Services Policy Reform and Commitments in Trade Agreements:  
An Analysis of Transition Economies

Felix Eschenbach

August 2005

Introduction

It is a stylized fact of economic development that the share of services in GDP and employment rises as per capita incomes increase (Francois and Reinert, 1996). This reflects increasing specialization and exchange of services through the market—with an associated increase in variety and quality that may raise productivity of firms and welfare of final consumers, in turn increasing demand for services. It also reflects the limited scope for (labor) productivity in provision of some services, implying that over time the (real) costs of these services will rise relative to merchandise, as will their share of employment (Baumol, 1967; Fuchs, 1968). Services are increasingly becoming tradable as a result of the greater mobility of people and technological change. This further increases the scope for specialization in production and trade. The competitiveness of firms—both domestic enterprises operating on the local market and exporters on international markets—depends importantly on the availability, cost and quality of producer services such as finance, transport, and telecommunications.

Standard economic growth theory, however, postulates that growth is merely a function of capital and labor inputs. It accords no special role to services. Services play a more prominent role in the literature on financial sector development (see Levine, 1997 for a survey), which recognizes that financial intermediaries do not simply passively convert savings into physical investment. Instead, temporary or permanent growth effects of capital accumulation and productivity improvement are supported by financial intermediaries (banks, capital markets) that actively mobilize savings and channel these towards profit-maximizing investment opportunities. Another strand of the growth literature that (implicitly) emphasizes a services dimension stresses the importance of human capital (education) and R&D (a “service” activity) in generating (endogenous) growth (e.g., Lucas, 1988, Romer, 1990).

1 Groupe d’Economie Mondiale, Institut d’Etudes Politiques, Paris. Mailing address: Groupe d’Economie Mondiale, Sciences-Po, 197 Boulevard St. Germain, Paris 75007. E-mail: FelixEschenbach@yahoo.com. This paper draws on joint work with Bernard Hoekman. I am grateful to him, Simon Evenett and Joe Francois for comments on earlier drafts.
The role of producer-services in the growth process has not attracted much attention in the theoretical or empirical growth literature. Francois (1990) develops a model that points to the importance of such producer services for economic growth, although his model is not dynamic. He argues that the increasing importance of producer services in modern (growing) economies reflects economies of scale and specialization. As firm size increases and labor specializes, more activity needs to be devoted to coordinating and organizing the core businesses of a company. This additional activity is partly outsourced to external service providers. The associated organizational innovations and expansion of “logistics” (network) services yields productivity gains that in turn should affect economy-wide growth performance by enhancing the efficiency of production in all sectors. The associated cost reductions can have the effect of upgrading overall productivity, and are likely to be enhanced by, if not conditional on, increased FDI in services (Konan and Maskus, 2005; Markusen et al., 2005).^2^

Transition economies—the formerly centrally planned economies in Europe and Central Asia—have undertaken numerous policy reforms in the services area. All had very small service sectors before 1990, reflecting the emphasis under central planning on industry and the bias against service sector activities. Service sector reform in these countries has thus had the character of a natural experiment: It allows to study the macroeconomic impact of liberalization and privatization of service activities in an initially very hostile policy setting. The same is true regarding the use of trade agreements as focal points for reform—the subject of this chapter.

The chapter starts with a brief summary and synthesis of policy reforms across 16 transition economies in the services area during the 1990-2004 period. It then analyzes the use that was made by governments of the General Agreement on Trade in Services (GATS) in committing such reforms as they affect the opening of service sectors to competition from foreign suppliers. Descriptive statistics are generated on the extent to which the different countries committed to WTO disciplines on market access and national treatment restrictions, and these are compared to indicators of actual policy stances of the 16 governments^3^ . An effort is made to categorize countries according to and for what purpose they use the GATS. There are four possible combinations. Countries may (a) rely on other liberalization mechanisms (such as

---

^2^ Most of the quantitative analyses of the impact of services policy reforms has used static applied general equilibrium models. These find that services policies are important for welfare—e.g., Konan and Maskus (2005) and the references cited there.

^3^ Note that that policy stances are not meant to follow one to one from GATS commitments, the relation is indirect and based on political economy arguments explained in section 4 of this chapter.
EU accession)—so that GATS commitments have little information (it does not matter whether they are far-reaching or not), (b) use the GATS as a mechanism to help pursue reform (i.e., as a lock-in device) or as a signal to investors that their markets are more (most) open, (c) use it as a signaling device without there being a serious commitment to reform, or (d) limit commitments in the GATS because they seek to maintain restrictions on foreign suppliers. Insofar as case (c) applies, questions regarding the effectiveness of the GATS enforcement mechanisms arise.

The remainder of the chapter is organized as follows. Sections 1 and 2 discuss the evolving role of services and services-related policy reform in transition economies. The following two sections are devoted to services trade and the use of the GATS as a commitment device. Section 3 describes the degree of openness that is reflected in schedules of GATS commitments of the 16 transition economies in the sample. Section 4 compares these commitments to the actual service sector policy reforms that have occurred and maps the 16 countries into 3 groups: those for which the GATS was (is) largely redundant as a commitment device; those for which it is important, with commitments that are in line with actual policies; and those that make commitments but perform badly in terms of actual policy. The latter category suggests that in terms of the GATS, the focus of attention should not just be on expanding coverage, but also on (more) effective enforcement. Section 5 concludes.

1. Shifts in the Structure of Services in Transition Economies

Services industries were generally neglected under central planning. Marxist thinking emphasized the importance of tangible (material) inputs as determinants of economic development, and classified employment in the services sector as unproductive. The lack of producer services was reflected in transport bottlenecks, queuing for and low quality of telecommunications, the absence of efficient financial intermediation, and much lower employment in services than was the case in OECD countries (e.g., less than 1 percent of the labor force was employed in finance and insurance, see Bićanić and Škreb, 1991). Many of the services that are critical to the functioning of a market economy simply did not exist—not just a financial sector that could allocate investment funds efficiently, but also design, advertising, packaging, distribution, logistics, management, after sales services, etc.

