

Building a Competitive Workforce in Bulgaria
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June 20-26, 2004

Objectives

Under a buy-in from the E&E Bureau to the Global Workforce in Transition contract, two senior experts, Evelyn Ganzglass and Kevin Murphy, visited Bulgaria to present tools and approaches for building workforce competitiveness in Bulgaria, brainstormed approaches with local leaders and stakeholders, including USAID and USAID contractors, and presented recommendations that could be implemented given the Mission's current phase-out trajectory via a private-public partnership under USAID's Global Development Alliance program.

Activities

Prior to arriving in country, the team reviewed extensive materials on Bulgaria's economy, labor market and education system sent by field-based consultants, and conducted limited benchmarking analysis on Bulgaria's economic and educational performance relative to other countries in the region (see Appendix 1 for Workforce Competitiveness Benchmarking Analysis of Bulgaria). The team traveled to Bulgaria and spent the last full week of June in-country presenting workforce approaches with key Bulgarian leadership groups. Zrinski Pelajic, a regional development practitioner from Croatia, joined the team presenting lessons from the Croatian experience. (See Appendix 2 for all Power Point presentations). Presentations were made at a Bulgarian Industrial Association (BIBA)-sponsored meeting at the Sophia campus at the American University of Bulgaria (AUBG). The team traveled and presented to a private-public-academic leadership group assembled at the Plovdiv Chamber of Commerce. From there the group traveled to Burgas to present to the meeting of the Governors of Bulgaria where the latter also received two studies done by the US Governors Association on workforce issues.

The team worked closely with its contractor, the Institute for Market Economics and even co-published a piece on "10 Bridges Linking Industry with Universities." The COPs of three current USAID projects (MSI, Carana and Vega) were interviewed. The team had a number of meetings with key individuals including Krasen Stanchev, Executive Director of the Institute for Market Economics, Sasha Bezouhanova, the local CEO of Hewlett-Packard and Vice-President for Foreign Investors in BIBA, George Sharkov, Director of the ESI @Center in Bulgaria, George Zahariev, Managing Director of Business Information Technologies and Systems, Maria Antova, Vice President of the National Agency for Vocational Education and Training, and Svetla Stoeva, Sales Consultant with Job Tiger.

Findings

With privatization largely completed and unemployment coming down from 18% to 13% in recent years, the task is now to improve productivity, which is still less than one-third the EU average.

Social costs, as a percentage of net wages, are still quite high, creating incentives for the gray economy. Potential upcoming changes in legislation could provide greater flexibility for universities, could give private universities equal status for government procurement and tax-deductible contributions.

Several recent government and private sector papers, including the National Development Plan for 2007-2013, the Council on Economic Growth's innovation strategy and a BIBA white paper have highlighted the need to strengthen linkages between business and education in order to increase Bulgaria's human resource capacity, and promote innovation and investment.

As part of the Workforce Competitiveness Roundtables we convened, we asked the roundtable participants to assess the current state of linkages between universities and the business community across a number of dimensions. Participants responded that these linkages were weak, rating them on average about 3 on a 2-6 scale. In addition, we presented a variety of workforce competitiveness strategies for attracting and improving jobs, making education more relevant to changing economic needs and increasing labor market flexibility. These strategies include strengthening university-business partnerships, expanding the mission of higher educational institutions to include local economic development, creating industry-led training centers, developing joint training programs with foreign firms and improving private sector human resources practices. Roundtable participants thought it was both highly desirable and feasible to implement the strategies presented. (The summary of both surveys are included as Appendix 2).

Despite the generally poor linkages between universities and industry clusters, we found that the most promising linkages appear to be between the IT industry and the IT/engineering faculties. AUBG is demonstrating a model of such linkages as it provides an Executive MBA and engages in extensive outreach to the private sector.

The Bulgarian IT sector, assisted by USAID through the MSI project, has repositioned itself in world markets. It now enjoys a good strategy and reputation for innovation; but expressions of interest by international investors quickly bump up against human resource constraints in terms of the quantity of programmers and project managers that would be available.

Recommendation #1

Develop a Global Development Alliance (GDA) for IT-Related Training

The lack of connection between schools and universities on the one hand and industry on the other hand can be addressed by means of a pioneering private-public partnership in the IT sector. The IT industry recognizes the need for more and more relevant training to provide the programmers and project managers required by growing demand and to be able to attract other software development business to Sophia. Meanwhile, the major universities could be doing a much better job of equipping people to work in this industry. USAID and private sector matching funds would be provided for intensive training activities by these institutions to better serve this sector. This could be in the form of vouchers or scholarships for training that would in turn be subject to certification.

