International Experience with Job Training: Lessons for the United States

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During the last three decades, concern about the skills of the U.S. workforce has emerged as a persistent public policy issue. In the late 1970s and early 1980s, sluggish U.S. labor productivity growth generated alarm over a perceived gap between the skills of U.S. workers and workers in other industrialized countries. In the 1990s, concerns arose about Americans being left behind as substantial changes in the labor market reduced the real earnings and labor force participation of less-skilled workers. The current focus on skills and their importance in the working lives of Americans is not new, rather a renewal. Federal training policy has its roots in New Deal public works programs. Today’s programs are the descendents of programs initiated during the Johnson Administration’s War on Poverty.

Several factors can be tied to the renewed public interest in skill development. Globalization, technological change, and the reorganization of work have combined to produce dramatic changes in the demand for workers’ skill. Into the late 1970s, workers without any college experience could anticipate a (manufacturing) job at good pay with attainable skill requirements. Most necessary skills could be acquired on the job. Today, “good” jobs increasingly require a strong base of analytical, quantitative and verbal skills.1 In the United States, these skills are produced, for the most part, by the educational system, followed in sequence by private employers. For most Americans, training occurs within firms as part of the normal course of business. Publicly provided job training is different; these programs (and other active
labor market policies) offer a second chance to many workers. In nearly all countries, these programs have a stated goal of integrating the unemployed and economically disadvantaged into the workforce.

In this chapter, we review recent evidence on training programs for a small group of mostly industrialized countries, and try to distill some lessons for the United States in its employment and training policy. We concentrate primarily on publicly funded programs targeted at unemployed and economically disadvantaged workers. Where appropriate, we make note of a country’s overall training environment. We are not the first authors seeking an international perspective on employment and training policy. Interested readers are directed to two highly useful and readable earlier papers, Haveman and Saks (1985) and Casey and Bruche (1985).

Training is just one tool in the kit of active labor market policies (ALMP). Active labor market policies are geared toward enhancing the employment and long-run earnings prospects of unemployed workers and those with low skill levels and/or little work experience. These measures include public employment services and administration (job placement, information, counseling, job matching, referrals, administering unemployment benefits); training for adults (vocational and remedial training for the unemployed and training for labor market reasons for the employed); youth programs (training and employment for unemployed youth and apprenticeship training for school leavers); programs for the disabled; and subsidized employment for the unemployed and other groups, excluding the disabled and youth (hiring subsidies, assistance in self-employment, direct job creation). Active labor market policies are grounded in a widely shared value that people need opportunities to work and advance themselves.\footnote{For the most part, we will not discuss passive labor market policies, such as unemployment compensation and subsidies for health insurance. These policies are part of the social safety net, and are geared toward reducing economic hardship resulting from joblessness.}

We acknowledge at the outset that private training expenditures vastly exceed spending by governments. As we show in Table 8.1, the United States spent 0.04 percent of GDP on public training in 2000. Public spending is estimated at just under 10 percent of total training expenditures (see Chapter 1). Even in Sweden, where spending on
Table 8.1 Public Expenditure on Labor Market Policies as a Percentage of GDP for 2000

<table>
<thead>
<tr>
<th>Country</th>
<th>Total labor market policy expenditures (active + passive)</th>
<th>Passive measures</th>
<th>Active measures</th>
<th>Public employment services and admin.</th>
<th>Labor market training</th>
<th>Youth measures</th>
<th>Subsidized employment</th>
<th>Measures for the disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1.49</td>
<td>0.98</td>
<td>0.50</td>
<td>0.40</td>
<td>0.34</td>
<td>0.06</td>
<td>0.16</td>
<td>0.06</td>
</tr>
<tr>
<td>Germany</td>
<td>3.13</td>
<td>1.89</td>
<td>1.23</td>
<td>0.19</td>
<td>0.28</td>
<td>0.07</td>
<td>0.25</td>
<td>0.22</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.87</td>
<td>0.48</td>
<td>0.39</td>
<td>0.28</td>
<td>0.18</td>
<td>—</td>
<td>0.56</td>
<td>—</td>
</tr>
<tr>
<td>Japan</td>
<td>0.82</td>
<td>0.54</td>
<td>0.28</td>
<td>0.39</td>
<td>0.11</td>
<td>—</td>
<td>0.46</td>
<td>0.04</td>
</tr>
<tr>
<td>Korea</td>
<td>0.55</td>
<td>0.09</td>
<td>0.46</td>
<td>0.09</td>
<td>0.20</td>
<td>0.02</td>
<td>0.67</td>
<td>0.02</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.72</td>
<td>1.34</td>
<td>1.38</td>
<td>0.19</td>
<td>0.22</td>
<td>0.01</td>
<td>0.20</td>
<td>0.38</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.94</td>
<td>0.58</td>
<td>0.37</td>
<td>0.35</td>
<td>0.14</td>
<td>0.41</td>
<td>0.03</td>
<td>0.05</td>
</tr>
<tr>
<td>United States</td>
<td>0.38</td>
<td>0.23</td>
<td>0.15</td>
<td>0.27</td>
<td>0.27</td>
<td>0.20</td>
<td>0.07</td>
<td>0.20</td>
</tr>
<tr>
<td>Cross-country average</td>
<td>1.36</td>
<td>0.77</td>
<td>0.60</td>
<td>0.24</td>
<td>0.23</td>
<td>0.07</td>
<td>0.28</td>
<td>0.19</td>
</tr>
</tbody>
</table>

NOTE: — = data unavailable.

* Categories for each country may not sum to 1 due to rounding error.

* Unweighted average.

SOURCE: OECD (2000, Table H).
active labor market policy is much higher, public expenditures on training in 2000 amounted to 0.31 percent of GDP.

The countries in our sample are Canada, Germany, Hungary, Japan, Korea, Sweden, United Kingdom, and the United States. All are members of the Organisation for Economic Co-operation and Development (OECD), with Hungary joining the organization in 1995 and Korea joining in 1996. We chose these countries as examples of different approaches to labor market policy in general and training in particular. Most clearly for the advanced industrialized countries, we were looking for countries with potential to yield useful lessons for the United States. Hungary was added as an interesting case of labor market policy in a transition economy, and Korea as an example of a rapidly developing economy.

The chapter is organized as follows. First, we examine recent patterns of public spending on labor market programs in general and job training specifically. Then we review recent cross-country trends in access to training, both in the private and public sectors. The third section briefly discusses what is known about training programs and the evaluation literature that provides these findings. The fourth section is devoted to country profiles, followed by profiles of displaced worker programs. In the final section, we offer concluding remarks, including lessons for the United States.

**PUBLIC SPENDING ON LABOR MARKET POLICIES**

As background to our discussion of spending, Table 8.2 presents standardized national unemployment rates and measures of the incidence of long-term unemployment. Unemployment rates generally fell over the late 1990s, with the exception of Japan. Unemployment fell dramatically in Canada, Hungary, and Sweden, and it reached a contemporary historic low in the United States. Long-term unemployment is a serious concern in Germany and Hungary and is a much greater problem now in Sweden than it was in the late 1980s. Long-term unemployment remains a problem in the United Kingdom, although it has diminished somewhat from the late 1980s. Canada has more long-
Table 8.2 Unemployment Rates and Incidence of Long-Term Unemployment, by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Standardized unemployment rate as a percentage of total labor force</th>
<th>Long-term unemployment as a percentage of total unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>9.1</td>
<td>8.3</td>
</tr>
<tr>
<td>Germany</td>
<td>6.5</td>
<td>9.3</td>
</tr>
<tr>
<td>Hungary</td>
<td>—</td>
<td>8.0</td>
</tr>
<tr>
<td>Japan</td>
<td>2.7</td>
<td>4.1</td>
</tr>
<tr>
<td>Korea</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.3</td>
<td>8.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10.2</td>
<td>6.3</td>
</tr>
<tr>
<td>United States</td>
<td>6.4</td>
<td>4.5</td>
</tr>
</tbody>
</table>

NOTE: — = data unavailable.

term unemployment than the United States, and both countries have seen little change since the late 1980s.