The share of services in GDP and employment has grown significantly since 1990 in almost all transition economies. Compared to the high income OECD average in 1990—when
the share of services in employment and GDP was around 63 percent—countries in Europe and Central Asia (ECA) lagged far behind: services accounted for 30-40 percent of GDP and employment. As of 2003, services shares had increased substantially. The greatest growth is observed in the Baltic States, which have almost converged on the OECD average of 68 percent in terms of GDP shares, although employment shares remain lower (Figure 1). The Central and Eastern European (CEE) countries that acceded to the EU in 2004 have also converged to a large extent. Much less progress has been made by the Central Asian countries, where natural resource-based activities continue to constitute a major share of GDP.  

Figure 1: Changes in the Share of Services in GDP and Employment

Input-output tables for the year 2001, the latest available year for many ECA countries, provide information on differences in economic structure and the extent to which ECA countries have converged to comparators in the rest of world as regards both intermediate services use and final demand, as well as on the service intensity of exports. Table 1 reports information on the sectoral intensity of exports: the direct contribution of agriculture, mining, manufactures and services to total exports, expressed as a share of total exports of goods and services. Albania, Croatia and the Baltic States are the most services-intensive in exports. The first column in Table 2 reports the sum of the direct and indirect linkage effects generated by a unit of export revenue—the total activity generated by (going into) one unit of foreign exchange (exports). The

---

4 What follows draws on Eschenbach and Hoekman (2005). See Figure 1 for the definition of country groups.
average “multiplier” is 3.6, i.e., every US$ of exports generates $3.6 in economic activity. On average a little over one third of this total activity is services-related, ranging from a high of 52 percent (Albania) to a low of 27 percent (Czech Republic). Many transition countries are more services oriented than developing countries such as China or Malaysia.

Table 1: Sectoral Share of Total Export Revenue, selected transition economies

<table>
<thead>
<tr>
<th></th>
<th>Agriculture/Food</th>
<th>Mining</th>
<th>Manufactures</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>19</td>
<td>35</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td>9</td>
<td>49</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>5</td>
<td>80</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>7</td>
<td>76</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>10</td>
<td>73</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>4</td>
<td>85</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td>4</td>
<td>86</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>4</td>
<td>81</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>11</td>
<td>66</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>13</td>
<td>64</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>13</td>
<td>63</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>40</td>
<td>52</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>


Table 2: Total Export Related Activity (direct plus indirect linkages), 2001

<table>
<thead>
<tr>
<th></th>
<th>Total “Multiplier”</th>
<th>Agriculture/Food</th>
<th>Mining</th>
<th>Manufactures</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>4.8</td>
<td>20</td>
<td>4</td>
<td>24</td>
<td>52</td>
</tr>
<tr>
<td>Croatia</td>
<td>2.9</td>
<td>18</td>
<td>1</td>
<td>36</td>
<td>45</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>3.0</td>
<td>10</td>
<td>2</td>
<td>61</td>
<td>27</td>
</tr>
<tr>
<td>Hungary</td>
<td>2.8</td>
<td>10</td>
<td>2</td>
<td>51</td>
<td>37</td>
</tr>
<tr>
<td>Poland</td>
<td>4.2</td>
<td>17</td>
<td>3</td>
<td>43</td>
<td>38</td>
</tr>
<tr>
<td>Romania</td>
<td>6.6</td>
<td>27</td>
<td>3</td>
<td>39</td>
<td>30</td>
</tr>
<tr>
<td>Slovakia</td>
<td>2.9</td>
<td>12</td>
<td>3</td>
<td>57</td>
<td>28</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2.9</td>
<td>10</td>
<td>1</td>
<td>58</td>
<td>31</td>
</tr>
<tr>
<td>Estonia</td>
<td>2.5</td>
<td>15</td>
<td>2</td>
<td>49</td>
<td>35</td>
</tr>
<tr>
<td>Latvia</td>
<td>3.0</td>
<td>17</td>
<td>1</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3.5</td>
<td>17</td>
<td>4</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>Russia</td>
<td>3.6</td>
<td>14</td>
<td>17</td>
<td>30</td>
<td>39</td>
</tr>
</tbody>
</table>

Memo:
- Cyprus          | 2.5               | 10               | 7      | 30           | 52       |
- Turkey          | 3.7               | 17               | 2      | 40           | 41       |
- China           | 3.7               | 18               | 3      | 62           | 17       |
- Malaysia        | 2.1               | 8                | 3      | 64           | 25       |
- Germany         | 3.3               | 7                | 1      | 49           | 43       |


Although technology is making it easier to trade services, often a commercial presence remains required to sell services, i.e., FDI. Given the lack of a service sector under central planning, FDI can be expected to play a particularly important role, more so than in countries where incumbent competition confronts foreign providers. Overall, services account for some 62
percent of the stock of FDI in the reporting countries (Table 3).\(^5\) Finance, transport, communications and distribution services account for the largest share of this FDI. The service intensity of FDI in services is highest in the Baltic states, presumably reflecting their relatively small size and limited manufacturing base, and lowest in Romania and the Ukraine. Services FDI is also very high as a ratio of GDP in the Baltic States. It is lowest in Romania, Russia and the Ukraine.

