The Global Information Industry and the Eastern Caribbean

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The information industry offers significant export opportunities to the countries of the Organization of Eastern Caribbean States (OECS). Focused action—especially in telecommunications price reductions and aggressive international promotion—could quickly deliver jobs and new export earnings. Investor interest is strong. U.S.- and European-based customer service centers, image processing and claims fulfillment operations, and transcription and secretarial services see the potential to cut labor costs through offshore operations. Neighboring countries such as Barbados, the Dominican Republic, and Jamaica already are pursuing investment and contract work.

One possible strategy for the OECS countries is to offer office-park-style "free zones" that provide liberal business climates and to authorize affordably priced teleports (satellite earth stations that bypass the local telephone network) that especially benefit export-oriented information service providers. Teleports today can be made operational within three months at a cost of well under US$250,000 and can offset a country's disadvantages in cost and frequency of air freight service by eliminating the need to physically ship materials offshore for processing. One such teleport is now established and operating in Grenada. This earth station—financed and installed by a North American data entry firm and transferred to Cable & Wireless—has led to the creation of more than 200 jobs. Workers receive 100,000 images of waybills daily from Federal Express in North America for processing. With its daily volume of 1.2 million waybills, this one customer could ultimately create as many as 2,000 jobs offshore.

This Note reviews the competitive strengths and weaknesses of the Eastern Caribbean countries in information services and suggests remedial actions to help them expand in that industry.

Competitive advantage
The Eastern Caribbean possesses several advantages as a base for offshore production of services:

- relatively affordable labor costs.

Eastern Caribbean direct labor costs for a range of information processing services are about 25 to 40 percent of North American and Western European levels (table 1). At the top
Trends in the global information industry

Since 1980, developing countries have been the beneficiaries of an inflow of export-oriented information processing operations. Labor cost differentials with OECD economies have created export jobs in such operations as:

- slow-turnaround data entry
- fast-turnaround imaging and claims processing
- computer-aided design and geographic information systems
- software development and services
- electronic publishing
- multimedia and hypermedia data base development
- voice center operations
- remote secretarial services
- customer support and technical support
- indexing and abstracting services
- research and technical writing services.

Until recently, most export jobs have depended on air freight delivery of source documents for conversion. But with the introduction of competitively priced telecommunications services, countries can now compete much more aggressively with onshore firms for fast-turnaround work. Teleports—satellite earth stations that bypass public telephone networks to provide companies with affordable, high-quality international telecommunications services—are emerging as a key enabling factor for these operations.

This presents significant opportunities. In North America alone more than 10 million workers are now employed in higher-skill electronic publishing, claims processing, technical writing, and other "back-office" operations. As a result of the 10 to 25 percent labor cost savings they offer relative to major cities, many remote communities in the United States have experienced growth in back-office market segments over the past decade. Now the search for greater labor cost savings is compelling many of these operations to look overseas, primarily to developing countries that can offer direct labor cost savings of 70 percent or more relative to prevailing North American levels. In evaluating alternative locations, availability of telecommunications is often a critical factor. Because satellite earth stations have fallen in cost, multinational corporations are prepared to finance needed equipment to ensure close links with clients and suppliers.

(or, more accurately, the bottom) of the league is the United States, where it costs US$8 an hour to hire a data entry worker. St. Lucian and Jamaican workers are cheaper, at US$1 an hour. Data entry companies operating in the Caribbean have found that keyboarding productivity is approaching U.S. levels, despite differences in initial skills. Caribbean workers attracted to "back-office" computer services are drawn from the top third of the workforce and tend to have far lower turnover rates than their U.S. counterparts. That means labor costs per unit of output vary by much more than pay differentials alone would suggest.

- good to excellent local and international public telephone systems. Cable & Wireless has made substantial investments in the Eastern Caribbean, resulting in a generally high-quality local and international service for voice communications.
- linguistic and cultural affinities with major markets. Historical relationships, shared values, and a common language have created strong language and cultural ties between North America and Europe and the Eastern Caribbean. And the educational base in the Caribbean compares favorably with that in many potential competitors in the developing world. The language and literacy of operators can be critical, especially if data entry is based on hand-written material.
- time-zone affinities with major North American and Western European markets. Many potential job-generating sectors for the Eastern Caribbean—voice center operations, remote secretarial services—are used heavily during business hours. Compatible time zones should enable the Eastern Caribbean to sustain a competitive advantage over other (lower-cost) English-speaking countries, such as India and the Philippines.
- relative transport convenience (for air-freight-oriented information services). Although air freight service to some islands is less frequent than to others, the Eastern Caribbean as a whole benefits from relative proximity to North America and, to a lesser extent, Western Europe compared with its Asian and Pacific competitors.
- open environment for private investment. The Eastern Caribbean countries are market-based economies with prudent macroeconomic management. In addition to free capital flows, they enjoy a stable currency system thanks to independent central banks.
Constraints
Despite its competitive advantages, the Eastern Caribbean still must overcome significant near-term constraints if it is to become known as a world-class choice for offshore information processing firms:

- the main constraint is the high price of international "dialup" communications, rendering operations of many kinds in the Eastern Caribbean uncompetitive. A comparison of dialup service prices gives a sense of the magnitude of the obstacles. Jamaica's Digiport offers overseas calls for as little as US$0.22 per minute, as well as "fast-fax" connections that can bring the price of transmitting documents offshore down to US$0.02-0.03 per page. Direct-dial overseas calls to the United States from St. Lucia, by contrast, cost US$1.85 per minute, and local firms face prohibitive price and access constraints when seeking to set up fast-fax 56/64 kilobits-per-second circuits on a dialup basis.
- prices for leased international circuits are also uncompetitive relative to those in alternative locations. In Jamaica, monthly lease prices for connecting to Intelsat satellites are less than US$1,900 for nonstop 56/64 kilobits-per-second links. The Eastern Caribbean, by contrast, quotes monthly lease prices of more than US$4,000 (table 1).
- obstacles in the investment approval process, especially for export-oriented local enterprises, deter growth, as do rigidities encountered by foreign firms in obtaining visas for needed personnel.

Table 1 Labor and telecommunications costs in selected countries
(U.S. dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>Hourly wage for data entry</th>
<th>Hourly wage for secretarial services</th>
<th>Hourly wage for voice operator</th>
<th>Monthly cost of dedicated 56-kilobit international service (half circuit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Lucia</td>
<td>1.10 (operator)</td>
<td>2.10-2.50</td>
<td>1.70</td>
<td>4,118</td>
</tr>
<tr>
<td></td>
<td>1.70-2.50 (supervisor)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominica</td>
<td>0.80-1.00</td>
<td>2.50-3.50</td>
<td>2.25-3.56</td>
<td>4,118</td>
</tr>
<tr>
<td>Grenada</td>
<td>1.26-2.10</td>
<td>2.42</td>
<td>3.05</td>
<td>4,118</td>
</tr>
<tr>
<td>St. Kitts</td>
<td>1.40</td>
<td>2.25</td>
<td>1.80</td>
<td>4,118</td>
</tr>
<tr>
<td>St. Vincent</td>
<td>1.10-1.57</td>
<td>2.15</td>
<td>1.57</td>
<td>4,118</td>
</tr>
<tr>
<td>Jamaica</td>
<td>0.80-1.00</td>
<td>1.75</td>
<td>1.10</td>
<td>1,850</td>
</tr>
<tr>
<td>United States</td>
<td>7.00-8.00</td>
<td>8.50-10.00</td>
<td>8.00-12.00</td>
<td>1,120&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

* a. AT&T domestic office channel price, New York to Los Angeles (1994).
• gaps in skills transfer have arisen because of the rapid pace of change in technologies and market conditions, compounded in some cases by inertia in training institutions.

• a lack of promotional visibility keeps investor interest lower than for other locations; few prospective investors and outsourcers have a clear appreciation of the Eastern Caribbean’s potential as an offshore information processing location.

Future action
A possible “jump-start” strategy for promoting growth in informatics exports would incorporate the following elements:

• authorizing affordable and privately financed new teleports to serve the informatics export sector. Local and foreign teleport investors can meet in full the costs of teleport purchase and startup if they retain access to basic Intelsat wholesale rates (US$490 per month per half circuit). At present, telephone companies in the region mark up these wholesale rates by an average of 800 percent.

• designating free economic zones as a stimulus to local and foreign investment. Free zones—areas offering relief from customs duties, bureaucratic delays, taxes, and foreign exchange controls—are well known and positively viewed by international investors, who may be slower to recognize and respond to other reform initiatives. Free zones should provide transparent business climates for eligible local firms as well as for foreign firms, and should be promoted as a near-term stepping stone to (and demonstration area for) further systemic reforms.

• introducing new skills acquisition opportunities. Through low-cost global satellite links, it will be possible for the Eastern Caribbean to access a far wider range of practical business and technical courses. This will benefit technical institutions, entrepreneurs, and employees. Ensuring that new entrants to the labor force are equipped with the basic education and keyboarding skills essential for information processing jobs could help solve some of today’s unemployment problem.

• improving the climate for private investment. To create an environment more conducive to private investment, the Eastern Caribbean countries will need to continue to liberalize authorization and registration procedures and relax limits on profit remittances, capital repatriation, and technology payments. Moreover, to attract foreign investment, these countries need to reconsider laws and regulations that restrict the right to buy land, foreign participation in certain economic activities and in the ownership of companies, and the ability of foreigners to work locally. The countries should also explore ways to extend the favorable telecommunications prices to areas beyond the physically segregated free zones.

• pursuing aggressive marketing and promotion. The countries should seek strategic alliances for investment promotion, coupled with a targeted international marketing campaign. This effort should concentrate on catalyzing outsourcing relationships between medium-size and small firms in North America and their Eastern Caribbean counterparts and on inviting direct investment from large corporations.

1 The countries of the OECS are Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.

For further information on the potential of the information industry in the OECS, contact the authors: Robert Schware (Telecommunications and Informatics Division) and Susan Hume (Caribbean Operations Division).