The OECD has been collecting comparable data on public spending on labor market measures since 1985. As reported in Martin and Grubb (2001), the typical OECD country spent just over two percent of GDP on active and passive labor market measures in 2000. Spending by the countries in our sample for the year 2000 is reported in Table 8.1. Our sample contains both some of the highest spending countries (Sweden and Germany), as well as the lowest spending countries (the United States). The (unweighted) average for these countries is 1.36 percent of GDP. Passive spending accounts for around one-half to two-thirds of total spending on labor market policy. Korea is an exception, where passive policies account for just 16 percent of total spending. For the most part, spending on passive programs in 2000 was a lesser share of GDP than it was for 1985–1988 (see Table 8.3). Germany, Japan, and Sweden are exceptions, where passive spending was higher in the late 1990s than in the mid-to-late 1980s. Since both passive and active spending are positively correlated with the unemployment rate, and passive more so than active, higher unemployment in these countries may explain the increase in spending (see Martin and Grubb 2001).

The relative importance accorded to active labor market policy varies considerably across the countries in our study. The average for the sample in 2000 was 0.6 percent of GDP on active measures, compared to an average of 0.8 percent of GDP for OECD countries. It is the variation in spending in our sample of countries that is remarkable. Sweden devotes the greatest share of GDP to these measures, but its spending as a share of GDP has fallen. Spending was almost two percent of GDP over the late 1980s, and as recently as 1997, it was 2.03 percent of GDP (see Table 8.3). But spending dropped to 1.38 percent of GDP in 2000. Germany is the only other country in our sample with significant resources devoted to ALMP, just over 1 percent of GDP in 2000. Other countries in the sample spend far less; the United States is the lowest, at 0.15 percent of GDP in 2000, down from a 1985–1988 average of 0.26 percent of GDP. Despite widespread recognition that governments should shift the balance of spending toward active labor market policies, the active share of spending has increased in a few countries (Canada, the United Kingdom, the United States, Japan), but
### Table 8.3 Labor Market Expenditures as a Percentage of GDP, by Active and Passive Categories

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.58</td>
<td>0.56</td>
<td>0.47</td>
<td>0.46</td>
<td>0.50</td>
<td>1.74</td>
<td>1.29</td>
<td>1.16</td>
<td>1.01</td>
<td>0.98</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>0.95</td>
<td>1.23</td>
<td>1.26</td>
<td>1.30</td>
<td>1.23</td>
<td>1.36</td>
<td>2.52</td>
<td>2.28</td>
<td>2.12</td>
<td>1.89</td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
<td>—</td>
<td>0.44</td>
<td>0.39</td>
<td>0.40</td>
<td>0.39</td>
<td>—</td>
<td>0.63</td>
<td>0.62</td>
<td>0.56</td>
<td>0.48</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>0.19</td>
<td>0.34</td>
<td>0.33</td>
<td>0.25</td>
<td>0.28</td>
<td>0.40</td>
<td>0.40</td>
<td>0.41</td>
<td>0.50</td>
<td>0.54</td>
</tr>
<tr>
<td><strong>Korea</strong></td>
<td>—</td>
<td>0.09</td>
<td>0.46</td>
<td>0.69</td>
<td>0.46</td>
<td>—</td>
<td>0.02</td>
<td>0.01</td>
<td>0.19</td>
<td>0.09</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td>1.96</td>
<td>2.03</td>
<td>1.96</td>
<td>1.82</td>
<td>1.38</td>
<td>0.80</td>
<td>2.10</td>
<td>1.93</td>
<td>1.68</td>
<td>1.34</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td>0.80</td>
<td></td>
<td>0.39</td>
<td>0.34</td>
<td>0.37</td>
<td>1.89</td>
<td></td>
<td>0.80</td>
<td>0.64</td>
<td>0.58</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td>0.26</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.15</td>
<td>0.51</td>
<td>0.26</td>
<td>0.25</td>
<td>0.25</td>
<td>0.23</td>
</tr>
</tbody>
</table>

**NOTE:** — = data unavailable.
- *a* Fiscal years starting April 1.
- *b* Data are from 1995–96 to 1996–99.
- *c* Data are from 1996–97 to 1999–2000. Japanese LMP data have been revised.
- *d* Excluding Northern Ireland.
- *e* Fiscal years starting on October 1.

**SOURCE:** OECD (2001) and Leigh (1995, Table 2.1).
fallen in others (Germany, Sweden). As noted, the share of ALMP in total labor market policy spending varies across the business cycle, with some similarities across countries. In general, the active share falls as unemployment rises.⁴

Turning to the separate active measures, training and retraining programs are the traditional core of government labor market policy, perhaps most strongly so in Western Europe. Training accounts for the largest share of total public spending on active measures for the OECD as a whole. In 2000 on average, OECD countries devoted 23 percent of total active spending to training programs, and that fraction has remained fairly constant since 1985 (see Martin and Grubb 2001, Figure 2). Our sample of countries acts somewhat similarly, spending on average 21 percent of total active spending on training, but the average masks a wide variation. Canada spends 34 percent of their total active expenditures on training, with Germany at 28 percent, the United States at 26 percent, and Sweden at 22 percent, while Hungary and Korea spend just under 20 percent and the United Kingdom 13 percent. Qualitatively, Sweden and Germany have stable, nationwide employment and training programs (as does Japan, in a fundamentally different way). The Public Employment Service (PES) is the largest share of total active spending for a number of countries in our sample (Canada, Japan, United Kingdom). For most countries, the PES serves two central functions: 1) as a clearinghouse between potential employers and workers (as the central labor exchange), and 2) as the interface for sources of assistance for the unemployed (payment of unemployment benefits, providing job search assistance).

CROSS-COUNTRY TRENDS IN PRIVATE AND PUBLIC TRAINING ACCESS

The International Adult Literacy Survey (IALS) is our primary source of information on private and public training access and participation.⁵ There are some clear patterns in the data (see Table 8.4). In the overall population, about one-third to one-half of adults ages 25–64 were engaged in some form of education or training outside of formal schooling. Employed adults were considerably more likely to receive
Table 8.4 Cross-Country Comparisons for Adults Aged 25–64 of All Education and Training, by Labor Force Status, Gender, Age, and Educational Attainment (%)

<table>
<thead>
<tr>
<th>Labor force status</th>
<th>Gender</th>
<th>Age group</th>
<th>Educational attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Employed</td>
<td>Unemployed</td>
</tr>
<tr>
<td>Canada</td>
<td>36.5</td>
<td>41.9</td>
<td>30.1</td>
</tr>
<tr>
<td></td>
<td>(29.5)</td>
<td>(37.5)</td>
<td>(22.0)</td>
</tr>
<tr>
<td>Sweden*</td>
<td>54.3</td>
<td>60.2</td>
<td>46.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>44.9</td>
<td>56.0</td>
<td>33.1</td>
</tr>
<tr>
<td></td>
<td>(39.7)</td>
<td>(51.9)</td>
<td>(24.0)</td>
</tr>
<tr>
<td>United States</td>
<td>41.9</td>
<td>49.0</td>
<td>30.2*</td>
</tr>
<tr>
<td></td>
<td>(37.8)</td>
<td>(45.6)</td>
<td>(28.5)</td>
</tr>
</tbody>
</table>

NOTE: Values in parentheses are for job-related training only.

\* Job-related training data unavailable.
\* Less than 30 cases in sample cell.

training than either the unemployed or the inactive (individuals out of the labor force). Separating job-related training from all education and training, we see that for the employed, most training is job-related. In our sample of countries, women tend to receive roughly the same overall level of education and training as men, but somewhat less job-specific training. Younger workers were more likely to receive training than older workers.

Perhaps the most striking pattern in access to training is the direct relationship it has with the level of formal educational attainment. There are three main educational attainment categories used in the IALS: 1) below upper secondary, equivalent to less than a high school diploma; 2) upper secondary, equivalent to a high school diploma; and 3) tertiary, equivalent to a college or university degree. Across three of the four countries in Table 8.4, adults in the tertiary category were more than twice as likely to receive education and training than adults in the below upper secondary category. The differences are particularly large for Canada and the United States, with the ratio of tertiary to below upper secondary in the range of 2.8–4.7. Even in Sweden, the ratio of tertiary to below upper secondary receiving training was close to 2 (1.87). Given these numbers, the overall message is clear: those who are employed, young, and with some college education are likely to receive some kind of training, whether job-related or not, in any given year. A virtuous cycle, with respect to the recent literature on labor market trends and skill-biased technological change, seems to exist for workers fitting this description. Skill upgrading is provided for the already skilled, and for the lesser-skilled, there is far less access to training. This pattern of providing services (skills) to those most likely to succeed is strikingly consistent across countries, despite their diverse labor market policies. It is not surprising, given the prevalence of employer-provided training. Employers can be expected to provide training to workers for whom it will yield the highest return.