Table 3: Inward FDI stock by sector, (end 2003 unless indicated otherwise; shares in total (%))

<table>
<thead>
<tr>
<th>Sector</th>
<th>CZ</th>
<th>HU</th>
<th>PL</th>
<th>SK</th>
<th>SI</th>
<th>EE</th>
<th>LV</th>
<th>LT</th>
<th>BG</th>
<th>CR</th>
<th>RO</th>
<th>RU</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing</td>
<td>0.1</td>
<td>1.3</td>
<td>0.4</td>
<td>0.2</td>
<td>0.0</td>
<td>0.4</td>
<td>1.5</td>
<td>0.8</td>
<td>0.3</td>
<td>0.3</td>
<td>0.7</td>
<td>0.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>1.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.8</td>
<td>0.0</td>
<td>0.4</td>
<td>0.6</td>
<td>0.8</td>
<td>1.1</td>
<td>3.1</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>35.5</td>
<td>45.8</td>
<td>35.8</td>
<td>37.5</td>
<td>43.3</td>
<td>18.2</td>
<td>15.5</td>
<td>31.1</td>
<td>33.4</td>
<td>30.6</td>
<td>54.3</td>
<td>45**</td>
<td>46.4</td>
</tr>
<tr>
<td>Electricity, gas, water supply</td>
<td>6.9</td>
<td>4.6</td>
<td>2.6</td>
<td>11.7</td>
<td>1.0</td>
<td>2.4</td>
<td>3.4</td>
<td>4.4</td>
<td>1.0</td>
<td>1.1</td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>1.9</td>
<td>1.1</td>
<td>2.6</td>
<td>0.7</td>
<td>0.1</td>
<td>2.5</td>
<td>1.0</td>
<td>1.2</td>
<td>2.7</td>
<td>0.9</td>
<td>2.4</td>
<td>2.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Distribution and repair services</td>
<td>11.9</td>
<td>11.1</td>
<td>17.1</td>
<td>11.2</td>
<td>14.5</td>
<td>15.9</td>
<td>18.0</td>
<td>17.9</td>
<td>18.0</td>
<td>6.9</td>
<td>16.4</td>
<td>22***</td>
<td>18.5</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>1.2</td>
<td>1.1</td>
<td>0.6</td>
<td>0.5</td>
<td>0.4</td>
<td>1.7</td>
<td>1.3</td>
<td>1.6</td>
<td>1.7</td>
<td>4.0</td>
<td>2.4</td>
<td></td>
<td>2.3</td>
</tr>
<tr>
<td>Transport, storage &amp; comm.</td>
<td>13.6</td>
<td>10.1</td>
<td>10.4</td>
<td>10.0</td>
<td>4.4</td>
<td>17.7</td>
<td>11.9</td>
<td>17.1</td>
<td>15.7</td>
<td>25.0</td>
<td>7.8</td>
<td>9.5</td>
<td>7.2</td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>15.9</td>
<td>10.3</td>
<td>21.3</td>
<td>23.5</td>
<td>18.8</td>
<td>28.1</td>
<td>15.0</td>
<td>15.7</td>
<td>17.7</td>
<td>24.6</td>
<td>1.8</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td>Real estate, rental &amp; business act.</td>
<td>9.3</td>
<td>11.7</td>
<td>7.5</td>
<td>3.2</td>
<td>15.2</td>
<td>11.4</td>
<td>24.5</td>
<td>7.3</td>
<td>3.9</td>
<td>3.1</td>
<td>8.2</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Education, health, social work</td>
<td>0.2</td>
<td>.</td>
<td>.</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
<td>0.0</td>
<td></td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Other community &amp; personal ser.</td>
<td>2.4</td>
<td>.</td>
<td>.</td>
<td>0.3</td>
<td>0.5</td>
<td>0.8</td>
<td>1.1</td>
<td>1.5</td>
<td>0.8</td>
<td>0.5</td>
<td>0.2</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Other not classified activities</td>
<td>0.0</td>
<td>1.0</td>
<td>1.4</td>
<td>.</td>
<td>1.7</td>
<td>0.4</td>
<td>6.0</td>
<td>0.3</td>
<td>3.2</td>
<td>.</td>
<td>16*</td>
<td>11.0</td>
<td></td>
</tr>
<tr>
<td>Real estate purchases by foreigners</td>
<td>.</td>
<td>1.5</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total services share **** 56.2 47.9 60.9 49.8 55.7 78.6 78.9 62.8 65.2 64.9 45 54.6 47.5

Value of services FDI stock ($ bn) 26.7 22.9 36.8 5.6 2.8 5.1 2.6 3.1 3.3 7.4 5.7 35.5 3.6

Services FDI stock as % of GDP 31.6 27.7 17.6 17.6 7.7 60.7 26.8 37.8 16.6 26.1 9.4 8.2 7.3

Notes: NMS: New EU Member States; * Includes finance and business services. ** Covers all industry, including mining/energy; *** Includes hotels and restaurants; **** Not including utilities.


The foregoing snapshot of trends in the share of services in GDP, employment, output per worker, trade and FDI reveal both substantial convergences towards European countries, but also a distinct difference between Central European/Baltic states and Central Asian and CIS economies. Given that trade and FDI in services can be expected to be associated with the acquisition of new technologies, higher service standards and more effective delivery, these differences should help explain the observed higher labor productivity performance in services in the former. The question explored in the rest of this paper is whether these services developments are determinants of the aggregate growth performance of countries. The services

\(^5\) Aggregate data on FDI inflows are available for a wider set of countries, but these are not broken down across services sectors.
outcome variables are of course endogenous, influenced by the policy stances of governments, so that the focus is on the impact of services policy reforms.

2. Policy Stances and Service Sector Reforms

Service sector reform involves a mix of deregulation (the dismantlement of barriers to entry and promotion of competition) and improved regulation (putting in place an appropriate legal environment, strengthening regulatory agencies, increasing their independence, etc.). The policy challenge is to achieve a balance between effective regulation and increasing the contestability of markets. Much has been done by transition countries to reform and adapt policies and regulatory regimes for service industries. Figure 2 plots three indicators of the extent of policy reform in banking, non-bank financial services and infrastructure. These indices, constructed by the EBRD, range from 1 to 4.3, and span the period 1990-2004. Box 1 provides a brief description of the EBRD reform indices. The 2004 value provides a measure of the progress that has been made by countries in converging to “best practice” standards—measured by a maximum value of 4.3. Data are available annually for the 1990-2004 period.

