors to their products or as inputs to production. Table 6 shows import levels and trends in the top import sectors in the U.S. and in other sectors that are of importance in California employment. The four largest U.S. import

### Table 4

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</thead>
<tbody>
<tr>
<td>Electrical Equipment</td>
<td>$11.8</td>
<td>$14.8</td>
<td>$16.9</td>
<td>43.2%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Computers, Ind. Equipment</td>
<td>13.5</td>
<td>15.1</td>
<td>16.6</td>
<td>23.3%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>7.9</td>
<td>11.9</td>
<td>8.5</td>
<td>7.3%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Instruments</td>
<td>4.4</td>
<td>5.0</td>
<td>5.3</td>
<td>20.7%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Food Products</td>
<td>3.8</td>
<td>4.0</td>
<td>4.3</td>
<td>14.7%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Crops</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>-0.5%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>2.4</td>
<td>2.6</td>
<td>2.6</td>
<td>10.9%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Petroleum</td>
<td>1.5</td>
<td>1.7</td>
<td>1.6</td>
<td>9.0%</td>
<td>-36.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$58.4</strong></td>
<td><strong>$68.9</strong></td>
<td><strong>$70.3</strong></td>
<td><strong>20.3%</strong></td>
<td><strong>13.5%</strong></td>
</tr>
</tbody>
</table>

*Source: California World Trade Commission.

### Table 5

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment Q1 1994E (Thousands)</th>
<th>% of Total Calif. Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Agricultural</td>
<td>11,955.5</td>
<td>100.0%</td>
</tr>
<tr>
<td>Top Goods Producing Sectors</td>
<td>2,238.9</td>
<td>18.7%</td>
</tr>
<tr>
<td>Electronic Equipment</td>
<td>211.0</td>
<td>1.8%</td>
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<tr>
<td>Electronic Components</td>
<td>118.2</td>
<td>1.0%</td>
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<tr>
<td>Industrial Machinery</td>
<td>185.9</td>
<td>1.6%</td>
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<tr>
<td>Computers</td>
<td>84.5</td>
<td>0.7%</td>
</tr>
<tr>
<td>Food &amp; Kindred Products</td>
<td>180.2</td>
<td>1.5%</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>176.3</td>
<td>1.5%</td>
</tr>
<tr>
<td>Aircraft</td>
<td>92.9</td>
<td>0.8%</td>
</tr>
<tr>
<td>Instruments</td>
<td>170.8</td>
<td>1.4%</td>
</tr>
<tr>
<td>Printing &amp; Publishing</td>
<td>153.2</td>
<td>1.3%</td>
</tr>
<tr>
<td>Apparel &amp; Other Textile</td>
<td>139.8</td>
<td>1.2%</td>
</tr>
<tr>
<td>Fabricated Metal Products</td>
<td>111.2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Chemicals &amp; Allied</td>
<td>70.6</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

*Estimated from average of monthly data reported by EDD for 1994.

*Selected Services:
- Business Services: 782.6, 6.5%
- Engineering/Management: 375.8, 3.1%
- Financial Services: 366.8, 3.1%
- Amusement/Recreation: 170.1, 1.4%
- Motion Pictures: 125.5, 1.0%
- Air Transport: 90.6, 0.8%
TABLE 6
Top Import Sectors, U.S., 1993 (Current $)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Import Value ($millions)</th>
<th>Share of Imports</th>
<th>Change, 1980-93 Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total U.S. Imports, 1993</td>
<td>705,684</td>
<td>100.0%</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total Merchandise Imports</td>
<td>589,244</td>
<td>83.5%</td>
<td>339,494</td>
<td>135.9%</td>
</tr>
<tr>
<td>Automotive</td>
<td>102,441</td>
<td>14.5%</td>
<td>74,184</td>
<td>262.5%</td>
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<tr>
<td>Petroleum</td>
<td>58,585</td>
<td>8.3%</td>
<td>16,040</td>
<td>37.7%</td>
</tr>
<tr>
<td>Energy Products</td>
<td>57,189</td>
<td>8.1%</td>
<td>10,835</td>
<td>-33.2%</td>
</tr>
<tr>
<td>Metals</td>
<td>36,504</td>
<td>5.2%</td>
<td>9,414</td>
<td>34.8%</td>
</tr>
<tr>
<td>Computers*</td>
<td>38,182</td>
<td>5.4%</td>
<td>36,555</td>
<td>2,483.0%</td>
</tr>
<tr>
<td>Travel*</td>
<td>42,329</td>
<td>6.0%</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Textiles and Apparel*</td>
<td>31,674</td>
<td>4.5%</td>
<td>25,312</td>
<td>397.9%</td>
</tr>
<tr>
<td>Electronic Equipment*</td>
<td>30,593</td>
<td>4.3%</td>
<td>24,450</td>
<td>387.6%</td>
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</tbody>
</table>