When the focus is shifted to employed adults and their job-related training, similar patterns across groups are evident (see Table 8.5). Several observations stand out. Training participation in Hungary is quite limited, focused on the young, somewhat more on women, and in particular, on those with a university degree. Training participation in the United States is much broader, with about half of all employed adults involved in some kind of job-related training. The United States
### Table 8.5 Cross-Country Differences in Various Training Indicators, Employees Aged 25–64 in the 1990s

<table>
<thead>
<tr>
<th>Country</th>
<th>Participation rate in career or job-related training</th>
<th>Volume of career or job-related training (avg. hours of training per employee)</th>
<th>Ratios of participation rates for women to men</th>
<th>Ratios of participation rates for workers aged 25–29 to 50–54</th>
<th>Ratios of participation rates for workers with a university degree to those not having finished upper secondary schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>37.70</td>
<td>41.10</td>
<td>0.94</td>
<td>1.96</td>
<td>2.34</td>
</tr>
<tr>
<td>Germany</td>
<td>20.00</td>
<td>40.50</td>
<td>1.15</td>
<td>1.79</td>
<td>1.96</td>
</tr>
<tr>
<td>Hungary</td>
<td>4.20</td>
<td>13.50</td>
<td>1.15</td>
<td>3.67</td>
<td>12.05</td>
</tr>
<tr>
<td>Sweden&lt;sup&gt;b&lt;/sup&gt;</td>
<td>55.50</td>
<td>11.60</td>
<td>1.09</td>
<td>0.93</td>
<td>1.58</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>58.00</td>
<td>52.10</td>
<td>1.00</td>
<td>1.56</td>
<td>1.70</td>
</tr>
<tr>
<td>United States</td>
<td>48.80</td>
<td>46.60</td>
<td>1.00</td>
<td>0.97</td>
<td>4.09</td>
</tr>
</tbody>
</table>


<sup>b</sup> Source for average hours of training: ELFS 1997.

also displays a strong association between educational attainment and access to training. A college-educated worker is four times more likely than a high school dropout to receive training (in Hungary, the difference is 12:1). In Canada, Germany, Sweden, and the United Kingdom, the education bias in training access is considerably weaker, on the order of 2:1. It is clear from the evidence that an adult high school dropout begins his working career at a large disadvantage and that disadvantage is compounded by the lack of job-related training opportunities.

Sweden provides not only the highest level of training access, but is also the most egalitarian provider of training across groups differing in gender, age, and education. From Table 8.5 we see that Sweden also provides more training to unemployed workers than the other countries. However, even from its egalitarian perch, Sweden is a strong illustration of the literacy-training association.

Job-related training is just one type of human capital investment, and at the country level, enhancements to human capital are strongly positively related. Analyses reported in OECD (1999) reveal that participation rates in job-related training are positively correlated with school spending, educational attainment, spending on research and development, and the share of the labor force working as researchers (see OECD 1999, Table 3.10). We find it striking the degree to which literacy is a foundation for skill training. Literacy skills themselves are mostly acquired in school, but there is an interaction between literacy and the labor market. Improved literacy is associated with more employment opportunities (and less unemployment), and within the employed, training is more readily available to the more literate. Given the fact that basic literacy skills are developed in school, it is not surprising that cross-country differences in education are associated with literacy differences. But even within education categories, stronger literacy skills are associated with greater access to training.

Information on the financing of training further highlights the pervasiveness of privately provided and sponsored training (see Table 8.6). Among workers with access to training, about one-third report employer financial support (slightly more for the employed), with workers and families contributing the next largest share (about one-fifth report self financing). Government financing plays a considerably

<table>
<thead>
<tr>
<th>Country</th>
<th>General population</th>
<th></th>
<th>Employed population</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Canada</td>
<td>Self or family</td>
<td>22.9</td>
<td>27.7</td>
<td>25.7</td>
</tr>
<tr>
<td></td>
<td>Employers</td>
<td>26.0</td>
<td>19.8</td>
<td>31.9</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>9.8</td>
<td>13.9</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>5.9</td>
<td>5.2</td>
<td>5.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>Self or family</td>
<td>19.2</td>
<td>23.0</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>Employers</td>
<td>27.4</td>
<td>31.3</td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>6.4&lt;sup&gt;a&lt;/sup&gt;</td>
<td>8.8</td>
<td>7.0&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>7.4&lt;sup&gt;a&lt;/sup&gt;</td>
<td>7.9</td>
<td>6.4&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Sweden</td>
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<sup>a</sup> Unreliable estimate.
<sup>b</sup> Data unavailable.

reduced role. Across countries, women report more government financing than men, even among the employed.

To summarize, most access to training is through employers, with more educated, full-time, large-firm workers more likely to receive training. Numerous studies have shown firm-based training to have a higher rate of return than other forms of postschooling training. We consider it most likely that in the United States, private sector training will continue to yield a (much) higher return than publicly financed job training, and that the vast majority of job training will continue to be provided by the private sector. Yet it is important to recognize that private sector training has a strong skill/literacy bias; the more literate and skilled, the greater the access to private training. The relative lack of private training access for less-skilled workers seems likely to further disadvantage them, creating a need for training funded by the public sector.

WHAT WE KNOW ABOUT PUBLICLY FUNDED TRAINING

Before turning to our country profiles of training programs, it is useful to discuss how we know what we know about program impacts. The central question any program evaluation has to answer is whether and to what degree the treatment had an impact on the treated. For the most part, it is generally accepted that the most reliable evidence on the efficacy of training programs is provided by formal statistical evaluation of program impacts, whether experimental or nonexperimental. Experimental evaluations, where the treatment and control groups are randomly assigned, are commonly seen to be the state of the art in statistical evaluations, due to relative ease of methodology and interpretation of results. Experimental approaches do have limitations, particularly in situations where programs are ongoing with potential substitutes. Random assignment evaluations also raise ethical questions, and have institutional limitations and potentially considerable implementation costs. Nonexperimental evaluations, it is more difficult to answer the counterfactual question of what would have happened to the treatment group in the absence of the program. This is a considerable challenge, and there have been important recent method-
ological advances in nonexperimental evaluations that address this challenge. These advances are centered on improving data quality and designing matching techniques that yield more reliable comparison groups.10

With its legislative mandates requiring program evaluation, the United States has a more extensive statistical evaluation history than does Europe, although the evaluation “gap” is likely to narrow when recently established European multi-country evaluation efforts bear fruit.11 The difference between the United States and Europe on this point is quite sharp. Europe has its well-funded, stable nationwide programs aimed at reducing unemployment, particularly long-term unemployment. In the United States, government funding for programs is at a low level and subject to instability, with uneven management, aimed at improving the earnings prospects of the disadvantaged. Although we can expect these differences to narrow in the near future, within the OECD, the understanding of what works and for whom is currently based heavily on evaluations of U.S. programs (see Martin and Grubb 2001).12

In their comprehensive review of active labor market policy evaluations, Heckman, LaLonde, and Smith (1999, p. 2053) conclude, “The evidence both from North American and European studies indicates that government employment and training programs have at best a modest positive impact on adult earnings.” Most gains are in employment, not in wages.13 Formal classroom training appears to help women, whether displaced workers, welfare recipients, or reentrants. Best results are seen when classroom training is strongly linked to employers. Displaced men and otherwise unemployed men with low levels of educational attainment gain little from classroom training. One exception for displaced men is rigorous technical training in community college settings that does produce gains (see Jacobson, LaLonde, and Sullivan 2001). On-the-job training similarly appears to help women, but not men, provided again that the training is closely linked with local employers.

The United States has very little funding for out-of-school youths, with the exception of Job Corps. Job Corps results are positive, with results likely associated with its considerable per-participant costs. Early studies indicated modest positive effects on employment and earnings, and a recent study found significant earnings gains (Burghardt
Reduced participation in criminal activities is an additional important positive impact.

Due in part to a different political culture surrounding employment and training programs and the absence of legislative mandates on evaluation, European evaluations are later entries and less numerous in the literature. Heckman, LaLonde, and Smith (1999) discuss evaluations up to the early 1990s, and Kluve and Schmidt (2002) provide a review into the late 1990s. Youth programs are a particular European focus, due to concerns about high youth unemployment. In general, studies of European youth programs find increased employment rates, and the increases can be substantial. Higher youth employment rates are thought to be due to improved transitions out of unemployment. There is much more limited evidence of program effects on European youth wages. For comparison purposes, it is important to note that European youth are generally less economically disadvantaged than targeted American youth.