**Figure 2: Services Reform Index, 2004**

![Graph showing services reform index for various regions and sectors]

*Source: EBRD (2004). See Box 1 and Figure 1 for definitions.*

The data are subject to limitations in the sense that they do not cover all service sectors and that they are somewhat arbitrary due to a certain amount of personal judgment in the assessment. They do, however, give a reasonable impression of the reform agenda put in place in
these countries. The infrastructure index in Figure 2 is the average of indices 3 to 7 in Box 1; the financial sector indicators are 1 and 2 respectively.

**Box 1: The EBRD Services Reform Indices**

The index ranges from 1 (little progress) to 4.3 (most advanced implementation of reform agenda) and has been compiled on an annual basis for the 1990-2004 period. The index we use to measure service sector reform is the average of the following components:

1. **Banking and interest rate liberalization**: 4.3 means full convergence of banking laws and regulations with BIS standards, provision of full set of competitive banking services.
2. **Securities markets and non-bank financial institutions**: 4.3 means full convergence of securities laws and regulations with IOSCO standards, fully developed non-bank intermediation.
3. **Electric power**: 4.3 means Tariffs cost-reflective and provide adequate incentive for efficiency improvements. Large-scale private sector involvement in the unbundled and well-regulated sector. Fully liberalized sector with well-functioning arrangements for network access and full competition in generation.
4. **Railways**: 4.3 means separation of infrastructure from operations and freight from passenger operations. Full divestment and transfer of asset ownership implemented or planned, including infrastructure and rolling stock. Rail regulator established and access pricing implemented.
5. **Roads**: 4.3 means fully decentralized road administration. Commercialized road maintenance operations competitively awarded to private companies. Road user charges reflect the full costs of road use and associated factors, such as congestion, accidents and pollution. Widespread private sector participation in all aspects of road provision. Full public consultation on new road projects.
6. **Telecommunications**: 4.3 means effective regulation through and independent entity. Coherent regulatory and institutional framework to deal with tariffs, interconnection rules, licensing, concession fees and spectrum allocation. Consumer ombudsman function.
7. **Water and waste water**: 4.3 means water utilities fully decentralized and commercialized. Fully autonomous regulator exists with complete authority to review and enforce tariff levels and quality standards. Widespread private sector participation via service/management/lease contracts. High-powered incentives, full concessions and/or divestiture of water and waste-water services in major urban areas.

**Source**: EBRD Transition Report, 2004

Central and East European (CEE) and Baltic states (FSU1) have made the most progress in all three services policy areas. For the other transition countries there is significant variation across indices. SEE has advanced the most on reforms in banking and infrastructure, followed by
the Caucasus (FSU3), while European CIS countries (FSU2) have done the most in the non-bank financial area, followed by SEE. The Central Asian republics have made the least progress in all three areas, with one country—Turkmenistan—not advancing at all in any. What follows briefly discusses current policies for financial and infrastructure services.

**Financial Services**

In CEE and Baltic countries the banking sector is presently characterized by small shares of credit allocated through state-owned banks and high foreign participation. Although weaknesses remain in the legal framework (e.g., creditor rights, the bankruptcy code), central bank independence has been strengthened in most of these countries. Cukierman, Miller, and Neyapti (2001) develop a measure of independence that has 16 (weighted) components. They conclude that in CEE and Baltic countries the degree of independence has converged to that of the German Bundesbank in the 1980s. Most other transition countries fall substantially short of this. Their measure, however, reflects only legal, not actual independence. If the latter is taken into account, the divergence across countries increases further. The Central Bank of Belarus, for instance, has a high degree of legal, but a low degree of actual independence.

Banking markets in many FSU countries tend to be relatively closed in either a formal or informal (de facto) sense. However, there is significant variation across countries. Thus, Armenia’s financial sector is relatively open and scores higher in terms of regulation. Formal limits on foreign participation (globally or on an individual bank basis) play a role in some countries, but bureaucratic impediments are more prominent in inhibiting foreign participation. Examples include limitations on foreign staff, lengthy licensing procedures, financial repression, public ownership of major banks, and lax regulatory practices. In general the banking sector in these countries suffers from a weak capital base.

**Infrastructure Services**

Policy reforms in the area of utility and infrastructure services include better regulation of the provision of these services, removal of cross-subsidization, more efficient pricing, improved revenue collection, and separation/unbundling of activities. Three types of reforms are particularly important in increasing the efficiency of provision of regulated infrastructure services: (i) allowing entry of new domestic and foreign providers; (ii), where feasible, opening the domestic market to imports of such services; and (iii) the establishment of an independent
regulator. The latter is likely to be a key determinant of regulatory effectiveness. Reforms may and often do include privatization, but this variable is captured in the overall investment climate variable, not in the infrastructure services policy reform index. Even if incumbent providers remain state-owned, if regulators permit entry of new providers in the market, such competition can be expected to yield efficiency gains in the industry overall. The EBRD indices suggest that the CEE and Baltic countries have made the most progress in establishing independent regulators, while many of the CIS countries have made the least.

Figure 3 disaggregates the infrastructure index along five sectoral dimensions—electric power, roads, railways, telecommunications, and water and wastewater—and assesses the cumulative reform progress in each of the ECA countries. On average for the region, progress has been most pronounced in the sectors of telecommunications and electrical power. Often this will reflect a mix of commercialization, deregulation and privatization of national telecom companies. The index shows little or no progress in utility and infrastructure reform in Turkmenistan, Tajikistan Belarus, Uzbekistan, and Kyrgyzstan, with most progress made in Hungary, Poland, the Czech Republic, Estonia and Romania.

Figure 3: Infrastructure Reform, by country and Sector, 2004

![Infrastructure Reform Graph]

Source: EBRD (2004). The scale ranges from 0 to 20, representing the cumulative progress for each country on the five indicators, which individually range from 1 to 4.3—see Box 1.

