FRBSF Economic Letter

2000-33 | November 3, 2000

Subscribe RSS Feed Share

« More Economic Letters

The Shipping News: Western Exports Rebound

Mary Daly and Carol D'Souza

After more than two years of weakness, exports from the West have begun to rebound. The recent pickup is due in large part to the economic resurgence of a number of trading partners of western states and to rapid growth in world demand for a variety of high-tech manufactured products. As a result, trade levels this year in the nine western states that make up the Twelfth Federal Reserve District are above those recorded in 1997. While the high value of the U.S. dollar relative to other currencies could damp the outlook for District exports, recently released IMF world economic forecasts, as well as newly passed legislation normalizing trade relations with China, point to continued export strength.

Export patterns

The Twelfth Federal Reserve District comprises Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington. Throughout the *Letter* we compare patterns in the District to patterns in the rest of the U.S. Since California accounts for more than 50% of District exports and since Washington exports are dominated by the shipment of aircraft, we also examine export values for these states and the rest of the District separately.

Export destinations. To understand why exports have fluctuated in the past several years, it is important to examine which countries receive exports from Twelfth District states and which products District states export. The top panel of Figure 1 shows the share of District merchandise exports going to countries in three trading regions, defined as the Asia 10 (China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand), NAFTA (Canada and Mexico), and the EU (Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and Sweden). The data come from the Massachusetts Institute of Social and Economic Research (MISER), and the export shares represent trade patterns for the first half of 2000.

As the figure shows, in both the District and the rest of the U.S., more than 80% of all exports go to countries in these three regions. District states trade more with Asia than do states in other parts of the U.S.; Asia accounts for about 40% of District exports, compared to less than 20% for the rest of the U.S. About one-fifth of District merchandise exports are shipped to EU nations, roughly the same share as in the rest of the U.S. Finally, in general, the District is less dependent on NAFTA trading partners than is the rest of the U.S. However, this difference is largely due to differences in trade with Canada (not shown separately); exports to Mexico account for approximately the same share (15%) of total shipments from both the District and the rest of the U.S.

In general the trading patterns described for the District excluding California and Washington are similar to those for California and Washington. The main exception is the importance of trade with EU nations. In the District excluding California and Washington, the share of exports to EU nations is slightly over 10% compared to more than 20% in California and more than 35% in Washington. In addition, the share of exports from Washington to NAFTA nations is low compared to other western states and to the rest of the U.S.

Although export demand from Asian countries continues to play a major role in the District, it has declined since the East Asian financial crises of 1997. This decline, combined with more open trade relations with Canada and Mexico under NAFTA and the recovery of a number of EU trading partners, has led to a more diversified trade portfolio for the West since 1997. The most significant change has been in trade with NAFTA nations, particularly Mexico. The share of District trade with Canada and Mexico increased by nearly 30% between 1997 and 2000, with exports to Mexico increasing by 60%. In California, trade with Mexico recently surpassed trade with Japan, the state's leading export destination for most of the 1990s.

Export composition. In most states in the District, exports are dominated by shipments from five SIC categories: industrial machinery and equipment (includes semiconductor manufacturing equipment), electrical machinery and components (includes computers and components, semiconductors, and telecommunications gear), instruments and related products, agricultural commodities and products (including fish), and transportation equipment. For ease of presentation, we collapse the five categories into three: (1) high-tech products, (2) agricultural products, and (3) transportation equipment. The bottom panel of Figure 1 displays the share of exports in each of these three industry groups for the District, the rest of the U.S., and the three District subgroups.

As the figure indicates, shipments from industries defined as high-tech account for the vast majority of District exports, while shipments of transportation equipment, primarily aircraft, make up about 20% and agricultural exports less than 10%. In general the patterns for the District hold across the individual states; the main exception is Washington, where exports of transportation equipment account for about two-thirds of total export values from the state. In California, the District's largest exporter, shipments of high-tech products dominate at a 67% share. Combined, agricultural and transportation exports account for about 14% of California's export values.