Across the number of European studies reviewed by Heckman, LaLonde, and Smith (1999), a common finding is a significant impact of training on employment, but not on wages (where point estimates of a positive impact on wages are large, statistical significance is often lacking). The same is true for the somewhat smaller number of late 1990s studies reviewed by Kluve and Schmidt (2002). Kluve and Schmidt (p. 438) take a slightly nuanced view, concluding that training (and job search assistance), “are more likely than subsidy-type schemes to display a positive impact on programme participants.” This conclusion rests more on the failure of job creation and subsidy schemes than on the success of training programs. Recent studies do find positive impacts of training on employment, although not for all groups in all countries.

While outside the direct focus of this chapter on job training, job search assistance (JSA) appears to help most unemployed workers, particularly displaced workers. Both European and U.S. evidence supports the provision of JSA. Its key advantage is its low-cost, but it also offers many unemployed workers what they most need, an upgrading of search skills. Access to JSA raises employment rates.
COUNTRY PROFILES OF PUBLICLY FUNDED JOB TRAINING PROGRAMS

This section offers a profile discussion of key features of publicly funded training programs for each country in our select sample. Our aim is to convey a sense of how each country approaches training, the target populations, and the basic institutional structure of service provision. With an eye to distilling lessons, our sample of countries concentrates on those with a history of active labor market programs, along with a few countries that have successfully adapted key elements of these systems. We start with Sweden, Germany, and the United Kingdom, recognizing the European history of (mostly) well-established ALMPs. Hungary is included as part of the region, and as an example of how programs can be adapted to transition economy needs. From Europe we turn to North America, to discuss Canada and the United States. We conclude with Japan and Korea.

Sweden

Haveman and Saks (1985) denote key characteristics of a Western European employment and training model. These characteristics describe well both Sweden and Germany and are 1) a single primary agency established by the national government but often independent, 2) an extensive network of local offices with outreach, 3) participation by employer groups and trade unions in policy formation and implementation, and 4) money is spent developing a professional staff. Sweden has a broad-based, large-scale training and retraining system that is grounded in its stable, comprehensive nationwide employment and training system.

Sweden’s ALMP is best understood within the country’s overall policy of wage solidarity, and with that, some uniqueness. If the wage policy establishes a floor on wages, workers with low productivity will find it difficult to obtain employment. This aspect increases the benefit of enhancing worker productivity through training. With wage equalization, ALMP is needed to facilitate worker mobility because the signaling aspects of wage movements are reduced. Firms are required to list vacancies with the Employment Service, and relocation expenses
are funded by the government. These policies explicitly entail a work principle, with a focus on employment rather than income transfers.

Although more recently decentralized, up to the early 1990s, training was centralized through the National Employment Training Board (AMU). This entity sold training services to any customer willing to pay, although its primary customer was the National Labor Market Board (AMS) and its Employment Service offices. The national AMU board operates a system of 100 skill centers located across the country. We note that this training system is independent of the educational system. The training system offers about 450 general curricula, available in all 100 centers. Each of the 25 regions may develop additional curricula. Most training courses are vocationally oriented and aimed at the upper secondary level. There are also basic education courses. Courses may last up to one year. AMU training is widely used, by both the employed and the unemployed. Training of unemployed workers is by referral from the Employment Service and is free, with a stipend roughly equivalent to unemployment compensation. Using data for 1990, Forslund and Krueger (1994) estimate that 62 percent of Swedish unemployed participate in government training.15

The Swedish training system was decentralized more recently, moving away from standardized training in government training centers to firm-based training meeting the needs of employers with a more flexible curriculum.

Forslund and Krueger (1994) surveyed a small number of early studies, noting a percentage wage effect in the range of –0.2 to +0.4 (and four studies are between –0.05 and +0.05).16 Three recent evaluations of Swedish training programs (reviewed in Kluve and Schmidt 2002, Table 2) show very modest (zero to some negative) impacts on employment and earnings for programs targeted at youth and adult unemployed. With these studies as the evidence, one is hard-pressed to conclude for Sweden that the payoff from training is more than modest.

**Germany**

Germany’s “dual” apprenticeship system gets its name from the way vocational training and education are provided simultaneously by employers and the state. The state is responsible for the financing, curricula, and provision of general training along with the theoretical
aspects of vocational education. Firms provide the setting for practical, “hands-on” aspects of vocational training. This setup strengthens the connection between education and employment and is seen as an effective method of maintaining both low youth unemployment and supplying an adequate number of skilled workers for the German economy.\textsuperscript{17}

Educational tracking is an element of the German system. Secondary schools lead either to a university or to vocational education and training (VET). There are outlets, however, where students can go to university after completing VET (and the reverse). For VET student apprentices, the dual system consists of one or two days a week spent in the classroom at vocational schools. Other workdays are spent at the firm usually under the guidance of an older “meister” worker or in specialized training centers organized by the firm (Gill, Fluitman, and Dar 2000).

The government organizes all aspects of training regulations, laws, and curricula for a given industry, along with monitoring costs and effectiveness of training via periodic national surveys. Curricula are drawn up by groups consisting of employers’ associations, unions, and government officials. The vocational schools themselves are run by state education ministries and financed by local governments that provide equipment and material, and state (länder) governments that provide personnel.

Employers are all part of 480 regional employer associations (chambers) that regulate vocational training via vocational training committees (VTCs). Employers pay vocational training costs including wages for the apprentice. Supervision of training is performed by VTCs. These committees also include union and vocational teacher representatives.

One strength of the dual system is the cooperative and stable relationship among parties and participants. Overall societal acceptance of the need for such a system is high, the division of responsibility between government and private firms is clear, and long-term financing, both through general government monies and firm contributions, is assured. Secure financial and political support insures that training is provided for both employed and unemployed workers throughout the business cycle.

The apprenticeship system is the most visible component in German labor market policy. The Federal Employment Service (FES)
administers unemployment insurance, job matching, and training programs. One-stop job centers are the starting point for the unemployed and for employed workers looking to upgrade skills. Unemployed workers in training programs are eligible for unemployment insurance.

Although the dual system is seen as a model for other countries to emulate—Korea in particular, for the purposes of this chapter—it does have some fundamental weaknesses and limitations. First, it is expensive. In 1990–1991 annual figures, total cost per student in U.S. dollars was $21,000, and since then costs have been rising faster than formal university expenses. Second, small firms take part in the system at a much lower rate than larger firms (between 35 percent and 60 percent for firms with 5–49 workers versus greater than 90 percent for firms with 100 or more workers). Smaller firms also have a lower retention rate of apprentices after completion of training as compared to larger firms (65 percent or less compared to over 80 percent for larger firms). Third, given its size, and the extent to which government, industry, and labor have a stake in the system, it suffers from institutional inertia. Any major changes in regulations concerning what is taught in vocational schools requires consensus among major societal groups. And even when consensus is reached and new curricula are drawn up, vocational schools are slow to respond. Curricular changes in certain subjects can take up to two decades. Firms are often accused of indifference where vocational education is concerned. Thus, while government and firms acknowledge the other’s legitimacy in the process, communication between the two is often lacking. These characteristics may not bode well for flexible skill-updating in a global economic environment characterized by rapid technological change.

The German government has been concerned with this problem since at least the mid 1990s. The concept of “modularisation/unitisation,” a decentralization where training is offered in smaller, individually certified blocks within an occupation, has been discussed as a method of providing greater flexibility to both training providers and students (Reuling 2000). Smaller training units give firms greater flexibility to tailor courses to actual production requirements, and offer trainees greater opportunities to take targeted courses that address focused skill needs. Smaller, targeted classes could improve incentives for firms to provide training. Across the system, designing shorter, more targeted, and flexible training opportunities spells could allow
market signals to play a greater role in determining training content and student enrollment.

One sticking point in the implementation of this more flexible plan is the need to accommodate certification with flexible focused training. Certification is an important and successful component of the German system. Certificated training enhances the transferability of skill and allows workers to be more mobile across firms. Yet, certification is built on a foundation of standardized and comprehensive training courses. It may be necessary to reform the certification process to bring in line the goals of flexible training with recognized credentials.20

**United Kingdom**

The United Kingdom’s active labor market policy looked considerably different in 2000 than it did in the late 1980s. Overall spending fell, from 2.69 percent of GDP averaged over 1985–1988, to 0.94 percent of GDP in 2000. Spending on training, as a share of GDP, dropped by just more than half, although spending on active policies, as a share of total labor market policy spending, increased to 39 percent in 2000 from 29 percent in 1985–1988.