The team recommends developing a GDA (Global Develop Alliance) under which the IT cluster and its university/education-training providers would implement strategies and initiatives to enhance training of programmers and project managers for the IT cluster. This would include private sector contributors/participators such as Hewlett Packard and others along with the University of Sophia, Technical University and the American University of Bulgaria (AUBG). The USAID/private sector contributions would go to fund training for Bulgarians in these areas and would also include entrepreneurship training. This would develop pioneering initiatives linking university and business and would serve as a model for other faculties in these universities and other universities not participating.

According to the local Director of Hewlett Packard in Bulgaria, the IT industry would be willing participants and could provide part of the funding. AUBG, Sophia University and the Technical University would also be interested in exploring this and seem to be already collaborating together to build capacity for the IT sector.

The team recommends specific follow-up actions for either MSI and VEGA or both, depending on who can identify and field the appropriate specialist to engage the players further and can write up the GDA per USAID guidelines.

Recommendation #2:

Support Workforce Competitiveness Initiative via Existing Projects

MSI and VEGA can also support university-industry cluster linkages through their existing projects by providing short-term technical assistance in specific areas that are relevant to their overall project mandate (policy and cluster initiatives for MSI; improvement of conditions for SME development for VEGA).

MSI has played a lead role in helping the IT cluster develop a concrete strategy for repositioning itself in world markets. The feedback from the IT cluster representatives interviewed, including Hewlett-Packard, AUBG and other IT companies and specialists indicated a high degree of buy-in to this strategy. MSI can assist in the implementation of this strategy by providing STTA and local support for building the university-industry linkages in the IT sector that will also serve as a model for other industry clusters.

Recommendation #3

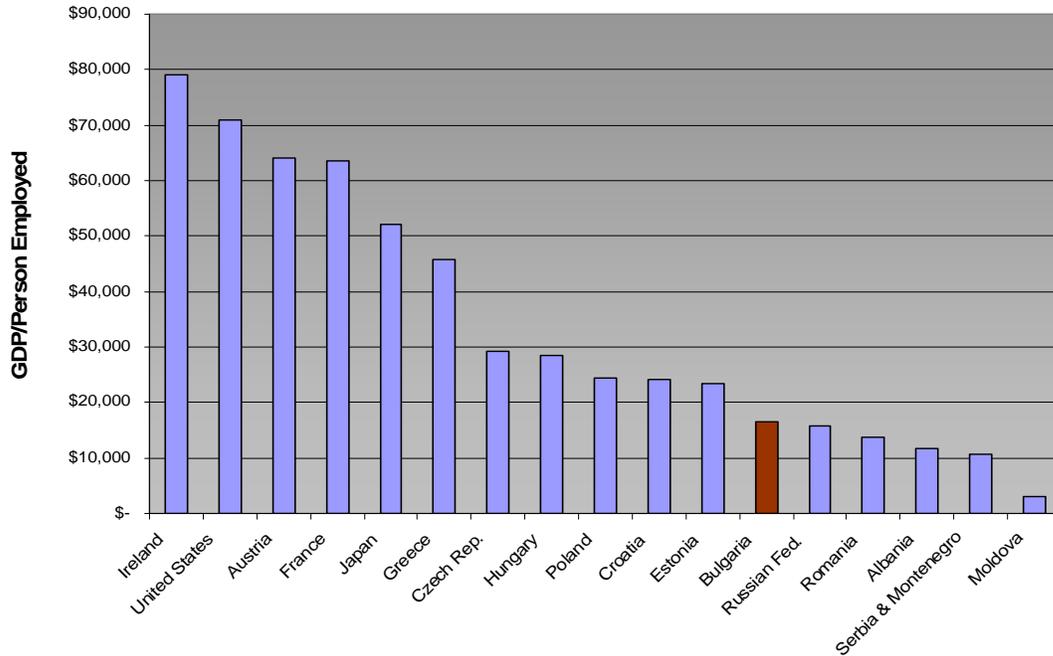
USAID Should Support the “Euro-Balkan” Sophia-Nis-Skopje Triangle Initiative