*Sector of key importance in California.

Import Levels in Other Major California Employment Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment (June 1992 and March 1994)</th>
<th>1993</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and Food Products</td>
<td>26,054</td>
<td>9,490</td>
<td>51.1%</td>
</tr>
<tr>
<td>Non-Auto Transport Equipment</td>
<td>12,317</td>
<td>7,951</td>
<td>182.1%</td>
</tr>
<tr>
<td>Instruments</td>
<td>9,706</td>
<td>8,118</td>
<td>511.2%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>18,090</td>
<td>12,822</td>
<td>243.4%</td>
</tr>
<tr>
<td>Business and Professional Services</td>
<td>4,389</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Financial Services</td>
<td>5,560</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: Survey of Current Business (June 1992 and March 1994) and CREUE calculations.

sectors—automobiles, petroleum, energy products and metals—are not major California employers. The next four—computers, travel, textiles and apparel, and electronics—are all significant industries in California. The rate of growth of imports is relatively high in at least three of these sectors, indicating that widening foreign trade may bring significant risk of import displacement along with new opportunities for exports. Two other significant California employment sectors—instruments and chemicals—are also experiencing high levels of import growth at the national level, although absolute levels of imports are still low.

The Trade Balance and California's Shifting Economy

A look at the trade balance helps to summarize the net impacts of exports and imports on California's economy. Table 7 shows trends in the U.S. trade balance in sectors important to California. For a number of these sectors—agricultural commodities, airplanes and parts, scientific instruments, and chemicals—the United States has a significant trade surplus. The impacts of trade agreements on these sectors will depend on the character of the industries in California. Agriculture, for example, is likely to see increases in imports of fresh produce from Mexico, but has also (until the peso devaluation) seen increasing exports of meat products to Mexico, and is expected to expand exports of other food products to Asian countries as a result of GATT.

Airplane manufacturers are likely to continue to be exporters, although the extent to which they remain in California is a separate question. Through 1992, California maintained a growth advantage in exports in this sector compared to nationwide trends. However, in 1993, about two-thirds of the drop in aircraft exports nationwide fell on the economy of California, again a reflection of the state's dominance in this sector.

California has had a strong competitive advantage in scientific instruments production. The state is likely to maintain this advantage, but trade agreements may make it easier to globalize production. The result would be the retention of higher wage specialized activities in California, but slower growth within the state of production activities with low to moderate wages.

Electronics, a sector of crucial importance to California, showed an improved trade balance nationwide in the early 1990s, without a corresponding employment increase in the state. This sector employs over 210,000 people in California, and accounts for 16-17% of the total U.S. electronics output, and for a far larger share of U.S. exports in selected subcategories. Nationwide, the trade balance in electronics went from a deficit that peaked in 1988 at $4.8 billion to a surplus of approximately $1.8 billion by

(Continued on page 8)