Following a set of 1988 reforms, a national network of Training and Enterprise Councils (TECs) was established as the central training institution. Following a common theme, these councils were intended to decentralize the provision of training services and increase the involvement of employers.21 As part of a government reorganization in 2001, the Learning and Skills Council (LSC) superseded the TECs and became responsible for post–age 16 education and training (apart from the university sector). The LSC seems to reestablish the central authority of the government, with a national office in Coventry running a set of 47 local offices. This is in contrast to the TECs, which were structured as independent private sector enterprises, created when a group of local employers entered into a contract with the national Department of Education and Employment.22 Moving back to a more unified approach, the LSC is charged with the planning and funding of work-based learning for young people; workforce development; adult and community learning; and information, advice, and guidance for adults. Local councils continue to include upper-level management from local
private sector enterprises. The overall system remains decentralized in spirit, with considerable local authority over financing and curriculum.

Work-Based Learning for Adults (WBLA) (formerly Training for Work) is the main state-funded program for unemployed adults. Individuals aged 18–63 who have been unemployed six months or longer are eligible, with priority to those unemployed 12 months or longer. Access to services is facilitated for individuals needing basic skills training, those jobless from large-scale redundancies, and those returning to the labor force. The LSCs manage the program. State funding has been reduced over the recent past. The focus seems to be on placing workers with employers, and most training occurs on the job, in the context of ongoing production. Trainees continue to receive unemployment benefits. Employers are not obligated to hire the worker after the training period. Outcomes are not overly impressive, with about 46 percent of trainees who complete training finding jobs or entering self-employment, full-time education, or further training. It is not known whether this outcome would occur without any state intervention (Crowley-Bainton 1997).

Work-Based Training for Young People (WBTYP) (formerly Youth Training [YT]) is the main state-funded program for young people. YT was developed from the highly successful former Youth Training Scheme, and it offers a place for all young people ages 16–17 who are unable to find a job. Funding is administered by the LSC. About one-third of trainees are employed by an enterprise while in training. Nonemployed trainees receive a small training allowance. Trainees aim to achieve a National Vocational Qualification (NVQ) level 2 (craftsperson) qualification. According to Crowley-Bainton (1997), YT suffered from bad publicity regarding the quality of training provided by some schemes and the low attainments of some trainees.

A more traditional apprenticeship program, called Modern Apprenticeships, was started in 1994, and reformed in 2001–2002. There are two programs, both administered by the LSC. Foundation Modern Apprenticeship (formerly National Traineeship) is targeted at 16–17-year-olds, but also open to individuals over 18 if training can be completed before age 25. The goal is a NVQ level 2 qualification. Advanced Modern Apprenticeship is aimed at school and college leavers, and these work-based training options lead to at least a NVQ level 3. Starting with the 2001–2002 reforms, these apprenticeships are
available in over 60 sectors, including some sectors without a tradition of apprenticeships, such as information technology and retail trade.23

It has been generally accepted within European countries that youth training should incorporate general transferable skills in addition to occupation-specific and industry-specific training. During the 1990s, concerns were voiced about a downgrading of the general and technical content of vocational training in YT, arising from the interests of local groups of firms (via the TECs) in reducing the general educational content of training curricula in favor of specific skills (see Oulton and Steedman 1994).

Hungary

Any assessment of Hungary’s publicly funded training schemes requires a look at the macroeconomic context. With the disintegration of the Soviet bloc in 1990, Hungary experienced a dramatic decline in GDP and an increase in unemployment. The unemployment rate rose from a negligible level in 1990 to a peak of 13.4 percent in February 1993. Unemployment fell in the late 1990s, but a considerable part of the decline was due to a shrinkage in the labor force (due to early retirements and informal sector employment). Although there is considerable optimism about Hungary’s prospects for completing the transition from a centrally planned economy to a market economy, the transition path for the Hungarian labor market has been bumpy, and difficulties remain. Long-term unemployment remains high (the highest for our set of countries). Industrial restructuring has resulted in a large number of unemployed workers needing retraining, along with training demands of students finishing formal education and desiring places in the training system (Gill, Fluitman, and Dar 2000). Large public sector budget deficits place a constraint on spending.

Despite these constraints, Hungary has an impressive array of active labor market policies. In 2000, spending on ALMP accounted for about 44 percent of total labor market policy expenditures, with training accounting for 18 percent of active program spending. Along with retraining, public service employment, a wage subsidy program, and self-employment assistance constitute the set of active labor market programs. O’Leary, Kolodziejczyk, and Lazar (1998) report that
about one million people use Hungary’s labor programs each year, with about 30 percent participating in an active program.

Hungary uses an extensive system of performance indicators to monitor the cost-effectiveness of active labor market programs. This system of indicators has been in place since 1994, and it tracks outcomes such as reemployment rates and costs. One issue, common across countries, that arises with performance indicators is “creaming.” When program managers are encouraged to achieve a high reemployment rate as a measure of program success, they may react by selecting the most able individuals, those already equipped with the skills to find new jobs on their own. These individuals may be more skilled than the group of unemployed as a whole. If workers are positively selected into programs by management on the basis of ability, programs may produce high rates of reemployment (success), yet the impact of the program (the effect of the training) may well be lower. When the Hungarian performance indicator system was implemented, program managers were warned about creaming and were encouraged to target services to those most in need.24

O’Leary, Kołodziejczyk, and Lazar (1998) provide a comprehensive summary and assessment of ALMP in Hungary. Workers eligible for retraining include the unemployed, those expecting to lose their jobs, workers in public service employment, and recent school-leavers. Training programs are short-term, to provide workers for job vacancies. Participants receive a stipend worth 10 percent more than their unemployment compensation payment. Training costs are paid by the local labor office.

Hungary’s retraining of the unemployed takes place within a backdrop of its vocational education and training system. There are two aspects: vocational schools that provide theory and general education, and firms and public and private institutes that provide practical training. Government financing relies on enterprise training levies. Regional Training Centers (RTCs), set up to augment other public and private training schools, are partially funded by the World Bank. Both public and private training schools bid for training contracts from the local labor offices to retrain the unemployed.

In a statistical analysis that controls for observed differences between unemployed workers participating in retraining and unemployed workers not participating, O’Leary, Kołodziejczyk, and Lazar
(1998) find that individual retraining produced an increase of 11 percentage points in the likelihood of finding unsubsidized work or self-employment, and an increase of 9 percentage points in those still in a job at their survey date. Similar to many other studies, these authors found no impact on average monthly earnings. Reemployment was higher for those bearing some of the direct costs of retraining. Group retraining produced similar, if a bit smaller, increases in reemployment and no effect on earnings.

At the beginning of the transition from a centrally planned to a market-based economy, enterprises provided the bulk of the training for workers. In the years since, enterprise training has collapsed as firms have gone bankrupt. RTCs and government-run vocational training institutes are attempting to pick up where enterprise training has fallen off. In addition, these government training institutes and RTCs are facing competition from an increasing number of private training institutes (UNEVCO 1998). Although this higher level of activity may eventually produce improved training opportunities, there is currently little if any official accreditation of these private institutes or certification of training results. This clouds the environment for assessing the impact of training.

For Hungary, ALMPs are likely to remain an imperative, given conditions of employment instability. Assessments yield mixed and modest results, outcomes that are well in line with the experience of other countries.

Canada

In Canada, the federal government is responsible for the state of the economy and the provincial governments have responsibility for education. Because training relates to both concerns, it falls under both federal and provincial responsibility. As in the United States, program initiatives undergo fairly frequent repackaging and reform (see Gunderson and Riddell 2001). A major reform was undertaken in 1996, when the federal government replaced Unemployment Insurance (UI) with Employment Insurance (EI), in the Employment Insurance Act. The revamped EI program reflects an emphasis on reemployment benefits and support measures targeted at unemployed workers available and able to work but unable to find a job. Also in 1996, the federal gov-
ernment began offering provinces and territories an opportunity to design and deliver EI-funded active employment measures.

Relative to other countries in our sample, passive labor market policies are used more extensively in Canada. Principally, this feature is due to Canada’s comprehensive and generous EI (formerly UI) benefits. Within active measures, Canada has the highest ratio of spending for employment services of the countries in our sample (40 percent of active spending is on employment services). A number of support measures, including job search assistance, a labor exchange network, and an automated labor market information system, are provided by the National Employment Service. Spending on training is an even larger share of active measures, at 34 percent in 2000.