Recent growth in merchandise exports

Figure 2 shows the percentage change in the nominal value of merchandise exports–manufactured and non-manufactured products–for the Twelfth District and the U.S. minus the Twelfth District for the period 1997 through the first half of 2000. The percentage change in nominal exports is calculated for the period shown relative to the same period one year earlier. As the left side of the chart indicates, District export growth tracked national growth closely during the past 3-1/2 years: following fairly rapid growth in 1997, export totals fell in 1998, grew weakly in 1999, and then surged in the first half of 2000, increasing by more than 10% over the same period a year earlier.

The right side of the graph displays export growth for California, Washington, and the remaining seven District states. This breakdown shows that California's export patterns were similar to those of the seven other District states; notably, during the first half of 2000, exports from these states surged, increasing by more than 20% over year-earlier levels, far above the pace of growth recorded for the rest of the nation. In contrast, Washington's patterns showed rapid growth in 1997 and 1998, followed by a significant drop-off in 1999 and the first half of 2000. This pattern reflects the dominance of aircraft shipments in Washington's exports. Planes require a long lead time to build so that orders placed two to three years ago will be delivered this year. The export pattern roughly follows the general pattern of Boeing's recorded aircraft deliveries: the percentage change in deliveries (change from same period a year earlier) from 1997-2000H1 were: 38% in 1997, 50% in 1998, 10% in 1999, and -23% in 2000H1.

Growth by destination region. Figure 3 shows changes in exports from 1997 through the first half of 2000 to the three main trading regions defined above, namely Asia 10, the EU, and NAFTA. As the figure reveals, the East Asian financial crisis and ongoing weakness in Japan damped export growth to Asia as early as 1997. As the effects of the financial crisis spread, U.S. and District export values fell. In 1998, exports to Asia from both the District and the rest of the U.S. were about 15% below year-earlier levels. During the same period, export growth to NAFTA and EU trading partners also slowed, weakened by export competition from nations in Asia, the strong dollar, and slower economic growth in Europe, Canada, and Mexico.

Although export growth from District states showed signs of recovering in 1999, the real rebound occurred during the first half of this year. Exports to Asia increased almost 16% compared to the same period last year; growth was most rapid in California, where exports surged by 26%. Exports to NAFTA trading partners also increased rapidly over the period, growing by about 23%, and exports to EU trading partners increased by about 20%. Exports from District states other than California and Washington have followed a similar pattern, although rates of export growth to EU nations have been slower. In Washington, exports to Asia and the EU nations declined.

Growth of high-tech exports

A major component of the recent pickup in District exports has been the resurgence of shipments of high-tech products. Sales of semiconductors, semiconductor manufacturing equipment, and a variety of telecommunications gear have risen rapidly this year. This has boosted export growth among high-tech manufacturing firms. In general, changes in exports of high-tech goods follow the patterns described for exports more generally. Exports from industries producing high-tech products declined in 1998, rebounded slightly in 1999, and have surged during the first half of 2000. This pattern held for both the District and the rest of the U.S. During 2000H1 exports from the sectors defined as high-tech increased 27.5% in the District, more than four times as rapidly as in 1999. Although the largest increase occurred in California, high-tech exports grew rapidly throughout the District, even in Washington.

Outlook for District exports

Looking forward, recently released IMF forecasts of solid growth in Europe, parts of Asia, and Mexico over the next year suggest that export demand from these countries will remain strong. In addition, the newly passed legislation normalizing trade relations with China should boost District export demand, particularly for high-tech products. Finally, the rapid growth in demand for high-tech products is expected to continue; the Semiconductor Industry Association forecasts that growth in demand for Internet devices such as handheld computers and web-enabled phones and other devices will increase by 50% during the next three years. One factor potentially damping the outlook is the high value of the U.S. dollar relative to other currencies. However, thus far this does not appear to have constrained growth in export demand in the District.

Mary Daly

Senior Economist

Carol D'Souza
Research Associate

Subscribe RSS Feed Share

More Economic Letters

Please send editorial comments and requests for reprint permission to

Research Library
Attn: Research publications, MS 1140
Federal Reserve Bank of San Francisco
P.O. Box 7702
San Francisco, CA 94120