TABLE 7

<table>
<thead>
<tr>
<th>Sector</th>
<th>Data for U.S. (Mill. of Current $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transp. Eq. (x Auto)</td>
<td>22,334</td>
</tr>
<tr>
<td>Ag./Fish, feeds, bev.</td>
<td>13,533</td>
</tr>
<tr>
<td>Instruments</td>
<td>5,849</td>
</tr>
<tr>
<td>Petroleum</td>
<td>(54,648)</td>
</tr>
<tr>
<td>Chemicals</td>
<td>14,044</td>
</tr>
<tr>
<td>Ind. Mach. + Computers</td>
<td>9,718</td>
</tr>
<tr>
<td>Computers/Of.Equip.</td>
<td>849</td>
</tr>
<tr>
<td>Electronics</td>
<td>1,355</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>1,155</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>200</td>
</tr>
</tbody>
</table>

*Includes food and non-food crops.

Source: U.S. Department of Commerce and CREUE calculations.
1993. Exports from California in this sector have been growing very rapidly since 1990—110.6%, 12.9% and 14.6% in 1990-91, 1991-92 and 1992-93, respectively. However, exports and imports are interlinked, with imports occurring for inputs and for the purpose of reexporting, as well as for final consumption in the U.S. The growth of output and exports in this sector during a period when employment dropped in California may in part be explained by the shift in where employment intensive production is occurring versus the location of higher value-added (and less job intensive) activity. The trade surplus in this industry is not substantial and threatens to turn into a deficit in 1994, leaving net jobs gains at the U.S. level from foreign trade in question in this sector. California’s high share of exports in this sector appears to outweigh its share of U.S. imports, based on several estimates, suggesting that the state may continue to have a trade surplus with the rest of the world, even as the U.S. once again is in deficit.

The computer industry is a second major California employment sector that has both high levels of exports and imports nationwide. Since 1980, the U.S. trade balance in computers has steadily eroded from a surplus of $6.4 billion in 1980 to a deficit of $12 billion in 1993. Nevertheless, in California, computer exports have been growing steadily, and the trade “balance” in California may be substantially better than for the U.S. as a whole, because California produces a larger share of U.S. computer exports than it consumes of U.S. computer imports. Like electronics, the computer sector is one where imports and exports are interconnected, with imported inputs contributing to export production. The increasing globalization of this sector is likely to keep California job growth to high value added activities, suggesting that employment growth may be at a slower pace than export growth.

The United States has particularly high deficits in autos, apparel and industrial consumer goods. Of these, the apparel industry is of importance to the economy of California. It employs approximately 140,000 people, almost 1.5% of employment nationwide. Nationwide, the deficit in apparel, clothing and accessories in 1993 was over $28.8 billion. Nevertheless, California exports in this sector have grown sharply, up by more than 30% annually in both 1992 and 1993, and annual exports from the state now exceed $1 billion. California certainly continues to import far more than it exports in this sector. However, it seems likely that exports in this sector are growing for specialized market niches, independent of import levels.

In summary, while the export market outlook appears strong, the import side of the picture is mixed, with job displacement from imports somewhat counterbalanced by lower input costs. Because California’s industry emphasis is more in export sensitive than in import sensitive industries, California is likely to be a net job gainer from increased foreign trade. However, these gains will be tempered by structural changes that will come with the impact of more open markets on the long term growth of California industries. The broadening of foreign trade will help to solidify a long term trend in the restructuring of the California economy—the trend for standardized production to leave the state and for specialized production and research and development activity to remain in-state. The result may be strong output growth, strong income growth in selected sectors, but weaker employment growth.

**NAFTA, GATT, and a Pacific Rim Location Affect Opportunities for California**

Some of the recent factors influencing growth of trade nation-wide are particularly important to California. California is sensitive to the U.S. trade position with Mexico. Short term losses will be primarily on the export side. Mexico is California’s second largest trading partner and, before the recent global recession, trade between the two countries was growing rapidly. Between 1987 and 1991, for example, California’s exports to Mexico increased by 145%. Peso devaluation and recession in Mexico will delay any benefits California exporters might have experienced from NAFTA.