In the telecommunications sector, fixed-line services are still quite underdeveloped in most economies. This has given rise to faster growth of, and stronger competition in, the mobile
services sectors, especially in CEE and Baltic countries, followed by SEE. In the rest of the FSU, mobile penetration rates fall short of fixed line services. In many of the latter countries, independent telecom regulators have yet to be established. The incumbent fixed-line operator may oppose interconnection agreements; tariffs are frequently low and distorted, and cross-subsidies between different types of calls and customers continue to be prevalent. The least progress has been made in the rail, road and water sectors. Only some CEE countries, (e.g., Poland, Hungary, and Croatia) have introduced private sector participation through toll roads. Reforms in the railway sector are also at an early stage in terms of private sector participation, although the separation of infrastructure from operations is either planned or has been put in practice in many countries.\(^6\)

FDI is an important channel for foreign providers to contest infrastructure service markets. FDI in these sectors sometimes takes the form of greenfield investment, but has mostly occurred through privatization. The extent of privatization varies substantially by country and sector, with Central European and Baltic countries the leaders in attracting FDI in infrastructure. The SEE countries have attracted the least.

Eschenbach and Hoekman (2005) analyze the impact of service sector policy reforms on the growth performance of 24 transition economies. Controlling for a number of standard explanatory variables used in the growth literature (investment, crises, inflation), they find a statistically significant positive association between per-capita GDP growth and indirect (FDI) and direct measures of service sector policy reforms (the different policy choice indices). Although the sample of countries was limited to transition economies—annual policy reform indicators of the type compiled by the EBRD do not exist for developing countries—the findings indicate that services policies should be considered more generally in empirical analyses of economic growth. Services such as finance, telecommunications and transport are major inputs into the production of goods and services—including agriculture as well as manufacturing. The costs of these inputs can account for a major share of the total cost of production, and are thus important factors affecting the competitiveness of firms. Services are also important

\(^6\) In terms of actual reform measures a few examples are worth mentioning. Estonia, for instance, has fully privatized its railway system. Network maintenance is carried out privately in Poland, the Czech Republic, Romania, and Kazakhstan. Passenger services are not profitable in many transition economies and are in general subsidized. In the Czech Republic, Latvia, and Romania the operation of some passenger services has been handed over to private companies. In Russia, Kazakhstan, Poland, and Romania private rail freight services have developed following gradual liberalization in this area. See Eschenbach and Hoekman (2005).
determinants of the productivity of workers in all sectors—education, training, and health services are key “inputs” into the formation and maintenance of human capital. Thus, service sector reforms potentially can do much to enhance economic growth and efficiency.

The findings in research by Eschenbach and Hoekman (2005), Konan and Maskus (2005), Mattoo et al. (2005) among others, suggests a comprehensive “behind-the-border” policy reform agenda focusing on services can help attract much-needed investment, both domestic and foreign. Openness to foreign competition—through policies that permit foreign participation on domestic markets—is a key element of good service sector policy. There is no good measure available of the “multiplier” effect of services reform and openness. But the limited stock of inward FDI in Central Asian economies is in striking contrast to the CEE and Baltic countries. So is the overall economic performance of these different countries, measured both in terms of average performance and its volatility. Liberalization—greater participation by foreign service firms on domestic markets—is of course not sufficient. Given the characteristics of services and services markets—often affected by asymmetric information or high fixed costs and associated barriers to entry—there is also need for effective regulatory supervision of both domestic and foreign operators. This is a significant challenge. Given that the CEE, Baltic and increasingly the SEE countries now offer relatively attractive policy environments for FDI and have done much to converge on OECD regulatory standards in services, the policy reform threshold for the Central Asian and other transition countries has become much more competitive.

The Doha Round negotiations on services offer an opportunity to pursue further service sector reforms. The remainder of this paper explores what transition economies have done to date in the GATS, and, in particular, what the relationship is between commitments and actual reforms.

3. Transition Economies and the Patterns of GATS Commitments
To compare the summary indicators of actual policy with the GATS commitments of transition economies it is necessary to convert the latter into an index as well. Annex Table 1 summarizes the methodology used, which involves a three-fold categorization of GATS commitments (based on Hoekman, 1996): (1) Free—there are no limitations on foreign suppliers with respect to market access and national treatment (i.e. non-discrimination of foreign suppliers); (2) Partial—some sort of specific commitment is made implying that restrictions are imposed; and (3)
Unbound—no commitments are made. Note that the latter does not imply the country is actually closed in a sector or mode of supply—just that it is not constrained by the GATS. One of the objectives of the analysis that follows is to determine whether there is a general tendency to be rather closed in “unbound” sectors.

The 16 countries are divided into four groups: (a) EU accession countries that were GATT members in 1994; (b) EU accession countries that were not GATT members in 1994; (c) South Eastern European countries, and (d) countries belonging to the former Soviet Union (note that the Baltics are part of group (b)). Charts displaying information on the distribution of commitments across the three categories (free, partial, and unbound) across the 155 GATS sectors – the total number of sub-sectors of 12 more broadly defined sectors – of the respective countries are plotted in Annex Figures 1-4. Each of the three bars for the respective four modes for market access and national treatment represents the percentage of sub-sectors in the total 155 sub-sectors for the categories free, partial, and unbound. We use the average of these shares for the category “free” across the two times four modes as an indicator of scheduled openness (commitments).

We start with group (a), the four EU accession countries that were GATT members before, i.e. Hungary, Poland, and the Czech Republic and the Slovak Republics (Annex Figure 1). The schedules took effect in 1994 for all four countries and have been revised several times since then. These revisions, just as those implemented by other countries, concern mainly additional commitments in the financial services and telecom sectors. The information presented in the Annex figures is based on the most recent revisions. The averages are somewhat biased downward by the fact that mode 4 is usually part of the horizontal commitments and therefore shows up as unbound in the charts. Hungary has the most sectors without limitations (‘free’), with an average share across modes of about 43 percent, followed by the Czech and Slovak Republics with about 28 percent each, and by Poland with roughly 21 percent. The relatively low degree of commitment to opening up in the latter three countries is surprising at first sight as all were preparing to join the EU at the time of submitting the schedules. The high percentage of ‘unbound’ commitments is also striking.

