Technical and Vocational Education and Training in Russia

19772
October 1998

Country Study Summary

BACKGROUND

After experimenting with some modest privatization and reform in the late 1980s, Russia initiated major economic reforms in 1991. Prices were decontrolled and an ambitious program of privatization was launched. The period 1991-96 is characterized by drops in production and output, high initial inflation, growing enterprise arrears, declining labor force and surprising stability in the level of employment. Between 1991 and 1995, real GDP and gross industrial output fell by half. Much of the decline in output was related to implementation of policies to transform the economy. Other problems arose from the disintegration of the USSR. These included disruptions in traditional supplies of raw materials and other inputs, and difficulties for enterprises to market to traditional customers, due to the collapse of Council for Mutual Economic Assistance markets. The structure of domestic demand also changed dramatically. Output in some traditionally favored sectors fell because of reductions in government expenditures, e.g., for defense.

The pace of privatization has been rapid. In 1994, over two-thirds of large and medium enterprises and over 80 percent of small enterprises had been privatized. Over 60 percent of the industrial workforce was employed in privatized enterprises. Privatization, however, can not be equated with industrial restructuring or competition. Incentive structures for management have not changed much and privatization has occurred without much discernible impact on enterprise behavior. However, some technological restructuring has begun. By 1994, about half of all firms had introduced some form of capital innovation or work reorganization. The size of enterprises has also begun to change. The inherited industrial structure was characterized by large enterprises. These structures have begun to break up into smaller enterprises and new job growth has been concentrated in smaller firms.

THE LABOR MARKET

Russia has a population of 148 million, which has been declining and aging. Education levels are high. Virtually all workers are literate. 20 percent of all workers have completed higher education; almost 70 percent have completed secondary education — including 32 percent with secondary specialized (technician) training — and only 12 percent have less than full secondary education.

Between 1990 and 1996 the size of the labor force declined by 20 percent from 90 million to 72 million. An estimated 6 million are unemployed, of whom only 2.4 million are officially registered as such. Regional imbalances are pronounced: unemployment ranges from less than 1 percent in Moscow to 23 percent in the Ingushetia Republic. Actual unemployment remains below four percent as employers use various means to avoid mass layoffs of workers: in 1994 suppressed unemployment in Russian industry was estimated at about 35 percent of the workforce.

The transition period has been characterized by major sectoral and occu-
Russia Country Study Summary

Patalional shifts in employment. In 1990 some 70 percent of the labor force worked in industry, but this fell to 44 percent by 1995. Growth areas include trade and services. Russian industry has tended to shed clerical and professional staff, while hiring manual and production workers. About 15 percent of basic vocational school graduates, 60 percent of specialized secondary graduates and 50 percent of engineers could not get any job in 1994 (see also table 1).

THE VOCATIONAL EDUCATION AND TRAINING SYSTEM

The Russian education system consists of 9 years of basic education, followed by secondary education - either general or vocational/technical - lasting between 2-5 years. Higher education consists of 4-6 years for the first degree, in academies, institutes or universities. The enrollment ratio is nearly 100 percent for basic education, 90 percent for secondary and about 20 percent for higher education.

Overview of technical/vocational education and training

School-based technical/vocational education and training includes almost 7,000 institutions and enrolls 3.7 million students. Enterprise-based training has decreased sharply in recent years, but in 1995 still included upgrading of almost 1.8 million workers, as well as training for new occupations for another 1.3 million. The recently created system of employment training for the unemployed trained almost a half-million adults in 1995.

Vocational and technical education

At the secondary level three types of education are provided: academic education for two years, vocational education for two to four years, and technical education lasting four or five years (see table 2). Vocational and technical education thus spans both secondary level and post secondary levels. There is considerable movement between the three types of secondary education, with academic secondary graduates enrolling in post-secondary grades of technical education, and accelerated vocational programs. Academic secondary education includes the option of obtaining qualifications in a vocation.

Enterprise-based training

Under the former command system, extensive enterprise-based training was mandated, both for apprentices and workers. This training dropped sharply with the new enterprise law of 1990, which freed enterprises from this responsibility. Enterprise training still exists, but has been sharply curtailed because of budgetary constraints. Managers have indicated a lack of interest in spending on training because of other priorities, including finding new markets, and investing in product development. To encourage training, up to 1.5 percent of payroll can be deducted from profits for expenditures on training, before paying taxes. However, few firms have made profits during the recent years.

Adult retraining

Retraining for unemployed workers is mainly provided through the Federal Employment Service (FES) financed by an Employment Fund, based on a 1.5 percent payroll tax on enterprises. Participation in these programs reached almost 460,000 in 1995. Over 90 percent of the training financed by the FES is provided by public training institutions, some of which are selected on a competitive basis. The Federal Educational Center of the FES develops the content of adult retraining programs and trains instructors. The completion rate is about 90 percent, and about 65 percent of the trainees find employment after training, though 20 percent of these eventually re-register as unemployed.

<table>
<thead>
<tr>
<th>Table 2. Destination of Form 9 Graduates (1995)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Academic secondary</td>
</tr>
<tr>
<td>Technical secondary</td>
</tr>
<tr>
<td>Vocational secondary</td>
</tr>
<tr>
<td>Labor market</td>
</tr>
</tbody>
</table>
ISSUES AND MAJOR REFORMS

The inherited VET system was believed to have been closely aligned with the needs of the command economy. Now, employers are beginning to demand different and broader skills.