Concern over the outmigration of firms is not likely to be increased in California by NAFTA. California as a “high wage cost” state with strict environmental standards is already losing jobs in cost sensitive industries to other states. The addition of Mexico to the list of places where California firms can migrate is unlikely to greatly increase the rate of outflow from California (although it may divert the migration of California firms away from lower wage states). Increased imports from NAFTA may affect the markets for some California producers, but the agreement may also result in trade diversion away from Asian companies producing in Asia to U.S. companies operating in Mexico. This would temper the impact of import growth on firms in California and throughout the United States. To the extent that California firms use lower cost production in Mexico (usually diverted from other states) to increase competitiveness, rising exports may then lead to job growth in the higher value-added portions of production activity that remain in California.

With the GATT agreement lowering tariffs for construction and agriculture, California is also likely to see expanded trade opportunities in these two important sectors of the state’s economy. A study by Nguyen, Perroni and Wigle estimates the net positive impact of GATT on the U.S. economy to be 0.8% of its GDP. Even assuming that in relative terms the impact on the state product of California is similar (despite higher than average dependence on trade) this would result in an increased state income in the
region of around $6 billion, and job creation in the tens of thousands.

The state is well positioned to take advantage of other emerging opportunities beyond the recent trade agreements. California is an integral part of the Pacific Rim, and it has extensive networks, contacts, joint ventures, collaborations in the region, particularly in Japan, Hong Kong, and Singapore, all of whom are among its largest trade partners, and with China, which has the fastest growing large economy in the world. The prospect of job loss due to expanding import activity has to be viewed, therefore, against the perspective of increased exports and retention of high-value-added jobs.

Other characteristics of California’s economy and population also suggest that the state is well positioned for participation in a global economy. In particular, the state’s growing international base of firms and population create both internal growth and links with the rest of the world. Other factors, such as higher educational institutions of international stature, have helped the state to maintain a strong position in research and new product development in some of its key industries. Immigration has provided California with an additional resource and in many ways helps it cope with the requirements of the international marketplace. The multicultural population of California is, by its very nature, well adapted as “human capital” for the increasing internationalization of the state’s and the nation’s economy.

Recent political events in California may have dampened the positive benefits of having a diverse, multi-national population. A strong showing for a state ballot initiative to deny services to foreigners in the country illegally, and the election of a governor supporting this initiative, have had at least verbal repercussions in Mexico. It remains to be seen whether this will translate into significant losses of business with Mexico and a reduction of the favorable impacts of NAFTA.

Foreign Trade—One Indicator of a Broader Base of Change

Foreign trade is not the new economic base of California, but it is one of a number of factors that will contribute to the state’s growth for the rest of the decade. The type of growth generated by foreign trade reflects both the strengths that remain in the state and some of the concerns that are likely to arise as the state’s economy recovers more broadly. In goods production, growing foreign trade will bring higher wage jobs and will demand and make use of a more skilled labor force. While technological changes make it possible for jobs of this type to locate in many different places, at least for the present there appears to be a preference for the continued locational concentration of many of these jobs, to California’s advantage. Many of the jobs related to the foreign distribution of goods also are higher waged jobs, and these often will be geographically tied to California or other West Coast locations. In contrast, the services jobs created by foreign trade, are not predominately high wage jobs on average, according to Department of Commerce figures, nor do they necessarily require much education or training. Thus, foreign trade growth, like other types of economic restructuring experienced nationwide, may contribute to the separation of labor force and the population into two groups, one of skilled and highly paid workers and the other of low paid, low skilled workers.

Despite these issues (which are certainly not confined to foreign trade), foreign trade is an area of growth for California that will increase income and jobs, support industries that have provided strength to the state’s economy in the past, and take advantage of the state’s demographic and geographic characteristics.

Ashok Bardhan
Cynthia Kroll

A detailed description of foreign trade activity in industries of importance to California and employment effects of foreign trade are reported in a forthcoming working paper.

Coming Soon...
Bear Territory

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