The GWIT team worked across the border from Bulgaria and identified an innovative initiative taking place by regional economic centers that are seeking to build cross-border linkages. The Sophia-Nis-Skopje triangle involves Bulgaria, Serbia and Macedonia and is an area that is strategically located being equidistant from the Adriatic, the Aegean and the Baltic. It can serve as a transport and logistics hub and later as a manufacturing center serving this region. By providing a larger scale market, the region can be more attractive to potential foreign investors. The region can also begin to call upon specialized R&D, training and university resources in the tri-city area. The effort also helps to re-build economic linkages among these three countries. The mayor of Nis would like to see support for this effort and USAID/Belgrade indicated a high level of interest in seeking to support this effort as well. Although USAID/Sophia has very limited resources, the Mission can help to lend moral support and even technical support to this initiative via existing projects.

Appendix 1

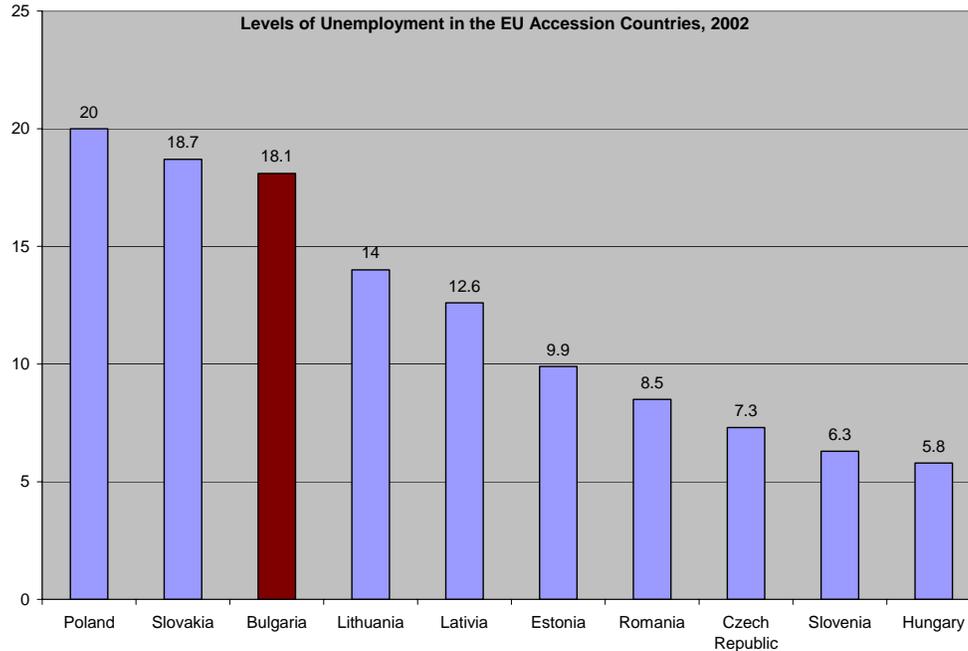
Productivity

GDP Per Person Employed



Benchmarking Bulgaria against 16 EU, OECD and European transition economies, Bulgaria has the 12th lowest productivity rate, which falls just over \$15,000 GDP per person employed. Poland, Croatia and Estonia have productivity rates at around \$25,000 GDP per person employed and Hungary and the Czech Republic have significantly higher productivity rates as compared with Bulgaria, falling just short of \$30,000 GDP per person employed.