---

7 Trade in services may occur through either (1) cross-border trade, (2) consumption abroad (e.g. tourism), (3) commercial presence (in the sense of FDI), or (4) temporary movement of natural persons providing services to clients abroad.
The four other EU accession countries that were not members of the GATT in 1994, i.e. group (b), convey a different impression (Annex Figure 2). Latvia is the frontrunner with about 58 percent ‘free’ sectors on average, followed by Lithuania (42 percent) and Estonia (38 percent). The outlier here is Slovenia with about 28 percent of the 155 sectors having no limitations on average. The schedules date from 1995 (Slovenia), 1999 (Latvia, Estonia), and 2001 (Lithuania).

Turning to group (c), the South Eastern European countries (Annex Figure 3), with 45 and 42 percent of all sectors committed as ‘free’, on average the two former Yugoslav Republics Croatia and Macedonia have committed substantially more than Romania (24 percent) and Bulgaria (22 percent). The schedules were submitted in 1994 (Romania), 1997 (Bulgaria), 2000 (Croatia), and 2004 (Macedonia).

Finally, the four former Republics of the Soviet Union (group (d)) all committed themselves to a rather high degree of market opening and non-discrimination. Annex Figure 4 shows that Kyrgyzstan is the leader, with 49 percent ‘free’, followed by Georgia (47 percent), Moldova (43 percent) and Armenia (40 percent). The schedules were submitted in 1999 (Kyrgyzstan), 2000 (Georgia), 2001 (Moldova), and in 2004 (Armenia).

Table 4: Index and ranking of countries based on average share of ‘free’ sectors/modes

<table>
<thead>
<tr>
<th>Group (a)</th>
<th>Group (b)</th>
<th>Group (c)</th>
<th>Group (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Accession in 2004</td>
<td>EU Accession in 2004</td>
<td>South Eastern Europe</td>
<td>Former Soviet Republics</td>
</tr>
<tr>
<td>GATT Members</td>
<td>Non-GATT Members</td>
<td>Potential EU Candidates</td>
<td>Non EU candidates</td>
</tr>
<tr>
<td>Hungary</td>
<td>43.4</td>
<td>Latvia</td>
<td>58.1</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>28.4</td>
<td>Lithuania</td>
<td>42.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>27.8</td>
<td>Estonia</td>
<td>38.2</td>
</tr>
<tr>
<td>Poland</td>
<td>21.2</td>
<td>Slovenia</td>
<td>27.7</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>30.2</strong></td>
<td><strong>Average</strong></td>
<td><strong>41.6</strong></td>
</tr>
</tbody>
</table>

*Source: own interpretation of respective GATS schedules*

Table 4 summarizes the patterns in the commitments made by the 16 transition economies. There are three interesting results. First of all it seems that among the EU accession countries, non-GATT (1994) member states have done a lot more in terms of commitments than the countries that had previously joined the GATT. The average share of sectors committed to full liberalization is more than ten percentage points higher. Poland’s weak use of the GATS as a liberalization device is particularly striking. Hungary and Slovenia are the respective outliers.
The Baltic States clearly signal a strong interest in the GATS mechanism. The second result is that of the four South Eastern European countries only the former Yugoslav Republics reveal a strong interest in committing themselves to liberal policies. Even though they are all potential EU candidates, Romania and Bulgaria were and are more advanced in the accession process, suggesting the GATS may have been less relevant for them. The third finding is the high degree of liberalization committed to by the four former Soviet Republics, three of which are in the Central Asia/Caucasus area. The average of about 45 percent ‘free’ sectors is the highest of all four country groups 8.

Several questions are suggested by these findings. First, do the schedules reflect actual commitments to ‘lock-in’ a set of reform agendas for the services sector? Or are they just a signaling device—an indication of intent? Second, do countries with little revealed interest in making full commitments use discriminatory trade-related oriented trade policies or do they simply want to reserve the right to remain unconstrained with respect to their policy choices? If the latter, is there a relationship with the size of the country—i.e., a potential terms-of-trade rationale? Third, is the lack of GATS ‘interest’ due to other factors, such as the need to implement the EU acquis? Finally, to what extent are commitments actually applied? The weaker the relationship between commitments and actual policies, the greater the doubts that can be expressed regarding the enforcement mechanisms of the GATS, and thus its usefulness as a commitment device.

4. A First Empirical Assessment of the Political Economy of GATS Commitments

There are two general explanations for the existence of trade agreements: market access (agreements as a way of internalizing policy spillovers—foreign policies that affect a country’s terms of trade) and domestic political economy (agreements as a vehicle for mobilizing domestic support for desirable national reforms and locking in such reforms). 9 A priori, a transition country’s GATS commitments are more likely to reflect the second motivation. However, in assessing possible explanations for the observed pattern of GATS commitments, account needs to be taken of different explanatory factors such as geographic proximity to a large market (EU),

---

8 Note that this is a conservative measure for Georgia, Kyrgyzstan, and Moldova as only sectors that are explicitly “free” are counted, and not the ones that are mentioned in the schedule but not clearly identified (i.e., empty spaces under the relevant headings). Strictly speaking the latter also comply with the definition of “free” so that the degree of liberalization would be even higher. For all other countries there is no difference.

9 See Bagwell and Staiger (2003) on the former and Tumlir (1985) on the latter.
the size of the economy, engagement in the EU accession process, etc. Countries may have a bigger incentive to use the GATS as a signaling device if they are small, geographically distant from large markets, and have no prospect of EU membership. These factors would explain why countries might opt to make more market opening commitments in the GATS. Even so, it is unclear whether they want to use the GATS to lock in policy or merely to signal willingness to become a ‘member of the club’.

In this section, we begin with an aggregate analysis of the extent to which GATS commitments by the four country groups (a)-(d) match up with applied policies. We then discuss if country characteristics may have some explanatory power. Figure 4 gives an impression of the “quality” of actual service sector reform in the four country groups. The data are averages of the country scores measured by the EBRD - see above – presented at the group level. The country scores themselves are averages across a larger number of service sector activities (1.-7. in Box 1). Observe that in terms of actual policy, group (a) has consistently performed best over the whole transition period, followed by groups (b), (c), and (d). If, however, we rank the country groups on the basis of GATS commitments, the ranking of groups (a) and (d) is reversed, while groups (b) and (c) stay the same. This is documented in Table 5. Our first main finding is thus the reversed positions of the extremes in the two different rankings. We shall later turn to the question why this may be the case.