For the 30 years prior to the 1996 reforms, the Government of Canada ran a series of training programs to improve the reemployment prospects of adult workers. Classroom training from community colleges and other training institutions was available, and on-the-job training from private employers. Labor market assistance to various target groups was coordinated through the Canadian Jobs Strategy (CJS). These groups include the long-term unemployed (through a program called Job Development); reentry women (Job Entry); training in designated areas of current or anticipated occupational skill shortages (Skill Shortages); and UI claimants in training who remained eligible for UI without a search requirement paying the cost of training (Feepayer). CJS programs were available to employed workers as well as unemployed. Park, Power, Riddell, and Wong (1996) reported estimated impact on earnings for the Skill Shortages, Feepayer, and Job Entry programs that are large in size and highly statistically significant. The estimated impact of Job Development is insignificantly different from zero.

The revamping of the EI system set two explicit goals: getting people back to work, and producing savings to the EI account. To further these goals, there are four main areas of Active Employment Benefits: 1) targeted wage subsidies; 2) self-employment assistance; 3) job creation partnerships; and 4) skills development, which includes training. The Skills Development program provides financial assistance to help unemployed EI claimants (or recent EI exhaustees) pay for the costs of skills training and related expenses while they are enrolled in an approved training program. The level of financial support provided is
based on need, and participants are normally required to pay a share of the cost. Skills Development participants currently on an EI claim may continue to receive their regular EI benefits until the end of the benefit period. The usual skills training duration is up to 52 weeks, with the potential for an extended period up to three years.

Although there is scant evaluation evidence regarding these recent reforms, we note that the direction of reform is consistent with earlier evaluation studies for Canada. As noted by Gunderson and Riddell (2001), there has been a reorientation away from basic and classroom training toward training in the private sector combined with work experience. Through the federal–provincial agreements that devolve responsibility to the provinces (Labour Market Development Agreements), there is more employer involvement in the delivery of training.

**United States**

Our discussion of U.S. federal job training programs will be brief here, as other chapters in this volume (see Chapters 1 and 3) offer more detailed perspectives. Our aim is to facilitate our own cross-country comparisons and to provide a background for the lessons we distill in the concluding section.

As summarized by Krueger and Rouse (2002), each decade since the 1960s has seen a major reform in federal job training programs. Unemployed and underemployed workers were the target of training initiatives introduced in the Manpower Development and Training Act (MDTA) in 1962, with particular focus on low-income and welfare recipients. The Comprehensive Employment and Training Act (CETA) was introduced by the Nixon Administration in 1973, and it continued to focus on unemployed and underemployed adult workers, with programs for disadvantaged youths. Decentralization, visible through a transfer of decision-making authority from the federal level to states and localities, emerged as a theme in CETA. State and local government gained responsibility for designing, implementing, and evaluating programs. CETA evaluations produced the first findings of no measurable program impacts for men and modest yet positive, significant impacts for women. The evaluations also found that on-the-job training was more effective than classroom training.
Program decentralization continued as a major theme in the 1983 replacement of CETA with the Job Training Partnership Act (JTPA). The steep recession of the early 1980s prompted the addition of displaced worker programs. The Private Industry Councils established under CETA were strengthened on the private employer side to limit training content to skills in demand by private employers. Public service employment, in place in MDTA and CETA, vanished. A distinctive component of JTPA was its congressionally mandated national evaluation. As the 1990s drew to a close, there were numerous employment and training programs funded by the federal government (see Chapter 1 for a summary). In 1999, the final year of JTPA authorization, the Department of Labor had $5.3 billion in budgetary authority for its job training programs. Just under 70 percent of that spending went to three programs: JTPA Dislocated Workers, Job Corps, and JTPA Adult Training Grants (see Krueger and Rouse 2002, Table 10.6).

The Workforce Investment Act (WIA) replaced JTPA in 1998. The goal of WIA is a comprehensive workforce investment system, where all workers, disadvantaged or not, can gain access to information about jobs and life-long skills training, and where employers can find skilled workers. Two features are central to WIA: 1) one-stop centers where all employment and training programs can be accessed in one physical location, and 2) universal access to core employment services, with more restricted and sequential access to intensive services for workers who need more help. It is still the case under WIA that job training is targeted at economically disadvantaged and dislocated workers. In fiscal year 2001, $6.4 billion was spent on public job training in the United States, with 63 percent in a similar set of programs as discussed above: adult and dislocated workers, TAA and NAFTA-TAA training (also dislocated workers), and Job Corps (see Table 1.3 in Chapter 1).

Japan

Japanese labor market policy is tied closely to its overall system of employment practices in the sense that both are enterprise-based with importance attached to long-term employment and seniority related pay. For our focus on training, an essential feature of Japanese employment is investment by firms in skill development. Table 8.1 shows that
the Japanese spend very little on labor market measures (more than Korea and the United States as a share of GDP, but less than all the other countries). Expenditures on adult training are even lower than those of the United States. Enterprises, and networks of enterprises, are responsible for employment and training. With respect to training, the firm-based model is built up from a strong foundation of skills established by the educational system. Skills are not just those of literacy and technical competency, but also teamwork. With a homogeneous set of school completers, all with solid basic education, firms focus on specific training. Workers are rotated through positions so that they become broadly trained within the enterprise. There are strong social norms against poaching, and a steep wage-tenure profile keeps turnover low.

As Leigh (1995) summarized, several characteristics are essential parts of the Japanese firm-based training system: homogeneity in basic skills, willingness to learn and teach others, and functioning as part of a team. These characteristics lower training costs. Are they transferable to the United States, where basic academic skills are lower and more heterogeneous? Leigh, based on Hashimoto (1994), concluded yes, given the success of Japanese automobile transplant operations.

For Japan, the overarching question is how to restore the macroeconomy to some reasonably robust state of health. There are also concerns about the labor market. From the 1960s to the early 1990s, low turnover and high levels of specific training were strengths. Labor immobility helped keep unemployment low. As Japan contends with the restructuring needed to address global competitive pressures, increasing labor mobility across firms will be a key issue for the future.

Korea

Korean active labor market policy should be viewed through the lens of recent history, societal attitudes toward higher education, and the government’s reputation for program oversight and cost–benefit testing. Recent economic history, the still-developing political system, success in raising basic education levels, and a societal aversion to nonuniversity higher education degrees all provide a backdrop for the government’s attempts to impose an extensive system of publicly and privately financed vocational training and education.
Throughout the 1970s and 1980s, Korea experienced remarkable growth stopped only by the regional financial crisis in 1997. This growth period allowed the government to experiment extensively with a variety of vocational education and training programs funded by levies on firms. These efforts included an explicit attempt to duplicate the German dual system of vocational education and training in 1994.

Korea has been remarkably successful in raising the level of basic education: in 1970, 75 percent of Korea had only an elementary education, and by 1990, only 30 percent of the population had a similar level of education. Over the same period of time, the number of students in vocational and academic secondary education jumped from 600,000 to 2 million, and university enrollment increased from 200,000 to 1.6 million. The number of vocational trainees rose dramatically. The country as a whole experienced sizeable increases in labor productivity and wages.

Vocational education in Korea is administered by the Ministry of Education and provided by vocational high schools, junior technical colleges, and open colleges. Education lasts from two to three years with classes in a major field. The breakdown of theory and practice in classes is roughly 70 percent and 30 percent, respectively. The training side of the equation is either administered directly (through the Korea Manpower Agency [KOMA]), or overseen by the Ministry of Labor. The actual provision of vocational training is split between privately financed in-plant institutes, public institutes and government authorized private institutes.

In attempting to implement its employment and training policy through vocational education and training programs, the Korean government had to contend with a negative social attitude towards vocational training. University degrees are prized and accorded much higher status than that accorded to a degree from a vocational school associated with practical training. There is a recognized preference among parents for children to go to university rather than participate in vocational education and training, despite a higher incidence of unemployment for university graduates than for vocational school graduates (Gill, Fluitman, and Dar 2000).

The Korean government in the 1980s, responding to political and societal pressure, increased access to general higher education. As a result, a shortage developed for production workers. Starting in 1990,
an attempt was made to address this particular skill shortage by setting a goal of a 1:1 ratio of vocational to general secondary school enrollment by 1995. By the late 1990s, some additional students had been induced to enroll in vocational secondary schools; however shortages remained for skilled production workers in various industries (KRIVET 1999).