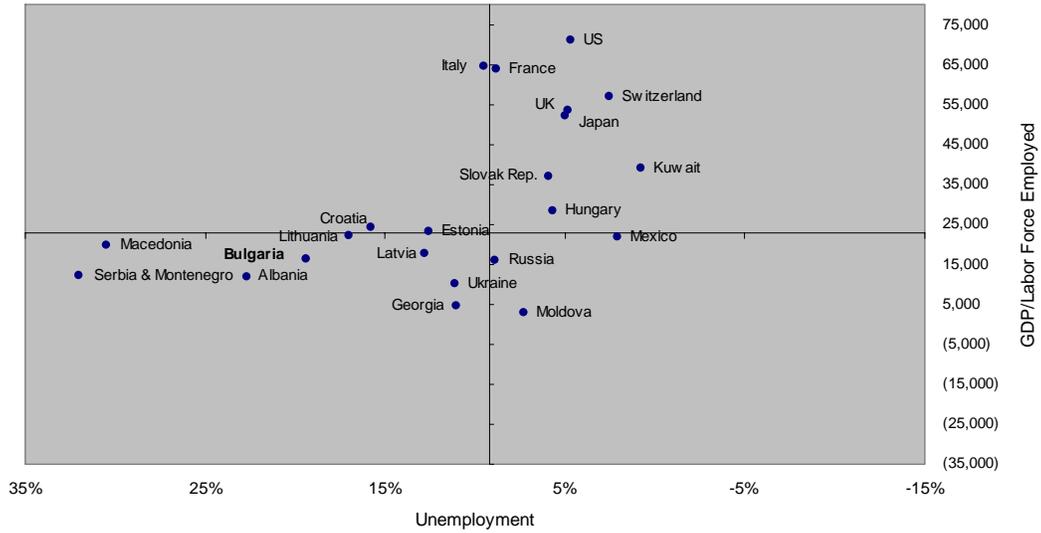
Levels of Unemployment in EU Accession Countries 2002



With an unemployment rate of 18.1% in 2002, Bulgaria had the 3rd highest level of unemployment out of the European Union accession countries, falling just behind Slovakia at 18.7% and Poland at 20%. The span of unemployment rates amongst the other seven EU accession countries ranged from 14% to 5.8%, illustrating Bulgaria's comparatively high level of unemployment.

Productivity & Unemployment

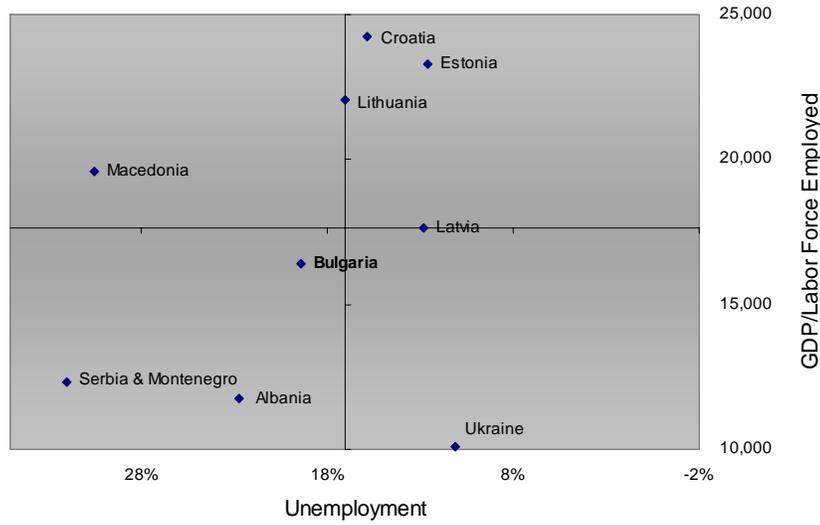
GDP per Person Employed/Unemployment



Bulgaria falls in the 3rd quadrant, indicating that it suffers from both low productivity and high unemployment.