**Figure 4: Time Path of Service Sector Reform**

![Service Sector Reform Index](source: EBRD)
Table 5: Openness Ranking of Country Groups according to Theory and Practice

<table>
<thead>
<tr>
<th>Position in ranking</th>
<th>Theory ranked by average ‘free’ sectors</th>
<th>Practice ranked by average EBRD score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Group (d) 44.4</td>
<td>Group (a) 2.68</td>
</tr>
<tr>
<td>2</td>
<td>Group (b) 41.6</td>
<td>Group (b) 2.41</td>
</tr>
<tr>
<td>3</td>
<td>Group (c) 33.1</td>
<td>Group (c) 2.01</td>
</tr>
<tr>
<td>4</td>
<td>Group (a) 30.2</td>
<td>Group (d) 1.70</td>
</tr>
</tbody>
</table>

*Source:* GATS and EBRD

Figure 5: Time Path of Service Sector Reform, Country Breakdown

Source: EBRD.

There is, of course, much more heterogeneity in the data. It is therefore useful to look at the different groups individually (Figure 5). We do not discuss the charts for all countries, but rather pick some interesting outliers. In line with its GATS commitments Hungary is the
frontrunner in Group (a) in terms of applied policy as measured by the EBRD indices. More surprising is the solid performance of Poland, which did not make much use of the GATS. In group (b) the four countries stay relatively close to each other in terms of policy performance. Estonia fares best while Latvia’s strong use of the GATS is not fully reflected in the policy indicator. In group (d) Bulgaria, Romania, and Croatia follow more or less the same actual policy path, while Macedonia has been stagnating since the mid-1990s. This does not fully reflect the picture painted by GATS commitments, where Romania and Bulgaria did very little in terms of committing to opening up. In terms of applied policy the pattern is the opposite. The same is true for Macedonia, a GATS frontrunner, together with Croatia. So theory and practice seem to be reversed for the three countries. Croatia is the outlier in that it performs well both in terms of commitments and applied policy. Striking in group (d) is the poor performance of Kyrgyzstan. Frontrunner in terms of GATS, it has been lagging on actual policy for about seven or eight years.

What does all this suggest about the political economy of making commitments in the GATS? The interesting finding here is the reversal in positions (rankings) of groups (a) and (d) in terms of actual policy as opposed to GATS commitments. Group (a) has the following characteristics: the countries are geographically close to the EU; they all acceded to the EU in 2004; they were all GATT 1994 members, and have quite heterogeneous market sizes. The fact that on average their policy performance is inversely related to their GATS commitments suggests that they relied on other mechanisms, in particular the EU acquis, as a focal point and lock-in mechanism. Group (d) is geographically distant from the EU, the markets involved are homogenously small, and there is no prospect of EU accession. This explains to some extent the difference in the observed use of the GATS. However, the low ranking of these countries in terms of actual policy indicates that the GATS may be used as a signaling device, but not to lock in reforms. Here the case seems rather to one of ‘joining the club’ than a reinforcement of domestic reforms. An obvious question or counterargument is that if GATS commitments have been made then presumably they are binding. In practice however it is unlikely that GATS commitments are (perceived to be) binding, as the very small markets involved and their distance from major markets imply that the incentives to launch dispute settlement cases against these countries are low. Thus, it may well be that governments in these countries may be less than
committed to liberalization, while still being to make what appear to be significant commitments in the GATS.

For groups (b) and (c) it seems that on average their commitments are in line with policy. Group (b) has a tendency to be a bit more remote from the EU and to have somewhat smaller markets on average than group (a). Group (c) is too heterogeneous to be discussed at the aggregate level. Turning to the country-level, we start again with group (a). Poland, the largest market with geographic proximity, previous GATT membership, and EU accession has done least of all countries in the GATS. It is a good example of a country that does not "need" the GATS. The same holds to a lesser extent for the Czech and the Slovak Republics. Hungary, however, used the GATS—perhaps to attain ‘frontrunner’ status as well as help lock-in reforms. In group (b) the same as for Hungary holds for the Baltics. They used the GATS to indicate commitment to implementing and locking-in reforms, which may partly be due to their small markets, their former membership of the Soviet Union, and their non-GATT membership. Apparently they do not rely on the EU accession process alone, which seems to be the case for Slovenia. In group (c) Romania and Bulgaria do very little in the GATS and thus seem to rely on their potential EU accession, market size, and geographic proximity. For Croatia, EU accession is an ambitious target if we look at the entire transition period, given that it was involved in the war in the Balkans. This may help explain why they made use of the GATS for committing themselves to a reform process. Macedonia, in turn, shows no willingness or ability to convincingly implement a domestic reform agenda. The same holds for the whole set of countries included in group (d). They seem to commit to market opening rather in order to signal than to implement. Kyrgyzstan is exactly the opposite of Poland. Its commitment to market opening in the GATS is as striking as its failure to implement a domestic reform agenda (as measured by the EBRD indices).

On the whole, the analysis above suggests the sixteen countries can be divided into three categories. First, there are the countries that have a perspective of joining the EU or already did so. They are more open in reality than is suggested by their GATS commitments. They have large markets, previous GATT membership, and geographic proximity to the EU. These countries do not need the GATS as a liberalization device. In this group Poland is a key player, but the Czech and the Slovak Republics, Slovenia, Bulgaria, and Romania, also belong to it.
The second group is composed of countries that are relatively open in both theory (GATS indices) and practice (EBRD indices). They may or may not need the GATS, but seem to use it to signal frontrunner status (Hungary), because they have small markets (the Baltics), or want to lock-in reforms (Croatia). Croatia is probably the only country in this group that actually "needs" the GATS because it confronts greater uncertainty regarding future EU membership. Most countries in this group also have in common that they were not members of the GATT previously (the exception is Hungary), which is an additional motivation for them to align GATS commitments and actual reforms. An important reason for this, not discussed up to this point, is that newly acceding WTO members have been subjected to much greater pressure to make far-reaching commitments than incumbents (see, e.g., Hoekman and Kostecki, 2001).