In 1994, to increase the relevance and flexibility of training in a changing technological environment, and to facilitate communication between the education and training parts of the system, a “2+1” program, patterned after the German dual system, was implemented. The “2+1” label indicates two years of education followed by one year of training with a firm. Implementation of the “2+1” system has been left to the discretion of technical training schools since 1999. The program has not been successful at generating large numbers of appropriately skilled workers. While it is difficult to pinpoint the precise reasons (to date) for the disappointing results, there are some broad outlines. In Germany, labor and industry enjoy a cooperative relationship—a collaboration that increases the chances for designing and implementing relatively effective training policies. Current and historical Korean industrial and labor relations cannot be similarly characterized. More generally, the close cooperation between government, business, and labor in financing and administering the “dual” system in Germany does not exist in Korea. In addition, Korea exhibits a distinct societal preference for nonvocational higher education, whereas the tradition of vocational training in Germany is well established. The weaknesses of Korea’s “2+1” system reveal the importance of having a solid infrastructure foundation of vocational training and social partner cooperation from which to build an apprenticeship program.

Summary

Table 8.7 summarizes the key features of the country training programs profiled in this section. All countries maintain an array of active labor market policies, with the exception of Japan, where the government’s role is notably secondary to private firms. All countries face the need for systems that can respond to the diversity of known and emerging skill needs. Most countries focus on the unemployed and at-risk (of unemployment) youth, although many countries are moving to
<table>
<thead>
<tr>
<th>Country</th>
<th>2000 spending (% GDP)</th>
<th>Administrative structure</th>
<th>Main target groups</th>
<th>Issues for the future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>0.18</td>
<td>Centralized historically, with movement toward decentralization since 1996. Federal funding, with shared federal/provincial implementation authority.</td>
<td>Unemployed; displaced workers</td>
<td>Reorientation from basic &amp; classroom training toward training in private sector with work experience.</td>
</tr>
<tr>
<td>Germany</td>
<td>0.35</td>
<td>Highly centralized and established vocational education and training system, with explicit coordination of social partners. Firms and federal government share costs.</td>
<td>Youth entering job market; unemployed</td>
<td>Making the system more flexible &amp; responsive to emerging skill needs</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.07</td>
<td>Retraining programs within overall context of a centralized national coordination of vocational training funding and evaluation, with decentralized provision by local governments and enterprises.</td>
<td>General unemployed</td>
<td>Addressing transition economy problems of high unemployment &amp; low labor demand with limited public budgets</td>
</tr>
<tr>
<td>Japan</td>
<td>0.03</td>
<td>Training system is private and enterprise-based. Firms and networks of firms provide training within context of long-term employment system. Low levels of public funding, within this system, for core workers at risk of displacement.</td>
<td>Core workers at risk of displacement</td>
<td>Revamping the delivery of training as long-term employment continues to decline in influence.</td>
</tr>
<tr>
<td>Korea</td>
<td>0.09</td>
<td>Centralized with national government coordinating funding, provision and curricula of formal vocational education.</td>
<td>Youth entering job market; workers needing skill upgrading</td>
<td>Delivering large number of skilled workers to growing economy</td>
</tr>
<tr>
<td>Country</td>
<td>Score</td>
<td>Training System</td>
<td>Key Stakeholders/Groups</td>
<td>Goals/Outcomes</td>
</tr>
<tr>
<td>-------------</td>
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<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.31</td>
<td>Large-scale</td>
<td>Unemployed and employed</td>
<td>Making the established system more flexible &amp; responsive to emerging skill needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>training and retraining system. Single agency with local offices. Until early 1990s, standardized training (w/ std. teaching methods &amp; materials) in gov. training centers. Recent (late 1990s) shift to a more decentralized structure using firm-based training.</td>
<td></td>
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<tr>
<td></td>
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</tr>
<tr>
<td>United Kingdom</td>
<td>0.05</td>
<td>Decentralized, with central funding authority at national level, training devolving to localities. Curriculum decided by local providers &amp; local councils (business leaders, political leaders, labor). Local units receive Whitehall funding, and use subcontracts (especially for classroom training) to private providers (proprietary schools)</td>
<td>Unemployed workers; out-of-school youth</td>
<td>Strengthening services for youth; maintaining decentralized but easy-to-navigate system</td>
</tr>
<tr>
<td>United States</td>
<td>0.05</td>
<td>Decentralized, with central funding authority at federal level, training devolving to states/localities. Curriculum decided by local providers &amp; local councils (business leaders, political leaders, labor). State/local units receive federal funding, and use subcontracts (especially for classroom training) to private providers (proprietary schools, community colleges). One-stop centers for delivery of services</td>
<td>Displaced workers; out-of-school youth; unemployed; economically disadvantaged</td>
<td>Targeting appropriate services for heterogeneous groups; obtaining sufficient funding</td>
</tr>
</tbody>
</table>

* Labor market training includes support of apprenticeship and related forms of general youth training.
* Provisional data.
* Does not include training for employed adults.
* Data do not include youth training.
improve training access for employed workers. In almost all countries, the trend in administration is toward decentralization of training provision.

The countries in our select sample represent a variety of training systems, in a diverse set of political systems. There are some commonalities in motivations, goals, and principles. The common motivations are to supply adequate numbers of skilled workers to insure global competitiveness while providing programs to lower unemployment. More advanced industrialized countries share a common goal of addressing the needs of economically disadvantaged workers. We see the following common principles:

1) Build flexibility into any training system to allow for rapid curricula changes in response to market signals.

2) Be able to adequately evaluate and certify any occupation or sub-occupation training program on a countrywide basis to maintain training standards and to encourage mobility.

3) Maintain close links at the local level between workers, training providers, and firms to assure the supply of skilled workers appropriate to the demands of local business.

4) Provide for the specific training needs of different worker groups in society (i.e., unemployed adults, low-skilled adults, youth and the disabled). Targeted groups are heterogeneous, making it unlikely that a “one size fits all” approach will be effective in improving worker welfare and in yielding positive cost–benefit analyses.

5) Maintain a high level of consensus between government, business, and labor and be clear about the responsibilities of each group.

6) Fund at a level that is adequate and sustainable given the current (nearly global) constraints on government activity.

One challenge presented by those principles is that while a given subset may be followed, it is very difficult to adhere to all simultaneously. For example, if the training system is designed to be flexible and react quickly to market signals (principle 1), it may not be possible to adequately evaluate and/or certify changing curricula (2) and main-
tain the quick reaction ability. If an effort is made to adequately address the training needs for all groups in society (4), such a system could be prohibitively expensive in the long run (6) and may not even work given the heterogeneity of needs. Maintaining a high level of consensus among major groups (5) implies a great deal of bureaucratic inertia and makes it difficult to react quickly to changing market conditions (1). If strong links are maintained at the local level (3), any country-wide training certification system (2) might not address a given region’s requirements.

DISPLACED WORKER PROGRAMS

Starting with the 1960s’ fears of automation, displaced worker programs have been a mainstay of labor market policy within the OECD. The United States is a particularly strong example of the central role of displaced worker programs in federal training efforts. Displaced workers, however, have some characteristics different from the other main target group for publicly funded training, the economically disadvantaged. Displaced workers are often older, experienced, and established workers, whose needs are related to abrupt structural economic change rather than to lifetime low skill. As Leigh (1992) highlighted, displaced workers want jobs, not training. For the most part, job search assistance produces favorable cost–benefit evidence, in large part because it is low-cost, and for many displaced workers, rusty job search skills are a real barrier to reemployment. Two key difficulties for training are the design of effective programs for these (often) experienced workers, and allocating sufficient funds. Evidence from various JTPA demonstrations, conducted over the 1980s, reveals mixed evidence on the benefits of training, with the best training being intensive and skills-based, not longer term. Yet for some workers, more expensive and longer-term classroom training yields earnings gains, but only where training is relatively rigorous at the vocational and academic community college level (see Jacobson, LaLonde, and Sullivan 2001).

For these workers, Leigh (1992) concludes that a training system needs to separate from the educational system and be permanent and institutionalized. One key advantage of a separate training system is its
open-entry/open-exit flexibility, allowing intensive short-term skills-based courses with employer ties.

Canada’s Industrial Adjustment Service (IAS) is a federally funded agency specializing in job development. Its goal is to bring together local labor and business interests to find job opportunities for displaced workers. IAS offers assistance to firms in advance of mass layoff, and helps negotiate an agreement on an adjustment plan. According to Leigh (1995), the basic thrust of IAS is to place unemployed workers in jobs that are never publicly announced, but rather filled by word-of-mouth. The emphasis is on prompt local placement rather than retraining, relocation, or counseling. Workers who cannot be placed are referred to the CEC system for relocation or retraining assistance.