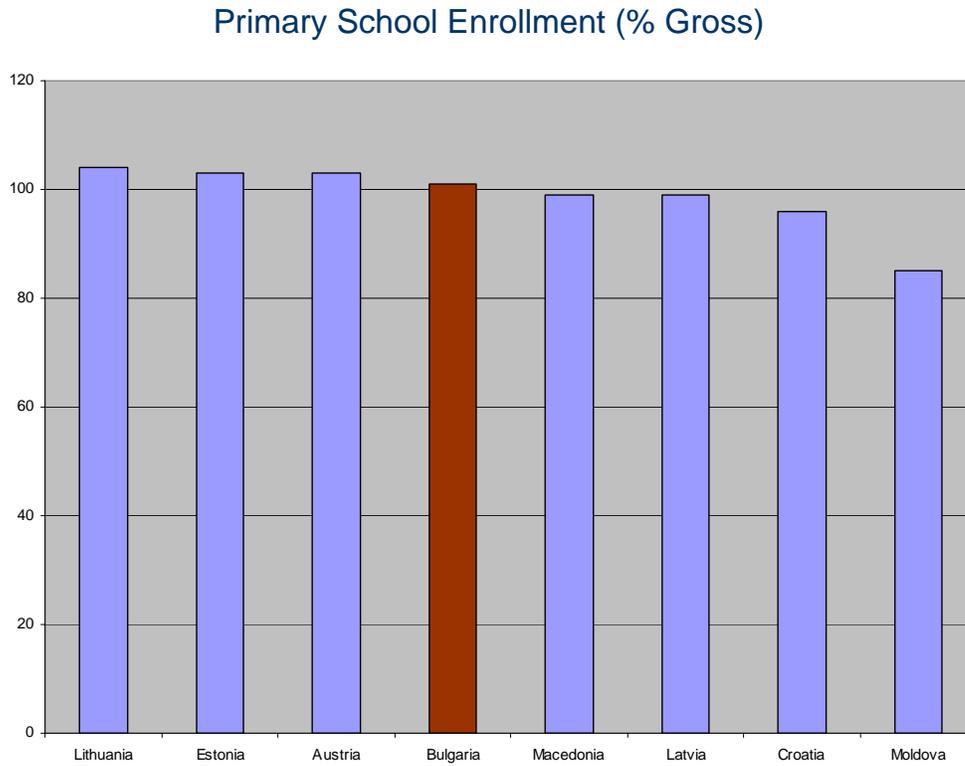
Productivity & Unemployment

Comparable Economies, 2001



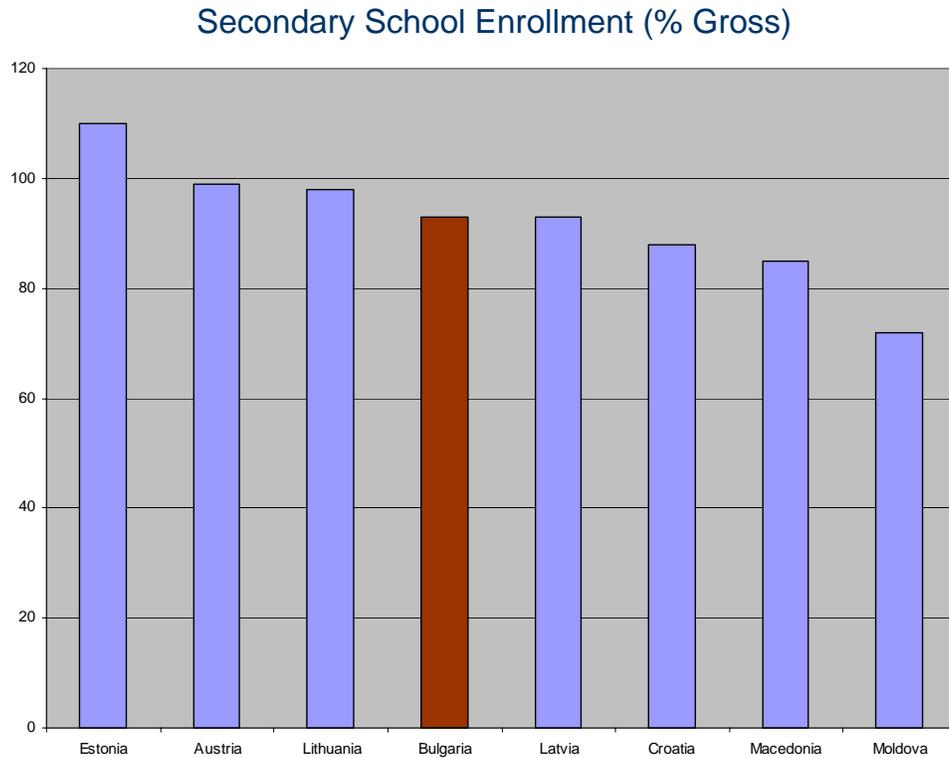
When compared with other European transition economies, Bulgaria again falls in the 3rd quadrant, accompanied only by Albania and Serbia and Montenegro, signifying its comparably low productivity and high unemployment in relation to its European neighbors.