Structure
The Russian VET system overemphasized pre-employment training, and required youth to choose an occupation at too early an age. The structure was rigid, with a fixed duration of training for all occupations. The amended education law allows authorities to adjust the length and location of training to the requirements of the occupation. Both vocational schools and technical secondary institutions have introduced the option of a lengthened program of an additional year to acquire additional qualifications. 15 percent of the vocational schools have upgraded to become "vocational lycées". Technical secondary institutions have the option, with approval from the education authorities, to become "colleges". Efforts to shorten programs have been less pronounced, but have occurred: the FES specializes in intensive courses of 4-6 months, including those for self-employment.

Management
Funding and curriculum development are both overcentralized. There was duplication of management responsibilities: the number of administrations involved exceeded 30. Now VET is handled by a section in the Ministry of Education, and some functions have been delegated to the regional authorities. Reforms undertaken in the early 1990s assigned considerable authority to schools. The autonomy of individual institutions was reinforced in 1996: school directors became responsible for hiring staff, setting salaries, initiating new programs, raising and spending funds.

Provision
A major change has been to allow private institutions. There are few restrictions on the establishment of private training establishments, which can be licensed legally simply by registering. If the schools wish to obtain state recognition, and some public financing, they must be accredited, which requires both licensing and performance evaluation. Those that are accredited can award certificates with state recognition. In 1995 some 300 non-state technikums and basic vocational schools applied at the federal level for licensing; 260 were given licenses and 40 that were previously licensed have been accredited.

Costs and financing
While the federal budget financed virtually all VET related expenses in the past, it now finances 50-60 percent. In 1994-95 the Government tried to turn over the operation and financing of vocational schools to regional and municipal governments, but this was resisted and the Government rescinded the decree. Attempts at ensuring adequate finance for VET (and education in general) through legislation have also failed. The 1992 Education Law stipulated that at least 10 percent of GDP would be spent on education, but it is currently just 3 percent. Moreover, the law also stipulates that teacher wages should not be less than the industry average, but currently they average just 30-50 percent of average industrial wages, resulting in departures of experienced teaching staff.

Relevance
Many vocational schools continue to be aligned in some fashion to specific enterprises, but apart from this there is little employer involvement. Curriculum is developed at the center, either in Ministries or methodological institutes. Vocational institutions have few incentives to learn about performance of their graduates in the labor market and make adjustments. Nevertheless, with economic restructuring, sectoral enrollments have shifted dramatically (see table 3). In training institutions a reorientation has occurred in terms of the breadth of study, led by the Government's
decision to reduce the number of recognized occupations from 1,200 to 287. Training institutions now offer a broader range of training, from 10-15 occupations compared with 3-5 in the past.

### REMAINING REFORMS AND OBSTACLES

The main issue facing policymakers is how to make the system more responsive to changes in the labor market. This requires close and frequent links with employers as well as establishment of better feedback mechanisms at the local level. Given limited government funding, the policy of providing everyone who enters the labor market with some pre-employment training needs to be reviewed and other funding sources need to be tapped.

#### Labor market constraints

Given the state of the labor market, a shrinkage of the education system will lead to growing unemployment of those who would otherwise be in schools. Vocational schools are viewed as a way to keep youth off the street while employment growth picks up. Enterprises face financial crises and mass layoffs. Under these circumstances it is understandable that apprenticeship training has low priority. Legislation is currently being considered to change the tax incentives for training. This draft legislation calls for enterprises to get tax concessions for up to 2 percent of payroll spent on training their own workers and, if the firms do not spend the 2 percent on training, the funds would be transferred to approved training institutions. This legislation seems to be misdirected: enterprises already have one of the heaviest tax burdens, variously reported as 80-95 percent. The legislation would, in effect, add a mandatory 2 percent payroll tax on top of that burden.

#### Financial constraints

The system of technical and vocational education and training has huge accumulated shortfalls of investments. This includes years of neglect of premises and equipment and teacher training and pay. While such new investments are essential, the federal, regional and local governments are limited in their capacity to finance them. Financial constraints mean that new alternatives must be found to finance the needed improvements. However, efforts to share the costs of vocational training with the beneficiaries, particularly the trainees themselves, are limited by legislation: initial vocational training is by law free to the participants.

#### Institutional constraints

Russia has not yet begun to address the fundamental question of how to reform the VET system. Most educational institutions cling to the old ways, and change will require strong commitment at the central administrative level. Private training provision has been slow to take root, in part because of the attitude of accrediting authorities towards private schools, which are viewed as a threat to the public system. The three year moratorium on privatization of public training institutions has also prevented legitimate devolution of training responsibilities from the state to private hands.

### Table 3. Enrollment in Postsecondary Technical Education (1994)

<table>
<thead>
<tr>
<th>Specialization</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument making</td>
<td>-36</td>
</tr>
<tr>
<td>Power machining</td>
<td>-35</td>
</tr>
<tr>
<td>Aviation technology</td>
<td>-27</td>
</tr>
<tr>
<td>Geology</td>
<td>-23</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>-19</td>
</tr>
<tr>
<td>Law</td>
<td>+10</td>
</tr>
<tr>
<td>Ecology</td>
<td>+24</td>
</tr>
<tr>
<td>Economics</td>
<td>+45</td>
</tr>
</tbody>
</table>

---

**authors**

Prepared by Amit Dar and Indermut Gill, based on "Technical and Vocational Education and Training in Russia" by Richard Johanson, prepared for the Bank-ILLO Study on "Constraints and Innovations in Reform of VET." For copies of the paper or others in the series please contact Indermut Gill via email at igill@worldbank.org or by telephone at 202-473-3448.