An essential characteristic of this IAS assistance is its local component. People with experience in local business, from either a labor or management perspective, are involved in making the placements. “... [T]he basic philosophy of the IAS [is] that displaced workers are to be assisted individually by persons who know them personally” Leigh (1995, p. 151).

For Swedish displaced workers, a key aspect of the AMU training system is its open admission and individualized study plans. The curriculum is organized in a modular system, providing flexibility in scheduling. Trainees receive a diploma upon completion that conveys clear information about curriculum and skills. Training centers are organized to mimic work environments rather than schools.

For Germany, the focus is on avoiding layoffs (with the exception of restructuring in the former East Germany, where the main policy response was unemployment insurance after massive layoffs). The German employment adjustment process is based on codetermination, or structured decision making, among the social partners. With layoffs costly (due to collective bargaining agreements and statutory employment protection) firms face incentives to use other options. Two important options are UI compensation for reduced work hours and early retirement. Evans-Klock et al. (1998) notes that redeployment within the enterprise is possibly facilitated by the broad-based job skill training that is a result of the apprenticeship system. If layoffs are used, the General Dismissal Protection Act requires a selection of workers for layoff to be socially justified, based on criteria such as age and income.
The Japanese have a two-tier system. For core, or permanent, employees (approximately one-quarter to one-half of the workforce), the Japanese response is based in the enterprise or in networks of enterprises. The state pays part of retraining and relocation costs when firms take these steps to avoid layoffs. More generally, there is public funding for enterprise-based training that targets workers at risk of displacement. Japanese firms retain flexibility in employment levels through the hiring and layoffs of temporary, or contingent, employees. For these workers, there is little or no employment security. With no secure link to an enterprise, there is little access to training when laid off.

**CONCLUSION**

Looking across our selective sample, we find striking the evidence in favor of a “virtuous” cycle between basic education, literacy, skill, and training. A strong foundation in basic education, especially literacy, is associated with greater access to training, not only through improved access to employment, but also through occupations with greater training content.

This link has three implications. The first is that training, in the main, belongs in the private sector, where it is closely tied to basic skill. The second implication of the schooling–training association is that strengthening schooling is an indirect, if slow, method for strengthening training. The third implication follows from the first two: whereas individuals in the “virtuous cycle” are well served by the current system, there is a “vicious” cycle for the individuals who are not well-served by the educational system. That “vicious” cycle consists of skill deficits, continued underinvestment in skills, low earnings, and declining employment (see Betcherman, McMullen, and Davidman 1998). Workers who face this cycle present heterogeneous needs. The literacy, education, and training needs of out-of-school youth are very different from the needs of established workers who lose their footing in employment (the displaced). Another group faces the complications of work and family (single parents, usually mothers). For these individuals and other workers tenuously connected to the labor market, publicly funded training offers a crucial second chance to recover from
“falling through the cracks” of the private training system. The failure of the basic educational system followed by employer-provided training to provide skills to these workers stands as a “market failure” justification for publicly funded training.

Our view is that increased awareness of how ALMP/training programs work in other countries can improve (or at least inform) the way the United States addresses the issue of publicly funded training. Some of the lessons put forth in Haveman and Saks (1985) bear repeating. They emphasize the comprehensive and stable institutional structure for (most) Western European employment and training systems. This structure includes 1) a single primary agency established by the national government but often independent, 2) a network of local offices emphasizing outreach to employers and employees, 3) participation in policy development and implementation by employers groups and trade unions, and 4) expenditures for the development of a professional staff of placement, counseling, and training personnel.

More recently, Martin and Grubb (2001) offer four features crucial to the design of effective public training programs: 1) targeting on participants, 2) relatively small scale programs, 3) programs should produce a qualification or certificate that is recognized by the market, and 4) a strong on-the-job component to establish links to employers. These features are on exhibit in the programs of a number of countries.

It seems clear that successful programs involve the private sector, particularly from the perspective of offering a curriculum of relevant classes teaching marketable skills. Integration is key. Skills training needs to be integrated with jobs, remedial skill training integrated with occupational skill training, private sector demands integrated with public sponsorship, and employee supply with employer demand. With an integrated approach, training can be tailored to the needs of local employers. To do this, the training system needs up-to-date, comprehensive labor market information.

It is commonplace for literature in this area to conclude by noting that evaluations find programs to have modest or mixed results at best. Even modest gains can make the economically disadvantaged less poor and raise, albeit modestly, the employment prospects of the unemployed. Expecting otherwise may be unrealistic, given traditional U.S. politics and programs. In his review of government-sponsored training programs and their evaluations, LaLonde (1995) writes, “The best
summary of the evidence about the impact of past programs is that we got what we paid for. Public sector investments in training are exceedingly modest compared to the magnitude of the skill deficiencies that policymakers are trying to address. Not surprisingly, modest investments usually yield modest gains . . .” (p. 149).

Notes

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1. Workers increasingly need problem-solving skills and skills that cross jobs as teamwork and quality control replace simpler and more hierarchical production processes. See Lynch (1994) for a discussion.
2. The OECD countries promoted that goal in 1994 in the OECD Jobs Strategy, when they agreed to move labor market policy toward active programs (see OECD 1994). That goal has not been uniformly met within the OECD.
3. The reauthorization of Trade Adjustment Assistance (TAA), contained in the Trade Act of 2002, included a program of refundable tax credits, payable in advance, to cover 65 percent of the cost of health insurance for TAA eligible workers.
4. This observation is related to the received wisdom that countries with greater spending on active labor market policies tend to have lower unemployment (see Layard, Nickell, and Jackman 1991 and Forslund and Krueger 1994).
5. See OECD (2000). Although the IALS offers a wealth of information on literacy skills and training, information is not currently available for Korea and Japan.
6. The distinction between all education and training and job-related training is not available for Sweden in the IALS.
7. Unfortunately, the information reported in Table 4 is available only for a limited subset of our sample.
8. For more on this point, see OECD (2000).
9. The existence of established ongoing programs, with substitutes, may be a concern for European training programs. In this situation, the risk of program disruption is higher, complicating the interpretation of the program effect. See Heckman, LaLonde, and Smith (1999).
10. Interested readers are directed to the detailed discussion of the evaluation of active labor market programs in Heckman, LaLonde, and Smith (1999).
11. New Techniques for the Evaluation of European Labour Market Policies is a research project bringing together eight research institutions from seven European Union countries. The Center for Economic Policy Research (CEPR) is coordinating the study. For information, visit http://www.cepr.org/research/Networks/LERTN/Summary.htm.
12. Given the overall institutional background of U.S. training, its evaluation context has limitations for inference to other countries. There are questions of external validity, or the extent to which estimated program effects can be generalized to different locations. Social attitudes, government institutions, the business cycle, and skill demands all differ across countries. In addition, many U.S. evaluations are of small demonstration or pilot programs. Scaling these programs up to more universal participation could influence community perceptions and/or combine with institutions and other forms of social interaction in ways that influence program success (see Friedlander, Greenberg, and Robins 2000).

13. An important follow-up question to a finding of employment gains is the nature of employment displacement for nonparticipants. See Davidson and Woodbury (1993) for an insightful discussion.

14. A central point in Kluve and Schmidt (2002) is that Europe needs to catch up to the U.S. “evaluation culture.”

15. The comparable figures for the United States in 1990 was 19 percent.

16. See Forslund and Krueger (1994, Figure 3). They report a weighted average percentage wage effect of –0.8 that is not statistically significantly different from zero.

17. See Soskice (1994) for an analysis of the incentives faced by the various actors in the German system, and for citations to the larger research literature on the German system.

18. Firm-based training is much less common for workers over age 24 in Germany (see Lynch 1994).

19. In practice, employers do not have much input in how vocational education is structured and what classes are offered.

20. This issue has an interesting parallel in the United Kingdom, where a system of “unit certification” is being implemented to bring coherence to a decentralized flexible training system (Reuling 2000).

21. Prior to 1988, much training of adult workers was the responsibility of industry employers, through a system of industry-specific Industrial Training Boards.

22. The Learning and Skill Council is part of a reorganized Department for Education and Skills.

23. In July 2002, an Advanced Modern Apprenticeship program with Swan Hunter, a Tyneside shipbuilder, was extended to workers in their thirties.

References