Primary School Enrollment



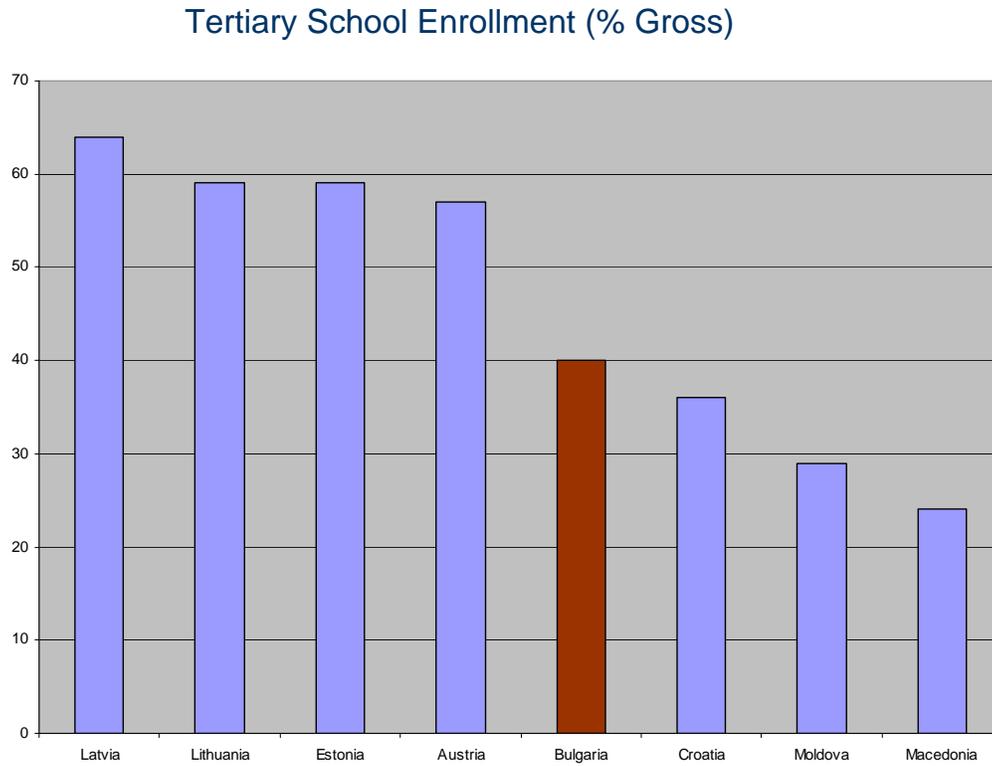
Bulgaria has full primary school enrollment.

Secondary School Enrollment



The secondary education participation rate for Bulgaria however, begins to dwindle, falling behind Lithuania, Austria and Estonia.

Tertiary School Enrollment



There is a further reduction in tertiary education enrollment for Bulgaria, falling to just 40%.

Private Sector Practice Index:

The Private Sector Practice Index includes seven equally weighted indicators from Michael Porter and Klaus Schwab's Microeconomic Competitiveness Index, which relate to the degree of private sector participation in the development of the competitiveness of its workforce. These seven indicators are: capacity for innovation; degree of customer service; extent of staff training; production process sophistication; willingness to delegate authority; reliance on professional management; and extent of incentive compensation. The seven indicators are rated on a scale of 1 to 7, with 1 being the lowest level of participation and competitiveness on the part of the private sector and workforce respectively, and 7 being the highest. The description of each of the seven indicators is as follows:

Capacity for innovation

1 = exclusively from licensing or imitating foreign companies

7 = by conducting formal research and pioneering their own new products and processes

Degree of customer orientation

1 = generally treat their customers badly

7 = are highly responsive to customers and customer retention

Extent of staff training

1 = to invest little in training and employee development

7 = to invest heavily to attract, train and retain employees

Production process sophistication

1 = labor-intensive methods or previous generations of process technology

7 = the world's best and most efficient process technology

Willingness to delegate authority

1 = top management controls all important decisions

7 = authority is mostly delegated to business unit heads and other lower-level managers