The third group is composed of countries that are less open in reality than they would appear to be on the basis of GATS commitments. They comprise the former Soviet Republics Kyrgyzstan, Georgia, Armenia, and Moldova, and the former Yugoslav Republic Macedonia. They have no or very little chance to join the EU. They are geographically and/or culturally distant from the EU, have small markets and were not GATT 1994 members. They use the GATS to signal their interest in membership of the world trading system without convincingly implementing a related reform agenda. For them the GATS is a pure signaling device in order to benefit from the membership in the world trading system.

To what extent are actual policies less liberal than GATS commitments? The inverse rank order of countries if done on the basis of GATS as opposed to EBRD policy performance suggests that the GATS enforcement mechanisms may not be very effective. It is difficult to say whether this is indeed the case, as there is no information whether foreign suppliers have had problems with inadequate implementation of GATS commitments in certain countries. As noted previously, these countries may attract very little foreign suppliers for other reasons (market size, political instability etc.), making it less likely that their GATS commitments will be put to a legal test. What can be said is that a commitment of ‘unbound’ does not necessarily imply that countries concerned are closed. The example of Poland shows that actual policy may be much more liberal than the GATS commitments might suggest is the case.
5. Conclusions

Services such as finance, telecommunications and transport are major inputs into the production of goods and services—including agriculture as well as manufacturing. The costs of these inputs can account for a major share of the total cost of production, and are thus important factors affecting the competitiveness of firms. Services are also important determinants of the productivity of workers in all sectors—education, training, and health services are key “inputs” into the formation and maintenance of human capital. Thus, service sector reforms potentially can do much to enhance economic growth and efficiency.

Given this increasing importance of the service sector, its role in trade negotiations also becomes a major issue for policy makers. The General Agreement on Trade in Services (GATS) is the primary multilateral instrument that can be used to improve access to markets and lock-in (promote) pro-competitive policy reforms. The ‘power’ of the GATS to promote liberalization on a reciprocal basis has been questioned in the literature—e.g., Hoekman and Messerlin (2000).

There are strong forces that should support unilateral services policy reform efforts, and reciprocity within services may be hard to obtain. Small countries in particular will have little to offer. However, clearly there can be (and is) resistance to domestic reform, suggesting that a primary function of trade agreements is to overcome such opposition, perhaps with the quid pro quo being sought in other sectors. The data analyzed above suggest that discussions of the role of trade agreements need to distinguish between deep regional integration of the EU type and more shallow commitment mechanisms such as the GATS. Many (most) countries do not have any prospect of acceding to the EU. These countries can emulate those transition economies that made use of the GATS to help lock-in reform agendas (such as Croatia). They should not emulate those transition economies that appear to have tried to use the GATS as a signaling device but not as a lock-in mechanism. Such efforts might appear to be a sensible way of seeking to reap the fruits of membership in the international trading system without incurring major policy constraints. The problem with this strategy is that it generates no payoffs—investors will focus on the actual policies. Perhaps a more important problem with the observed pattern of commitments vs. real policies is that GATS commitments may not be of any great value to small countries because they are not (or only weakly) enforced. If so, this puts the burden back squarely on the shoulders of domestic reform and national governments. An implication is that
the efforts and calls that are made for more offers to be submitted in the services negotiations may not have very significant payoffs to those who make them.

References


Annex

Annex Table 1: Classification of GATS commitments for quantification purposes

<table>
<thead>
<tr>
<th>GATS terminology</th>
<th>Correspondence used in charts</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Free</td>
</tr>
<tr>
<td>None, except specific services or provisions</td>
<td>Partial</td>
</tr>
<tr>
<td>Unbound, except specific services or provisions</td>
<td>partial</td>
</tr>
<tr>
<td>Unbound, except as indicated in horizontal section, plus textual description of bound commitments</td>
<td>partial</td>
</tr>
<tr>
<td>Unbound, due to lack of technical feasibility, except specific services</td>
<td>partial</td>
</tr>
<tr>
<td>Textual description of bound commitments</td>
<td>partial</td>
</tr>
<tr>
<td>unbound</td>
<td>unbound</td>
</tr>
<tr>
<td>Unbound, except as indicated in horizontal section</td>
<td>unbound</td>
</tr>
<tr>
<td>Unbound, due to lack of technical feasibility</td>
<td>unbound</td>
</tr>
<tr>
<td>Empty space/sector not mentioned in schedule</td>
<td>unbound</td>
</tr>
</tbody>
</table>

Source: own definition.

Annex Figure 1: Allocation of commitments across 155 GATS sectors, Market Access and National Treatment, and Modes of Supply (1-4), EU Accession Countries with former GATT Membership

Source: own interpretation of respective GATS schedules
Annex Figure 2: Allocation of commitments across 155 GATS sectors, Market Access and National Treatment, and Modes of Supply (1-4), EU Accession Countries without former GATT Membership

Source: own interpretation of respective GATS schedules
Annex Figure 3: Allocation of commitments across 155 GATS sectors, Market Access and National Treatment, and Modes of Supply (1-4), South Eastern Europe

Croatia, GATS Commitments (% of all 155 Sectors)

Macedonia, GATS Commitments (% of all 155 Sectors)

Romania, GATS Commitments (% of all 155 Sectors)

Bulgaria, GATS Commitments (% of all 155 Sectors)

Source: own interpretation of respective GATS schedules
Annex Figure 4: Allocation of commitments across 155 GATS sectors, Market Access and National Treatment, and Modes of Supply (1-4), Former Soviet Union without Accession Countries

Source: own interpretation of respective GATS schedules