Reliance on professional management

1 = usually held by relatives

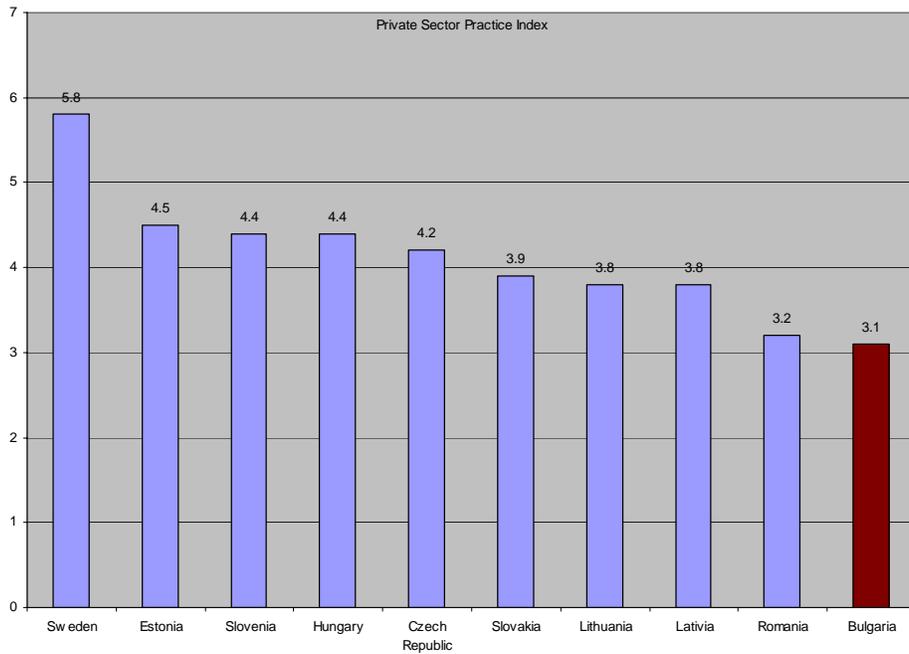
7 = held by professional managers chosen based on superior qualification

Extent of incentive compensation

1 = is based exclusively on salary

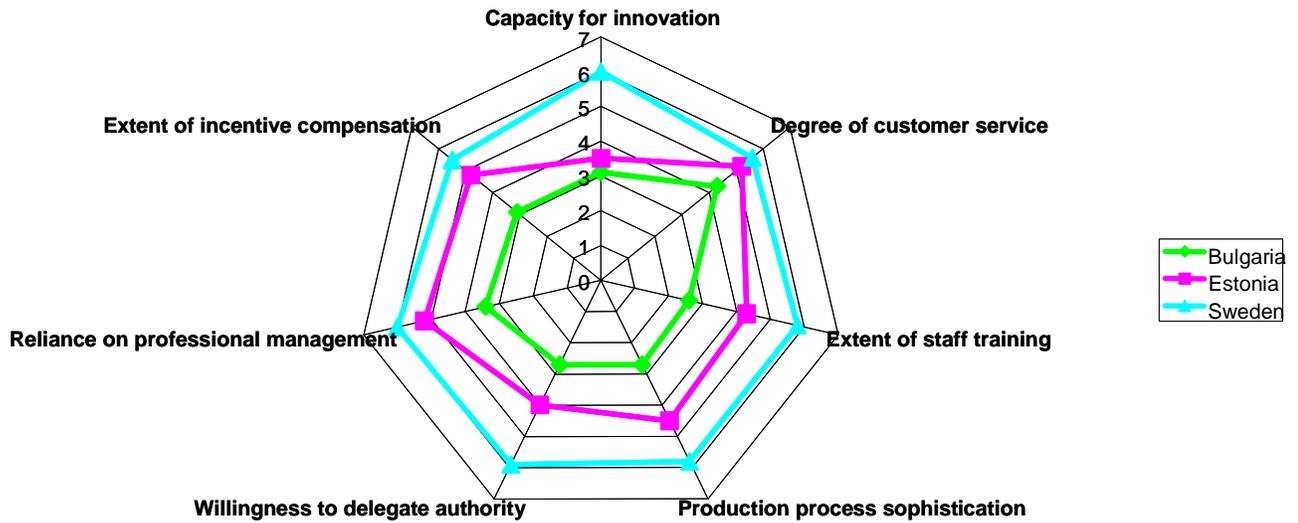
7 = includes bonuses and stock options, representing a significant portion of overall compensation

Private Sector Practice Index



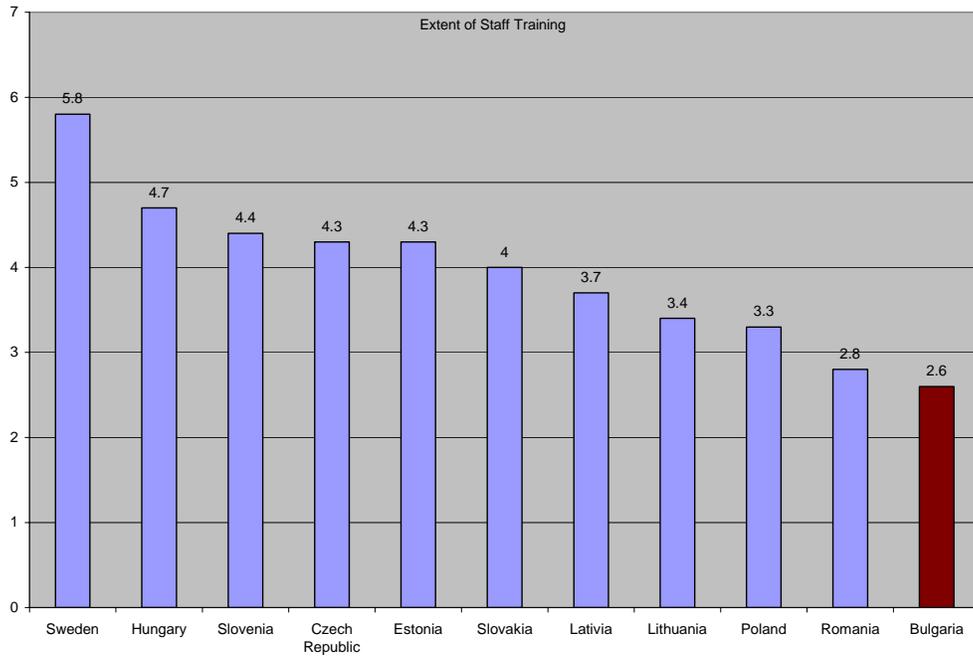
When benchmarked against eight European transition economies and Sweden, Bulgaria ranks the lowest, with only a 3.1 private sector index value. Estonia, Slovenia, Hungary and the Czech Republic have values over a point higher than Bulgaria, which is significant considering the index has only a seven point range.

Private Sector Practice Index



The private sector practice index spider graph benchmarks Bulgaria against Sweden and Estonia, two countries with relatively high index values. Bulgaria scores high for customer service, but exceptionally low for production process sophistication, willingness to delegate authority and the extent of staff training. The largest gaps found between indicator values for Bulgaria and Estonia are for the extent of staff training and production process sophistication.

Extent of Staff Training



The extent of staff training graph shows the exceptionally low level of workforce training provided by Bulgaria's private sector as compared to other European transition economies and Sweden.

Appendix 2

Building Workforce Competitiveness in Bulgaria

Summary of Surveys on Desirability and Feasibility of Implementing Workforce Competitiveness Strategies in Bulgaria

(6, the most desirable and 2, the least)

Workforce Competitiveness Strategies	Desirability		Feasibility	
	Plovdiv	Governors	Plovdiv	Governors
Attract Jobs and Improve Jobs	5.4	4.8	5.0	5.3
Local economic development focused institutions	5.3	4.7	5.2	5.0
Industry-led training center	4.6	4.0	5.2	4.8
“Customized” training	5.2	4.8	5.3	5.2
Joint training with foreign companies	4.7	5.0	4.5	5.0
Improve Private Sector HR practices	4.5	4.6	4.1	5.2
Make Education More Relevant	5.3	4.9	5.3	4.9
University- Business partnerships	5.2	4.5	5.2	5.1
School-to-work at secondary level	5.3	4.6	5.3	5.2
Entrepreneurship training	4.9	4.1	4.9	4.8
Intensive training for out-of-school youth	5	4.4	5.1	4.6
Flexible adult learning opportunities	4.9	4.5	5.1	4.9
Increase labor market flexibility	5.2	4.9	4.9	5.0
Policy reforms	4.8	4.5	4.8	4.5
Information and placement	5.1	5.0	4.9	5.3
Skill standards and certification	5.3	4.9	5.2	5.4
Worker adjustment	4.8	4.9	5.0	4.9

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Summary of Roundtable Surveys on “Bridges” Between Universities and Businesses

(6, the Most Developed- 1, the Least Developed)

“Bridges”	American U of BG	Plovdiv Chamber	Governors
Placement	3.67	3.3	3.2
Alumni associations	2.93	2.6	2.9
Internships	3.37	3.2	3.2
Business association-education linkages	2.98	3	2.7
Paid Consultation	3.29	3.3	3.4
Executive training/lifelong learning	3.59	3.3	3.3
Funded R&D	2.66	2.9	2.7
Informal events	3.4	3.2	2.8
Curriculum advisory boards	2.71	2.8	2.7
Revolving door between professors and professionals	3.06	3	2.8
Composite score	2.87	3.1	3